UC RIVERSIDE School of Public Policy

UCR SPP Working Paper Series

June 2022 – WP#22-05

TABLE OF CONTENTS

READY TO RISE: A PRAGMATIC FRAMEWORK TO IMPROVE PLANNING, INVESTMENT, AND COMMUNITY DEVELOPMENT

S. Karthick Ramakrishnan and Beth Tamayose

Center for Social Innovation, UC Riverside

Summary:

Congress passed a $1.2 trillion infrastructure package in November 2021, touching everything from bridges and roads to the nation's broadband, water, and energy systems. Using a framework known as the Justice40 Initiative, the Biden administration has signaled that 40 percent of infrastructure investments in climate action, clean energy, and sustainable transportation will prioritize communities that have been historically disadvantaged by poverty, air pollution, and poor health outcomes.

Despite the many benefits of Justice40, there are several limitations that need to be addressed when decision makers, investors, partners, and stakeholders engage in various stages of project and program development—from convening and brainstorming; to proposal design, development, and financing; to project implementation, evaluation, refinement, and reform. This paper lays out a framework for conceptualizing, operationalizing, and evaluating projects and programs based on their ability to advance key social impact goals of resilience, inclusion, sustainability, and equity.

The Ready to RISE framework builds on the core notion of "shovel readiness" by examining key aspects of readiness—in physical and digital infrastructure, labor markets, public and private institutions, and civil society—to undertake new projects and adds conceptual precision and measurability to notions of Resilience, Inclusion, Sustainability, and Equity (RISE) that decision-makers often uphold as important priorities but remain vague on the details.

In addition to situating the Ready to RISE framework in the context of prior scholarship and offering standard and novel measures for each major indicator, this paper provides concrete illustrations of how stakeholders, decision makers, and evaluators can deploy the framework, with key benefits that include performance tracking and improvements in project implementation, perceived legitimacy, and ongoing stakeholder and community support.

Draft submitted to Southern California Association of Governments (SCAG)

We are grateful for the input and feedback of many research and community partners, including Chris Benner, Kevin Kane, Sheheryar Kaoosji, Gigi Moreno, and Silvia Paz. The authors alone are responsible for the claims made in this paper, as well as any errors contained herein.

TABLE OF CONTENTS

Introduction

In November 2021, Congress passed a $1.2 trillion infrastructure package, which includes $550 billion in new federal spending over five years, touching everything from bridges and roads to the nation's broadband, water, and energy systems. The Biden administration has signaled that 40 percent of infrastructure investments in climate action, clean energy, and sustainable transportation will prioritize communities that have been historically disadvantaged by poverty, air pollution, and poor health outcomes, under a framework known as the Justice 40 initiative.

This prioritization reflects a big shift from standard infrastructure projects' predominant focus on "shovel-ready" projects, to those that can produce jobs and other benefits that can improve community outcomes in the short term and long term. Importantly, the Justice40 framework also builds on advancements California has made in the past decade with infrastructure investments under various initiatives of the state's Strategic Growth Council, which uses place-based measures of inequities in community health and well-being to prioritize public investments that derive from sources that range from cap-and-trade funds to general fund expenditures.

Despite the many benefits of Justice40, there are several limitations that need to be addressed when decision makers, investors, partners, and stakeholders engage in various stages of project and program development—from convening and brainstorming; to proposal design, development, and financing; to project implementation, evaluation, refinement, and reform. For example, Justice40 does not explicitly address racial equity, which has been an area of mounting concern well before the summer of racial unrest in 2020 following the murder of George Floyd. In addition, the Justice40 framework does not consider community inclusion in planning and decision-making, which research has shown to be important for improved decision-making and equitable outcomes. Also, while environmental and sustainability goals are clearly specified in frameworks such as Justice40, the important and related concept of resilience is not well conceptualized or operationalized in those frameworks and others that seek to advance inclusive and sustainable development. Finally, frameworks like Justice40 do not lay out explicit criteria for readiness—such as infrastructure readiness, institutional readiness, community readiness, and financial readiness—that play a critical role in shaping the likely success or failure of projects and programs.

In this paper, we lay out a framework for conceptualizing, operationalizing, and evaluating projects and programs based on their ability to advance key social impact goals of resilience, inclusion, sustainability, and equity. The Ready to RISE framework builds on the core notion of "shovel readiness" by examining key aspects of readiness—in physical and digital infrastructure, labor markets, public and private institutions, and civil society—to undertake new projects and adds conceptual precision and measurability to notions of Resilience, Inclusion, Sustainability, and Equity (RISE) that decision-makers often uphold as important priorities but remain vague on the details.

We situate the Ready to RISE framework in the context of prior scholarship in planning, economic development, and community development, offering standard and novel measures for

each major indicator. In addition we provide concrete illustrations of how stakeholders, decision makers, and evaluators can deploy the framework and associated tools for engagement, measurement, and evaluation, with key benefits that include performance tracking and improvements in project implementation, perceived legitimacy, and ongoing stakeholder and community support.

Making the case for equity

Efforts to advance equity in economic and regional development need to take into account equality and inclusion, which are distinct but related to equity. Put most simply, equity is fair treatment that closes historical gaps across geographies and communities, while equality means equal opportunity regardless of prior or current circumstances. Equity tends to focus on disparities in outcomes faced by historically marginalized populations, while equality tends to focus on uniformity in opportunities made available to everyone. Inclusion, by contrast, signifies the extent to which stakeholders are recognized, engaged, and granted influence over economic decision-making.

Equality in treatment can be fair when affected populations and communities are on an even playing field, meaning that they start off with the same level of inherited advantage and setback. However, when equal treatment is applied to communities that are already in a place of disadvantage, those disparities persist and often get even worse. Thus, equitable strategies are corrective actions that help create a more level playing field. Finally, equitable strategies that include a significant degree of community inclusion—as measured by the breadth and depth of cross-sector commitment—tend to be more enduring than initiatives for equity that are top-down or confined to a limited set of leaders (Edenhofer et al., 2021).

From a practical standpoint, equitable and inclusive economic development make for sound strong economic development policy. In 2021, McKinsey published a report based on analysis of a 2016 Federal Reserve Board survey of consumer finances. The report concluded that closing the racial wealth gap in the United States could boost domestic investment and consumption by an additional $2 to $3 trillion (Chui, Prince, and Steward 2021). Years of academic and applied research also support the notion that growing inequities threaten sustained economic growth and prosperity. Era Dabla-Norris and colleagues (2015), writing for the International Monetary Fund, point to consistent empirical findings that link economic inequality to dampened economic growth, and summarize a larger academic literature that offers several possible drivers, including adverse health outcomes in lower-income households as well as lower human and physical capital accumulation, growing economic and political instability, and demands for greater protectionism.

Similarly, Federico Cingano (2014) analyzes original survey data from the Organization for Economic Co-operation and Development (OECD) which suggests a depressing effect of growing inequality on educational investments at the lower end of the economic distribution. On a more conceptual note, Chris Benner and Manuel Pastor (2015, 2021) point to examples where a greater focus on inclusion and equity lead to improved long-term economic outcomes

by generating stronger ideas, proposals, and projects that spread economic benefits among workers and investors alike.

The importance of inclusive and equitable strategies are particularly pressing for Southern California. As the COVID-19 pandemic has illustrated, low-income communities and workers of color bore the brunt of adverse impacts related to health risks from providing essential services, living in crowded and precarious housing, experiencing food insecurity, and being the target of hate incidents and excessive use of force (Andrasfay and Goldman, 2021; McLaughlin et al. 2021; Rogers et al. 2021; AAPI Data and SurveyMonkey 2021). National evidence from the Current Population Survey also indicates that small businesses owned by women, Black, Latinx, and Asian Americans were hit disproportionately hard during the pandemic (Fairlie, 2020), and women have been disproportionately displaced from the labor force because of disruptions in child care and primary education (Albanesi and Kim 2021). Finally, recent work done by Bates et al. (2020) on good jobs in Southern California found that workers with college degrees were less likely to lose jobs in the first place and were more likely to get re-hired at an earlier stage of the recovery. While some of this gap is likely due to the slow post-pandemic recovery in retail and hospitality, the reality is that even prior to the pandemic, those without four-year college degrees suffered from limited economic mobility.

Introducing the Ready to RISE framework

The post-pandemic agenda for economic development and regional planning has inclusion and equity as key priorities. This is particularly true in the state of California and in regions such as Southern California, where public and private funding opportunities place a strong emphasis on investments in disadvantaged and "disinvested" communities (California Office of Planning and Research 2022).[1] In addition, decision makers in California increasingly see the importance of boosting community resilience, which means being able to bounce back after significant setbacks from economic downturns, public health crises, and destruction to physical infrastructure from wildfires, flooding, and earthquakes. Finally, California has for several decades made environmental sustainability a key priority, with water conservation, reduction in air pollution, and greenhouse gas reduction as important collective goals.

While all of these factors—resilience, inclusion, sustainability, and equity—are core values among many policy makers and stakeholders in California, these concepts are often ambiguous and imprecise, causing confusion and frustration among stakeholders, residents, and those government agencies tasked with policy implementation.

The Ready to RISE framework aims to integrate these core values and concepts into all aspects of project and program development. It is also meant to be expansive and achievable. It is expansive, in that it includes considerations and recommendations on inclusion that go well beyond formal mechanisms such as public notice and public comment (Arnstein 1969, Klosterman 2013).[2] At the same time, the framework is also pragmatic, offering gradations of achievement that can provide stakeholders with the ability to compare progress over time and across projects, programs, and jurisdictions.

The Ready to RISE framework is also intended to be measurable and adaptable. In each instance, we spell out the concept as clearly as possible, provide general types of indicators for each concept, and suggestive measures that enable stakeholders to score achievement and progress in each indicator. We also allow for adaptability, both with respect to allowing communities to guide the development of their own priority indicators, measures, and weighting schemes based on an inclusive process, and to include additional concepts that may be critical to the measurement of program success, including innovation (such as the ability to find new ways of solving thorny problems) and efficiency (producing the same outcomes on readiness, resilience, inclusion, sustainability, and equity while minimizing associated costs).

Finally, the Ready to RISE framework is unique in that it is specifically aimed to help create accountability measures toward greater resilience, inclusion, sustainability, and equity at all stages of the process. For example, mandated community participation tends to occur after projects are conceptualized, and then tapers off after project approval. This can be problematic for several reasons. First, if the only stakeholders providing input at the ideation stage are those who are already intimately involved with and invested in the proposed project (monetarily or otherwise), it can make it difficult to realistically include any of the RISE elements at any point later in the process. Second, while the mandated nature of community participation is ostensibly to ensure that as many individuals as possible can provide comment and input on the project and related process, this can end up feeling perfunctory at best, often resulting in community members feeling frustrated or disinvested and uninterested in engaging further. This can lead to further cycles of exclusion and inequity, with community and stakeholder groups being less empowered to participate and improve decisionmaking in the future.

Case Study: Imperial Valley's Lithium Deposits

Part of the impetus for diving deeper into the Ready to RISE framework was a case study the Center for Social Innovation did on the Salton Sea region, including southwest portions of Riverside County and the western portion of Imperial County.

While Riverside County is home to the resort destination Palm Springs, the international tennis competition circuit destination Indian Wells, and one of the University of California campuses (Riverside), Imperial County—Riverside's southern neighbor—tells a completely different story. Imperial County has among the highest poverty rates, lowest rates of educational attainment, and some of the worst CalEnviroScreen scores of any county in the state. However, it also happens to be the home of one of the largest lithium deposits in the world. To this point, both the Biden Administration and the Newsom Administration have teamed up to support investment around lithium extraction from the Salton Sea region of the Imperial Valley, in order to reduce reliance on other countries as well as build up the nation's efforts toward electrification and clean energy.[3]

The Salton Sea region's current economic output is largely dependent on low-wage industries like agriculture, retail, and hospitality. While jobs in healthcare offer some opportunities for economic mobility, much of this is hindered by insufficient investment and underfunding of delivery and programming. Additionally, data on the healthcare sector does not always parse

out by type of healthcare jobs - e.g., healthcare vs healthcare-adjacent jobs are vastly different in terms of wages, benefits, and hours.

While there has been some historical movement toward investments in clean energy such as through solar, wind, and geothermal energy,[4] they have not produced the number of jobs or other regional economic benefits (such as through taxes or other revenues) to counter the challenges facing the region. Emerging developments around use of lithium for battery energy storage offer some promise for a different type of economic growth and good jobs, and there is significant interest among local, regional, state, and federal stakeholders and government agencies to ensure that frontline communities and regional labor markets benefit significantly from this new opportunity. However, this idea of "building back better" will require a concentrated effort toward changing how business is done, among *all* stakeholders. Otherwise, there is a great - and very real - possibility that whatever the investment is in lithium, it will simply mirror the same type of myopic pathways that have been witnessed worldwide in many other examples of resource extraction, refinement, manufacturing, and deployment.

Prior opportunities in Imperial County have illustrated that local communities are skeptical, and rightly so. For instance, investments in solar power were sold to the community as a way of bringing in a high level of jobs and tax revenue. Government agency and community interviews indicate that neither actually materialized. Additionally, very real concerns were raised about how regional decisions are made and who actually holds power in the area. In the case of the potential for industries related directly and indirectly to lithium extraction in the region, concerns expressed at multiple levels and via a variety of stakeholders included who will actually benefit (e.g., the region's residents or those coming from the outside), what the actual environmental impact might be, and how sustainable this development will be for the region in the long-run.

Major corporations like Berkshire Hathaway Energy are carving out spaces in the area, with promises of good jobs for the area's residents, but it is not clear whether anyone from the region will actually qualify for these jobs. The area immediately surrounding the southern end of the Salton Sea, which is most likely to be the epicenter of the majority of lithium extraction and lithium extraction-related industries, is extremely low income with few employment opportunities. So while the promise of jobs is tantalizing, it is not yet clear if many of the area's residents would qualify for what would be considered the good jobs (e.g., full-time jobs, with opportunities for economic mobility and family-sustaining wages and benefits). And while the existing geothermal extraction industry is set up to also dredge up lithium in a way that is cleaner and more environmentally-friendly than other methods across the world, residents are concerned about impacts to the Salton Sea itself (which is already an environmental issue in its own right)[5] as well as other related externalities (e.g., dust, reduced air quality) that might adversely affect community health.

How planning has addressed inclusion and equity

Research on various aspects of equity has illustrated that equity is good for growth and for urban planning, and also that inequality impedes progress. For example, in their two-part series, Chetty and Hendren (2018a, 2018b) argue that the circumstances a child grows up in impact

their adult life trajectory. Importantly, in their study on childhood neighborhood effects, they note (2018b) that “the success of the poor does not have to come at the expense of the rich. (1166)”, indicating that an equitable balance is not only doable, but is actually a more optimal situation than one which is inequitable. There is also a growing understanding among scholars and practitioners in economic development that economic inequality and blocked mobility produce overall negative outcomes. In 2011 the International Monetary Fund published a report linking inequality with unsustainable growth, with similar findings coming from OECD in 2014 and the United Nations in 2020. Domestically, even organizations like Standard & Poor’s - which is in the business of bond ratings, and not economic policy, recognize the importance of income inequality.

While not directly called equity planning as such, the field of urban and regional planning has made some incremental steps to address the topic of inclusion and equity. For instance, much of planning was considered to be “rational” for a substantial stretch of history, fueled primarily by decision-making that tended to focus on hard data and technocrats who work with such data, and less on input from individuals who either have experience and expertise in a certain area and/or those whose lived experience lends them particular insight into both the needs of communities, but also the impacts of decisions on outcomes.

In large part, this shift has been attributed to a myriad of negative externalities that have come out of various planning processes and decisions. For example, highway construction often occurred on land occupied by lower income and minority populations causing mass displacement, and housing discrimination was actively pushed and promoted by real estate developers and planners alike. Industrial and other less-desirable land uses were sited within close proximity to schools and residences in low-income communities, disproportionately burdening them with a variety of health issues. As a result of these policymaking processes, and in response to outcry from communities and nonprofit organizations, planning has slowly moved to better incorporate the voices of more than simply politicians and developers. However, more can still be done to create more resilient, inclusive, equitable, and sustainable outcomes in both the near and long-term.

Scholars on equitable and inclusionary practices have largely focused on the role of participation in the planning process, identifying such approaches as advocacy, communicative, or participatory. The idea of including the public in policy making largely stems from the goals of fairness and justice, working to address long standing systematic suppression of the least advantaged groups’ needs, preferences, and desires (Innes and Booher, 2000). While there has been significant debate on how this actually gets rolled out in practice (e.g., Davidoff, 1965; Healey, 1992; Umemoto, 2001; Innes, 1995; Forester, 1982), there is a growing understanding that information transfer, power/power dynamics, type, quality, and range of engagement, relationships, and cultural considerations all play a role in whose voices and included and ultimately heard.

Participation has largely been deemed important, and as such, some baseline version is mandated in every planning process. Still, in almost all cases, and regardless of intent, the

process of engaging the community and associated stakeholders is often messy (Rittel and Webber, 1973; Lachapelle, McCool, and Patterson, 2003; Head and Alford, 2015; Christensen, 1985; Cartwright, 1973), and some have suggested that the reality of what gets rolled out is due to some combination of habits and expectations (Innes and Gruber, 2001). Indeed, some have argued that information sharing and education is essentially only a one-way process - the emphasis is really on educating the public and not the agency (Innes and Booher, 2000).

There has also been some debate about whether participatory planning and inclusion are effectively the same or are completely different. Scholars such as Quick and Feldman (2011) argue that public participation and inclusion are actually fundamentally different because they involve different aspects of the process. Specifically, they argue that participatory efforts are really geared at impacting the input received, whereas inclusionary efforts are more about capacity building, removing barriers between roles (e.g., government vs public), and creating a framework for community building. Part of this debate can be attributed to the power structure Arnstein articulated in 1969, which many have since argued is largely linear and overly simplistic.

While an overview of the scholarly debate on inclusive planning is outside the scope of this paper, scholars have explored the continuum of process aspect of planning, in terms of learning (Lachapelle, McCool, and Patterson, 2003), collaboration (Innes and Booher, 2004), and addressing fairness and representation (McCool and Guthrie, 2001; Burby, 2003). However, there is agreement in the field that there is a disconnect between “going through the motions” versus providing meaningful opportunities to influence outcomes (Arnstein, 1969). In addition, measurement and evaluation of public participation in planning decisions tend to be sporadic and limited, although the field has improved considerably with respect to various options for measuring and evaluating the effectiveness of participatory tools and decisionmaking with respect to process as well as outcome (Rowe and Frewer 2004, Bryson, Quick, Slotterback and Crosby 2013).

From Concepts to Indicators and Measures

Civic engagement. Inclusion. Sustainability. Resilience. These are all examples of aspirational concepts that we use in daily conversations, and that advocates and decision makers use in the formulation of policies, that nevertheless tend to lack precision and agreement about what they refer to. How do make sure that these types of concepts are mutually understood, agreed upon, and useful? One of the first steps is to gain insights from the social sciences about what, exactly, do we mean by concepts, what makes for good concepts, and how do we make concepts more concrete through the development of indicators and measures.

Concepts, at their most basic level, are the “building blocks of thoughts” (Margolis and Laurence 2021), of notions “that we conjure up when we think of some cluster of related observations or ideas” (Saylor Academy 2012). ***Concept formation*** is critical for the development of theories (which themselves can be based on debates over ideas or studies based on observation, or a mix of both) and for the improvement of practice.

While it may seem arbitrary, or in the eye of the beholder, as to whether a particular concept is good or helpful, scholars have settled on some useful ways to think about ways to improve concepts. For example, in a 1999 article "What Makes a Concept Good?," John Gerring notes that concepts are useful when they adhere to important criteria such as *familiarity* (the extent to which it "make sense" or is intuitively "clear"), *resonance* (being appealing/catchy and enduring), *parsimony* (using as few words or attributes as possible), *coherence* (having only like elements together), *differentiation* (being able to distinguish from other concepts), *depth* (ability to serve as a shorthand for invoking a larger set of related concepts), *theoretical utility* (helpfulness for scholarship) and *field utility* (helpfulness for practitioners). Some of these criteria—differentiation and depth, theoretical and field utility—pull in different directions and it will be important for scholars and practitioners alike to recognize the tradeoffs involved while defining or re-defining a concept.

Once a concept has been established, it is important to lay out key attributes. This process is called ***operationalization***, which involves the development of indicators to measure concepts (Adcock and Collier 2001). Thus, for example, indicators for population health can include food insecurity, drug overdose, childhood obesity, and exposure to unhealthy air. Then, in turn, it is important to provide quantitative and qualitative ***measures*** of these indicators, which can be derived from surveys, interviews, and administrative records of utilization and other transactions and interactions. Thus, for example, scholars and practitioners alike may debate over the best ways to measure food insecurity, even as they agree about its critical importance to population health.

One of the major intentions of the Ready to RISE framework is that it should be easily understandable, measurable, and most importantly attainable with gradations of success such as those utilized by the LEED Framework (Certified, Silver, Gold, and Platinum). As part of this work, we refer to other existing frameworks such as the Rockefeller Foundation's 100 Resilient Cities Framework and the United Nations Sustainable Development Goals in order to better understand how Ready to RISE may be best operationalized and how the indicators and related metrics can be realistic, measurable, and deployable.

Rockefeller Foundation's 100 Resilient Cities Framework

For resilience, we chose the Rockefeller Foundation's 100 Resilient Cities framework because of its stated goal of incorporating complexity and identifying ways to define, measure, and improve resilience. Key dimensions of the framework include health and wellbeing, economy and society, infrastructure and environment, and leadership and strategy. We also find this framework useful as a foundation, given its focus on sustainability and its discussion of shocks in terms of their physical, social, and economic effects. Importantly, the Resilient Cities framework is also amenable to measurement and evaluation. The Rockefeller Foundation embarked on a midterm evaluation of the Resilient Cities framework, and has provided important insights about progress as well as pitfalls in implementation.

Figure 1. Rockefeller Foundation's Resilient Cities Framework

Source: https://www.rockefellerfoundation.org/wp-content/uploads/City-Resilience-Framework-2015.pdf

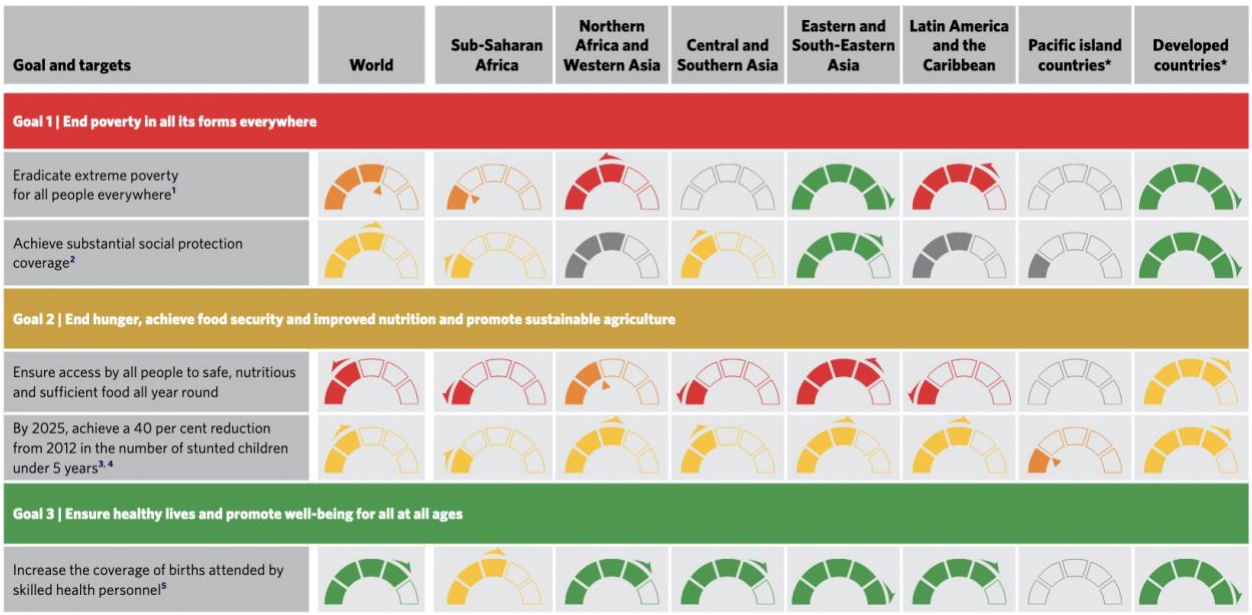
United Nations Sustainable Development Goals

For sustainability, we chose the United Nations Sustainable Development Goals (SDGs) as a frame of reference because of the stated goal of partnering the key components of environmental, social, and economic stability. In particular, the layout of the goals is done in a manner that includes concrete measures (e.g., very specific metrics by which to ascertain progress).

Figure 2. United Nations Sustainable Development Goals Framework

Similar to the Rockefeller Foundation's 100 Resilient Cities Framework midterm evaluation, the United Nations has taken specific steps to periodically evaluate progress towards the SDGs. Because the metrics used are concrete and measurable using data that is objective and collectable, the agency has been able to fully integrate continual progress monitoring into the program, allowing for consistent reporting on progress.

Figure 3. Measuring Progress Towards UN Sustainable Goals



Source: https://unstats.un.org/sdgs/report/2021/progress-chart-2021.pdf

The Ready to RISE Framework

The Ready to RISE Framework aims to take several key considerations into account with respect to investment, planning, and community development. First and foremost is the notion of ***community readiness.*** Is a community ready to embark on a project or receive a certain type of investment, or are some important elements that are missing or insufficient that need to be bolstered? Traditionally, decision makers have thought only of "shovel readiness" with respect to the availability of physical infrastructure (such as roads that can transport people or material to the job site) and the pool of readily available labor (such as the number of construction firms and workers in a metropolitan area). As we lay out in Table 1 and 2, however, community readiness also needs to include other aspects of readiness that include the strength of financial institutions and histories of cooperation and conflict resolution involving public and private actors.

Second, the RISE portion of the framework plays homage to the idea that there are several major throughlines that need to be addressed at any stage of a project, including ideation/formulation, planning, resourcing, implementation, and evaluation. RISE is an acronym that stands for Resilience, Inclusion, Sustainability, and Equity, as these have been identified as major categories of goals that projects should aim to address to create optimal outcomes for as many communities and stakeholders as possible. In particular, the Ready to RISE themes aim to address aspirational goals for projects, in ways that are concrete and measurable (see Table 1).

Table 1. Ready to RISE element descriptions

Readiness	Refers to the measurement of a community's readiness (e.g., physical and digital infrastructure, strength of labor markets, formal and informal financial institutions, other public and private institutions, and civil society), with respect to receiving new investments and completing projects in a timely manner.
Resilience	Refers to the interconnected nature of system assets and processes, and how they can absorb, recover from, and continue on after some sort of a shock.
Inclusion	Refers to the extent that communities are recognized and meaningfully included in decisions, plans, programs, and projects. Includes measures of breadth, depth, and stage of inclusion
Sustainability	Refers to the conditions that promote individual and community health and well-being, through improvements in environment, quality of life, and economic stability.
Equity	Refers to whether investments, policies, and practices intentionally focus on improving outcomes among historically marginalized populations, and whether outcomes actually improve for those populations.

Readiness

The concept of *readiness* aims to address the status of systems and/or infrastructure (physical and/or otherwise) and the ability to grow it, borrow it, or modify it. Research various types of infrastructure (e.g., physical, organizational, individual) has examined the role of infrastructure ability and infrastructure capacity and the relationship of each to performance. For instance, Cervero (2001) finds that infrastructure and employment density are positively related to economic performance. At the organizational level, Glickman and Servon (2003) find that the ability to access support networks increases the potential for economic performance. At the individual level, Mandarano (2015) finds that investing in human capital provides greater support for overall community capacity; similarly Halstead and Deller (1997)[6] note that while public infrastructure is important, the quality of the labor pool also plays a vital role in economic growth.

Readiness also has to do with availability of resources. For instance, while "shovel readiness" is often referenced as a key metric of whether or not a project or program should be prioritized, financial readiness is just as crucial for success. And notably, financial readiness can take a variety of forms. For instance, it can mean immediate access to capital, but it can also take the form of an ability to mobilize a variety of resources and invest into community level outcomes, similar to what is promoted by the capital absorption framework.[7] In "9 things Local Government can do to Harness Private Capital for Public Good", a 2012 paper by the Harvard Kennedy School and Living Cities, the authors identify "convening stakeholders, providing information, setting policy and investing public dollars"[8] as the most appropriate roles for the government to take on in order to promote effective investment in communities. Importantly, it is also key to understand where a community is with respect to its ability to absorb capital; not all places, and particularly those that are distressed, have the capacity to do so, and it would be a mistake to automatically assume that investment can change the trajectory of an area that does not have the capacity absorb large investments.[9]

There is also a general consensus on the importance of networks at various scales, and that relationships play a large role in creating an atmosphere that is conducive to growth and success (Blakely 2001; Chapple 2001; Mitchell 2001). Similarly, the literature on disaster planning, which covers readiness, response, and recovery, also acknowledges the vital role of social networks and economic development processes for resilience and recovery (Aldrich and Meyer, 2015; Nakagawa and Shaw, 2004).[10] Indeed, social networks and relationships are often deemed to be as important, if not more important than, physical infrastructure investments because they are often the component deemed most reliable and trustworthy (Kim and Olshansky, 2014; Olshansky, 2006).[11] As Olshansky (2006) points out, "Social and economic networks are what make a city, and it is these networks that rebuild the city."[12]

Given findings from prior scholarly and applied work, we identify the following key indicators of community readiness:

Table 2: Readiness components and scoring

Components of Readiness	***Description***	***Notes on Scoring***
a. Recognition	Stage 1: Recognition of the issues and population groups that are priorities for readiness (based on b-j below) Stage 2: Prioritization of issues/groups and entities outlined in Stage 1	None: no diversity on this dimension Low: some diversity of impacted communities and advocates Medium: moderate, some key communities left out High: all relevant communities included
b. Capacities and characteristics of physical infrastructure	Level of service Safety standard ratings/maintenance history Maximum capacity percentage Contingency plans for infrastructure failure	None: no evidence (quantitative or qualitative, using administrative, survey, or interview data) of capacity on this dimension, as measured at the level of individual, household, population group, organization, sector, or jurisdiction Low: evidence of low capacity on this dimension, using objective or perceptual measures Medium: evidence of medium capacity on this dimension, using objective or perceptual measures High: evidence of high capacity on this dimension, using objective or perceptual measures
c. Capacities and characteristics of digital infrastructure	Strength of assets Strength of network	
d. Capacities and characteristics of labor markets	Strength of assets Migration patterns/Commute patterns	
e. Capacities and characteristics of civic infrastructure	Strength of key notes and assets Strength of network ties	
f. Capacities and characteristics of public agencies	Strength of government agency resources Connection between agencies, stakeholders, and community organizations	
g. Capacities and characteristics of for-profit sector	Strength of for-profit sector resources Strength of community engagement and ESG prioritization by industrial sector	
h. Capacities and characteristics of nonprofit sector	Strength of nonprofit sector resources Strength of relationships with communities, government agencies, and for-profit institutions	
i. Capacities and characteristics of philanthropy	Strength and geographic reach of investments Strength of relationships with communities, government agencies, and for-profit institutions	
j. Capacities, characteristics, and histories of cross-sector collaboration	History of conflict resolution and compromise Levels/frequency of communication and information sharing History of collaboration History and length of relationships and ties within a group and across groups (and other measures of bridging and bonding social capital)	

Resilience

Resilience is generally categorized into some version of a few main categories: the ability to 'bounce back' from shocks, the 'ability to absorb' shocks, and the ability to adapt to shocks, either in anticipation or in response (Martin and Sunley, 2015;[13] Pendall et al., 2010;[14] Goldschalk, 2003[15]). From an organizational standpoint, Duchek (2020)[16] proposes three stages—anticipation, coping, adaptation—to help us better understand resilience.

While there is much contemporary discussion about the need for resilience, there seems to be a similar insistence on efficiency has often resulted in a loss of resilience. For instance, the COVID-19 pandemic highlighted some shortcomings of just-in-time manufacturing and related resource/goods allocation, which prior to the pandemic was often touted as a miracle of business and manufacturing management,[17] but is now recognized as producing vulnerability because of a lack of redundancy and contingency planning. Greater uncertainty requires greater flexibility, though in practice simply planning for the worst case scenario also typically doesn't allow for the type of approach needed to address issues as well as opportunities (Longstaff et al., 2010).

In many ways, the idea of resilience captures many of the overarching concepts of the RISE framework. For example, the United Nations Development Programme has created a Community Based Resilience Analysis (CoBRA, 2017),[18] which provides a framework for identification and assessment of various characteristics of resilience components. Similarly, the US Agency for International Development (2018) has created a series of indicators that address well-being outcomes, shocks, and capacities needed for resilience.

As part of the Ready to RISE framework, we propose the following components and measurements of resilience:

Table 3: Resilience components and scoring

Components of Resilience	*Description*	*Notes on Scoring*
a. Recognition	Stage 1: Recognition of the issues and population groups that are priorities for resilience (based on b-f below) Stage 2: Prioritization of issues/groups and entities outlined in Stage 1	None: no diversity on this dimension Low: some diversity of impacted communities and advocates Medium: moderate level of diversity, some key communities left out High: all relevant communities included
b. Flexibility	The internally-oriented ability of projects and programs, including associated assets, actors, and coalitions, to easily change strategies, investments, and programs	None: no evidence (quantitative or qualitative, using administrative, survey, or interview data) of capacity on this dimension, as measured at the level of individual, household, population group, organization, sector, or jurisdiction Low: evidence of low capacity on this dimension, using objective or perceptual measures Medium: evidence of medium capacity on this dimension, using objective or perceptual measures High: evidence of high capacity on this dimension, using objective or perceptual measures
c. Adaptability	The externally-oriented ability of projects and programs, including associated assets, actors, and coalitions, to effectively respond to changing situations	
d. Agility	The ability of projects and programs to quickly move from one situation to another	
e. Self-sufficiency	The ability of projects and programs to be self-reliant with respect to human, technical, or monetary resources	
f. Agency	The ability of program or project actors to take charge of a situation in ways the increase responsiveness	

Inclusion

Policy and planning have examined the idea of inclusion for decades. While there have been inroads since the era of mostly technocratic-based approaches, there has been a movement to further dissect the idea of participation, urging scholars to push beyond the standard communicative and participatory approaches.

Innes and Booher (2004)[19] address the disconnect between the mandated objectives of participation (and ostensibly, inclusion) and the reality of who participates and whose voices get heard. Umemoto (2001)[20] discusses the complexity of different backgrounds and cultures in addressing participation, and highlights the role of empowerment and power. Laurian and Shaw (2008)[21] examined a range of public participation practices and found that public hearings - arguably the most common inclusion and participation tool used - was among the least

influential. In reality, the typical public meeting is not particularly effective at gathering public comments from a broad range of stakeholders, encouraging deliberation, or being particularly accessible to those that most need to be present at the table and heard. So while these mandated approaches are ostensibly meant to address inclusion, they effectively end up being exclusive on a variety of dimensions (Few et al., 2007)[22].
Granted, Quick and Feldman (2011)[23] argue that participation and inclusion, while related, are two different dimensions of public engagement, where inclusion creates a continuum of involvement versus participation's main goal is soliciting input. Within this vein, there has been increased attention paid to co-production and in particular, power and power inequalities (Rosen and Painter, 2019;[24] Blue et al., 2019[25]).

From a more practice-based standpoint, the United Nations has looked into analyzing and measuring social inclusion. They note that while there has been significant and steady progress toward addressing issues such as socio-economic development, inequality and exclusion still exist and in certain ways are increasing. As part of a larger UN effort, the Department of Economic and Social Affairs has looked into practical strategies to address social inclusion and the development of indicators to measure and monitor progress. The UN's 2010 study, "Analysing and Measuring Social Inclusion in a Global Context,"[26] proposes five goals for indicators, suggesting that they need to be able to identify the essence of a problem, that they should be measurable in generally agreed-upon ways, that they should be broadly interpretable, that they should be subject to revision, and that the measurement process itself shouldn't itself become a significant burden.[27]

As part of the Ready to RISE framework, we propose the following components and measurements of inclusion:

Table 4: Inclusion components and scoring

Components of Inclusion	*Description*	*Notes on Scoring*
a. Recognition	Stage 1: Recognition of the issues and population groups that are priorities for inclusion (based on b-e below) Stage 2: Prioritization of issues/groups and entities outlined in Stage 1	None: no diversity on this dimension Low: some diversity of impacted communities and advocates Medium: moderate level of diversity, some key communities left out High: all relevant communities included
b. Breadth of Inclusion	By geography By race By gender By sexual orientation By immigrant status By disability status By youth status By other social categories as meaningful to context	
c. Depth of Inclusion	Level of influence over scope of decision making	Evaluation based on the IAP2 Spectrum (Inform, Consult, Involve, Collaborate, Empower)
d. Mode of Inclusion	Direct inclusion of affected populations and stakeholders Representative inclusion (those representing affected stakeholders)	Direct inclusion Representative inclusion
e. Stage of Inclusion	a. Ideation (convening, brainstorming, refining ideas) b. Project development (visioning, designing, prototyping, planning, decision-making on governance, roles, activities, outputs and outcomes); c. Financing (applying, resource allocation and sharing); d. Implementation (tracking and monitoring progress on activities, outputs, and outcomes); e. Evaluation (learning, researching, and disseminating findings on process and outcome impacts), and f. Reform (refining and redesigning for future cycles of work).	None: adversely impacted communities and advocates not invited Low: invited, but tokenized or marginalized Medium: recognition of community expertise, opportunities to express insights High: equally prioritized, fully respected and valued for expertise

Sustainability

Sustainability may be one of the most widely used aspirational terms used in political, policy, and advocacy circles, and also simultaneously one of the least understood and well-defined.

As mentioned earlier, Campbell's 1996 article on sustainability touched on the conflicts between what was defined as the three corners of the sustainability triangle: equity, environment, and economy. In a retrospective article in 2016, Campbell, among other scholars, reflected on the changing understanding of sustainability, and also the evolution of the understanding of the conflicts and synergy between the three corners of the triangle. Importantly, one of later takeaways is that part of the core idea of sustainability is future generation, and to what degree investment in one aspect of sustainability aids or impedes progress on the other dimensions.

Parris and Kates (2003) propose several dimensions to measure sustainable development. Among these considerations are timeframe; how to define and quantify; and the interactions between salience, credibility, and legitimacy. They also acknowledge that measurement may vary depending on purpose, and that defining the specific motivation can help motivate an appropriate selection of design and methodology. Mori and Christodoulou (2012)[28] identify several buckets of categories, indicating "socio-ecological system integrity; livelihood sufficiency and opportunity; intra-generational and inter-generational equity; resource maintenance and efficiency; socio-ecological civility and democratic governance; precaution and adaptation; and immediate and long-term integration (95)" as core generic criteria for assessment.

In general, the Ready to RISE framework aimed to view sustainability as a holistic goal, as involving the conditions that enable communities to live healthful lives. While sustainability is often thought of through an environmental lens, other aspects such as economic and social/health impacts are also important considerations.

Table 5: Sustainability components and scoring

Components of Sustainability	*Description*	*Notes on Scoring*
a. Recognition	Stage 1: Recognition of the issues and population groups that are priorities for sustainability (based on b-e below) Stage 2: Prioritization of issues/groups and entities outlined in Stage 1	None: no diversity on this dimension Low: some diversity of impacted communities and advocates Medium: moderate level of diversity, some key communities left out High: all relevant communities included
b. Promotes health and wellness through environmental improvements	Local air quality Regional air quality Greenhouse gas emissions Access to clean and affordable water Water conservation Ground/surface temperatures Indoor temperatures Mitigation of climate change	None: no consideration to sustainability on this dimension Low: some consideration to sustainability, weak measures and accountability Medium: moderate consideration to sustainability, moderate measures/accountability High: strong consideration to sustainability, strong measures/accountability
c. Promotes health and wellness through quality of life improvements	Reductions in commute times Increases in opportunities for recreation Increases in opportunities for community engagement	None: no evidence (quantitative or qualitative, using administrative, survey, or interview data) of improvement on this dimension, as measured at the level of individual, household, population group, organization, sector, or jurisdiction Low: low evidence of improvement Medium: some evidence of improvement High: substantial evidence of improvement
d. Promotes health and wellness through economic improvements	Wages and benefits to support households (individuals and families) Relies on a mix of revenues to sustain jobs or benefits	
e. Promotes health and wellness through other improvements	Provides enduring solution to problem (not temporary fix) Makes consistent progress toward achieving 100% vision	

Equity

A concern about traditional approaches to equitable practices is the degree to which planning efforts might further disadvantage groups that have been historically marginalized. While public administration has discussed the importance of equity equal to efficiency and economic growth

for several decades (see Frederickson, 1990;[29] Frederickson 2018[30] and others drawing from the theoretical works of justice scholars such as John Rawls (1971),[31] questions remain about what is the best practical approach to get to this ideal. Norman-Major (2011) proposes several criteria for incorporating social equity, identifying procedural fairness, distributional equity, process equity, and outcome disparities as key to measuring progress. The National Academies of Science, Engineering, and Medicine (2019)[32] has similarly worked to develop indicators toward equity within an educational context, identifying student outcomes and access to educational opportunities as broad categories. An important goal of this effort was to make sure that any proposed indicators and related measures were practical, and the National Academies is clear that indicators were chosen based on their importance for student success, appropriateness for various stages, and ability to be used as diagnostic tools.[33]

As part of the Ready to RISE framework, we propose the following components and measurements of equity:

Table 6: Equity components and scoring

Components of Equity	***Description***	***Notes on Scoring***
a. Recognition	Stage 1: Recognition of the issues and population groups that are priorities for equity (based on b-c below) Stage 2: Prioritization of issues/groups and entities outlined in Stage 1	None: no diversity on this dimension Low: some diversity of impacted communities and advocates Medium: moderate level of diversity, some key communities left out High: all relevant communities included
b. Activities intentionally focused on improving outcomes among historically disenfranchised populations	Geography Race Gender Sexual orientation Immigrant status Disability status Youth status Other social categories meaningful to context	None: no evidence of presence/ intentionality Low: some presence/intentionality Medium: moderate presence/intentionality High: high presence/intentionality
c. Outcomes actually improve disproportionately among historically disenfranchised populations	Geography Race Gender Sexual orientation Immigrant status Disability status Youth status Other social categories meaningful to context	None: no evidence of improvement Low: low evidence of improvement Medium: some evidence of improvement High: substantial evidence of improvement

Tradeoffs and Other Strategic Considerations

One important consideration when seeking to implement the Ready to RISE framework is understanding what questions to ask when, of whom, and why. As most policymakers are aware, tradeoffs are inevitable when we convert ideas and ideals into practice. Similar to the argument that Campbell (1996)[34] makes, the process of realizing a resilient, inclusive, sustainable, and equitable outcomes will often require the explicit exploration and recognition of conflict among stakeholders, as well as tradeoffs and design choices that require deliberation and compromise. An additional consideration is time, particularly with respect to resource availability. What is currently available versus what might be available in the future can impact resilience and sustainability calculations, and might also change what might be possible in terms of efforts towards inclusion and equity.

All the above feed into the notion that design considerations should flow from the realities of each context. When considering implementing a new project or program, it is important to ask who is the intended audience, who should be at the table (as opposed to who would typically be at the table), why are specific groups participating and why others are not, what is actually being proposed (versus what the public narrative might be), and how the intervention is likely to be proposed and implemented (versus what the typical process is). The Ready to RISE framework is intended to help planners and policymakers understand the impacts of various choices and constraints on a policy, program, or investment as it goes through the process of ideation/formulation, proposal, resourcing, implementation, evaluation, and reform.

Planners, decision makers, and stakeholders also need to deliberate over outcomes are worth prioritizing with respect to developing measures for equity, sustainability, and the like. In each of our indicator tables, we include a two-step process whereby relevant stakeholders collectively decide on the inclusion and prioritization of key issues and population groups within each category. Thus, for example, stakeholders considering community benefits associated with a large construction project in a particular city may prioritize Black poverty rates as a key metric to gauge improvements in racial equity, while those in another city may prioritize reductions in residential segregation.

More generally, communities may wish to prioritize issues that have been shown to have long-term, intergenerational consequences. These can include issues like childhood poverty, homeownership, and residential segregation. While it is well-documented that the root cause of poverty is complicated and multi-faceted, aspects of personal and community wealth building do include access to stable housing and the existence of racial segregation. Additionally, environmental aspects such as access to clean drinking water and regional air quality contribute to overall health and well-being. Communities that have been disproportionately burdened with environmental harms bear an intergenerational burden of poor health outcomes that have been linked to other social outcomes.

Standardizing Measures of Equity and Inequity

In addition to strategic considerations of tradeoffs and constraints based on timing and availability of resources, those seeking to implement the Ready to RISE framework might also benefit from some recent advancements by the Center for Social Innovation with respect to producing standardized measures of equity and inequity that can be applied across populations of interest (whether defined by race, gender, disability status, etc.) as well as across outcomes of interest (such as homeownership, college attainment, commute times, and access to public transportation).

At present, studies of disparities in population outcomes by race, gender, educational attainment, and more cannot easily be compared to each other, particularly when population groups are split into more than two categories (such as with race, nativity and citizenship status, and educational attainment). Thus, for example, we cannot easily answer the question of whether homeownership disparities by race in a given geography are greater than, or less than, homeownership disparities by gender, nativity, or educational attainment.

In addition to having standardized comparisons of disparity across population groups for the same outcome, we also need to have the ability to create standardized comparisons of disparity across outcomes for the same population group. This is also difficult to achieve when the population group has more than two categories (such as with race, nativity and citizenship status, and educational attainment). Thus, for example, we cannot easily determine whether racial disparities in homeownership are greater than, or less than, racial disparities in college attainment or racial disparities in poverty status.

We propose standardized measures of population-based equity and inequity that are modified versions of the Hoover Index of disparity and that range from 0 to 100, representing the minimum and maximum possible values, respectively, on each indicator.

- The Standardized Measure of Equity (SME) of 0 and 100 represent no equity and full equity, respectively. SME = (1 minus the Hoover Index) * 100.
- The Standardized Measure of Inequity (SMI) of 0 and 100 represents no equity and full equity, respectively. SMI = Hoover Index * 100

METHOD

The SME and SMI are derived as follows:

1. Determine the relevant **baseline population** for each outcome (such as all residents, all adults, all adult citizens for citizen voting-age population (CVAP), population 5 years and over (such as for English proficiency), population 16 and over (such as for labor force participation), and population 25 and over (such as for educational attainment).
2. Divide the baseline population by group categories, such as gender, race, nativity and citizenship status, educational attainment.
3. Determine each group's share of the baseline population.
4. Divide the outcome of interest (such as population with college degrees, population with limited English proficiency) by the same group categories. This is referred to as the outcome of interest population, or **outcome population**.

5. Calculate the Hoover Index based on the absolute value of the difference between each group's share of baseline population versus the group's share of the outcome population. Sum up the values for each group and divide by 2. This measure will range from 0 as the theoretical maximum of equality and 1 as the theoretical maximum of inequality.
6. Calculate the SME and SMI as follows:
    a. Standardized Measure of Equity = (1 minus the Hoover Index) * 100, where 0 = no equity and 100 = full equity
    b. Standardized Measure of Inequity = Hoover Index * 100, where 0 = no inequity and 100 = extreme inequity

These are standardized measures of population-based equity and inequity that can:

1. operate across indicators such as college attainment, homeownership, poverty status, private health insurance;
2. operate across population groups based on race, gender, geography, and more; and
3. provide a range of 0 to 100 representing no inequity and extreme inequity, or its reverse—no equity and full equity.

Applicability to Southern California

In the example below, we illustrate how our Standardized Measure of Inequity can help simplify and improve our understanding of how racial and gender disparities vary by geography as well as outcome. Detailed data tend to produce an enormous array of data by race and geography. Take homeownership, for example. As Table 7 indicates, there are significant racial homeownership disparities for each county in the SCAG region. From glancing at the data, however, it is difficult to know which county has a greater degree of racial inequity than another.

However, when we convert these racial data indicators to the Standard Measure of Inequity, shown in Figure 4, we can more easily compare across counties, and understand that Orange County has the greatest level of racial inequity in homeownership. Importantly, using a standardized index of disparity also enables decisionmakers and stakeholders to compare disparities across outcomes, and across social categories. Thus, for example, we can see that racial inequities in poverty are even greater than racial inequities in homeownership, and that race-based inequities are worse than gender-based inequities on each of these measures. By using a standardized measure of disparity, we are therefore able to condense information from four tables (racial and gender disparities in homeownership and poverty) into two figures that allow for easier comparisons across groups, indicators, and regions, with new insights that can have powerful implications for decisionmaking.

Table 7. Percent living in owner-occupied housing in the SCAG Region, by racial group

Group	Imperial	Los Angeles	Orange	Riverside	San Bernardino	Ventura	SCAG region
White	74%	57%	66%	73%	66%	71%	**63%**
Black	19%	37%	35%	49%	36%	52%	**39%**
Native Am	40%	45%	52%	56%	49%	53%	**49%**
Asian Am	61%	57%	64%	74%	71%	76%	**61%**
Pacific Islander	27%	39%	42%	69%	36%	52%	**44%**
Other	39%	50%	61%	61%	51%	60%	**54%**
Latino	55%	41%	39%	60%	55%	48%	**46%**
OVERALL	**56%**	**47%**	**56%**	**65%**	**58%**	**61%**	**53%**

Source: Analysis of ACS 2019 5-Year File via IPUMS USA

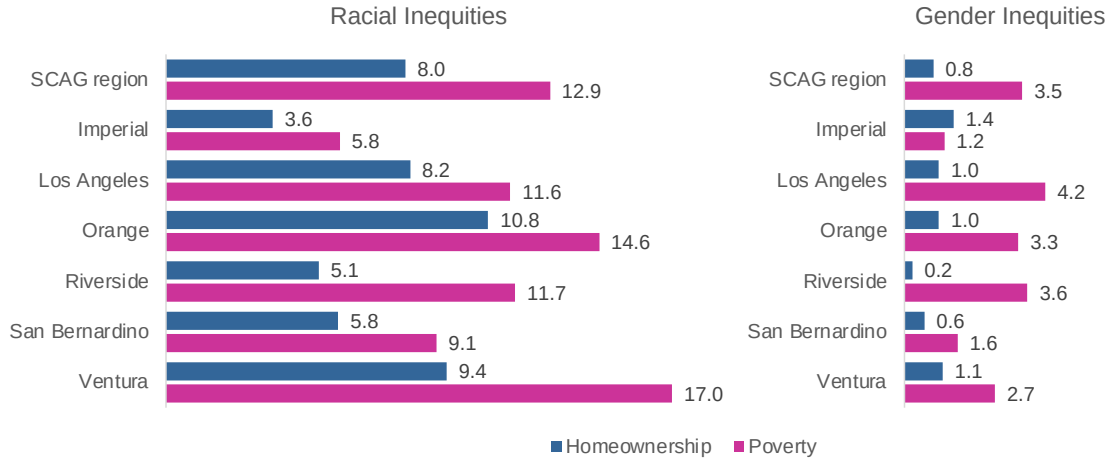
Table 8. Percent living in owner-occupied housing in the SCAG Region, by gender

Group	Imperial	Los Angeles	Orange	Riverside	San Bernardino	Ventura	SCAG region
Female	53%	47%	55%	65%	57%	60%	53%
Male	59%	48%	56%	65%	58%	61%	53%
OVERALL	**56%**	**47%**	**56%**	**65%**	**58%**	**61%**	**53%**

Source: Analysis of ACS 2019 5-Year File via IPUMS USA

Finally, we can also see that eliminating racial inequities across the entire SCAG region will take more effort than simply solving racial disparities within each county. For example, the racial SMI on poverty for the entire SCAG region is 12.9, which is higher than the weighted SMI average across the counties: 12.0. This is because overall poverty rates are higher in counties such as Imperial that have high proportion of Latino residents, and so eliminating racial inequities in poverty across the SCAG region will need to pay attention to disparities driven by the uneven distribution of poverty across counties as well as racial racial inequities in poverty within each county.

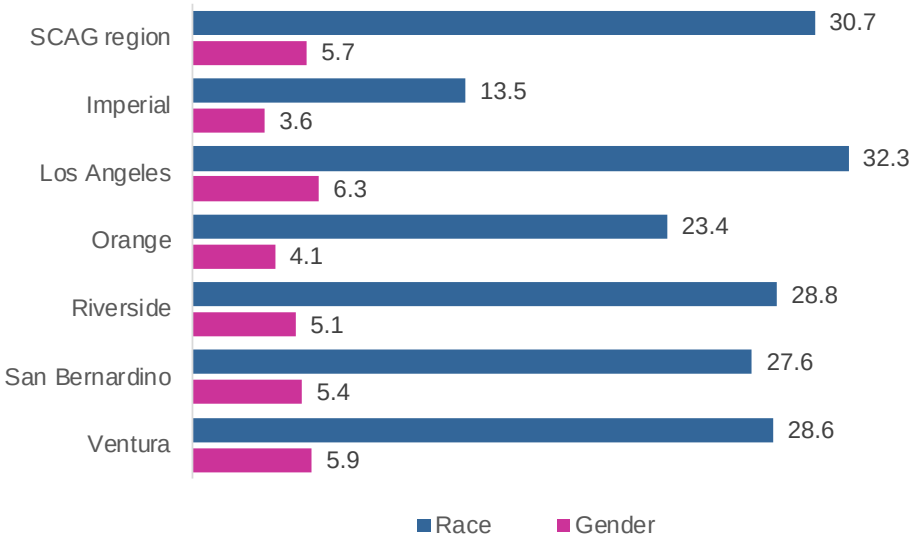
Figure 4. Standardized Measure of Inequity (SMI) in Homeownership and Poverty



Source: Analysis of ACS 2019 5-Year File via IPUMS USA

Another factor that is often shown to produce long-term inequities are racial disparities in college attainment. As we can see in Figure 5, racial and gender inequities in college attainment are much higher than similar inequities for homeownership or poverty.

Figure 5. Standardized Measure of Inequity (SMI) in College Attainment



To sum up, using a standardized index measure allows for much clearer, more straightforward visualization of complicated data, which can help decision makers and the general public quickly and easily understand issues across various outcomes. In effect, the SME and SMI serve as a kind of “dashboard measure” of inequity, one that can aid in decision making and allow for deeper dives into disaggregated data by population group.

The Ready to RISE framework, coupled with the help of the SME and SMI, provides some guidance on how policymakers can move forward. For instance, addressing the various aspects of inclusion can help make progress on several measures. By having communities at the table from the start, particularly those that are most vulnerable and/or have not traditionally been included in planning processes, would do a lot toward creating a more equitable balance regarding outcomes. Additionally, asymmetry of information and access to tools and resources plays a huge role in a community's ability to proactively and effectively participate in policy discussions. By ensuring equity of access to data, resources, and technical assistance, communities may be better equipped to use the tools at hand to influence the policy and decision-making process.

Going beyond the utility of the SME and SMI to understand disparities by race, gender, and other factors in Southern California, the Ready to RISE framework is more generally important to address some of the biggest challenges facing the region, including planning for housing, land use, and economic development in ways that uphold resilience in the face of natural and human-caused disasters, and sustainability in the face of water and land scarcity.

Southern California is in the unique position of being one of the largest economies in the world, having an incredibly diverse population, and having an abundance of natural resources. However, these advantages have not come without their pitfalls. Prior to the Great Recession, and in many ways even going back to the mortgage foreclosure crisis earlier in the previous decade, the building industry was a major contributor to Southern California's economy. Both the mortgage foreclosure crisis and the Great Recession hit the region hard, and arguably the industry has not rebounded to its original peak, despite constantly increasing housing costs.

Additionally, there is a gap between climate goals and racial equity goals that are enshrined both legally and in the California State Constitution (and to an extent the US Constitution, depending on the Court's interpretation of equal protection and discriminatory intent versus impact). There are, however, still ways to ensure racial equity. First, the state constitution provides mechanisms for modification, including via ballot proposition. Laws such as Proposition 209 could be tweaked with respect to contracting and/or hiring to make them more equitable in practice. Second, place-based interventions that address concentrated harms can ensure substantial progress towards equity. Measures such as poverty, language proficiency, and exposure to environmental harm can be used to help identify priority communities for investment. Finally, community inclusion can be more intentionally highlighted as a way to change policies and practices that can proactively advance racial equity.

The Strategic Growth Council's Transformative Climate Communities (TCC) program provides a case in point about how place-based, cross-sector investments in community expertise, experience, and education can build more resilient and sustainable neighborhoods, cities, and metropolitan areas. UCLA released a series of reports on several TCC grantees, and found that the program helped improve the overall quality of life for residents.[35]

Considering the Ready to RISE framework, there is a potential to leverage these pitfalls into new opportunities to build back better, specifically more resilient.

First, this is a prime opportunity to think about housing production in Southern California. In many ways the ideal of 'housing', particularly in high-profile and highly desirable regions such as Southern California, is a detached single-family unit on a large lot. Considering the housing shortage that has plagued the region for at least the last decade, there is an opportunity to rethink housing production among a variety of dimensions.

Another challenge is density. The ideal of the single family unit on a large lot is unsustainable for a variety of reasons, but one of the largest is that this type of housing production takes up a far greater share of resources than it needs to. On top of that, changing demographic preferences have indicated that the market is in fact moving away from single family houses to the type of walkable, bikeable, transit-friendly mixed-use developments that have naturally higher density.

Changes in the type and geography of employment are also important. The relationship between jobs and housing has become an increasingly important topic in terms of regional resilience and sustainability due to the impacts of commuting on air quality, quality of life, and overall well-being. Additionally, employment centers can be rethought of as job centers, in that it isn't just about employment, but also job creation, job training, and job upskilling. Policymakers have a prime opportunity to change the typical Southern California mindset of driving whatever distance deemed necessary to one where residents have realistic and affordable housing options that also allow them to utilize mass transportation and/or active transportation to commute to work. The COVID-19 pandemic also has opened the door to reimagining what work can and might look like in the future, with many companies thinking about work in a way that is more distributing, with many opting to adopt a fully-remote-optional or hybrid environment, and providing even more flexibility in terms of schedules. In essence, policymakers have a prime opportunity to leverage the mild climate of Southern California to provide the type of urban environment in which one has a variety of choices to live, work, and play in.

Then, there is thinking about how planners plan for housing. Considering the options at hand for creating a new job-housing balance, there is also a ripe opportunity for promoting social housing such as workforce housing (i.e., more studios, bachelor pads, and one-bedroom units), and also thinking about how to leverage available government land that is not currently being used but could be developed to fill a social need. For instance, the currently active SB-616 (Rubio, 2021)[36], would allow school districts to leverage leasing of school-owned property to finance affordable rental housing units for school district employees. This unique approach to affordable housing production allows government land to be leveraged to aid government workers, whose jobs typically center on essential social service provision, but whose wages are typically less than what would be considered competitive private-sector compensation. Additionally, in this particular example, the land is already there, and would otherwise not be available for other uses or be able to be leveraged for specific types of financing.

Aside from housing, the two most recent major economic shocks to the Southern California region also shed harsh light on what the region's economy runs on. There is a unique opportunity at hand in the form of lithium battery manufacturing, and all of the relevant related businesses and supply chain options. The Salton Sea, located in Imperial County (southeast corner of the SCAG region), is home to one of the largest lithium deposits in North America, and because of the related current geothermal energy plans already in operation, lithium can be extracted as part of the standard geothermal energy creation process, making it a significantly cleaner source of lithium than other mines worldwide. Because the Biden Administration has identified lithium as a mineral of natural security,[37] the federal government has put increased emphasis on strengthening domestic battery manufacturing and supply chains through the most recent infrastructure bill and also a variety of other means.[38] This historic emphasis and investment on domestic production of a critical mineral presents a unique opportunity to include resilience and sustainability planning into typical economic development planning.

In particular, this is also a prime opportunity to consider the role of inclusion and equity in planning processes. Economic development, while ostensibly about improving communities and access to jobs and opportunities, has often realistically been about benefiting a select few, while others - and most often these have been low-income marginalized populations - bear the majority of the costs. Planning processes have incorporated public participation as a way to mitigate some of these challenges, but as scholars and practitioners have pointed out, the reality is that certain voices continue to be privileged for a variety of reasons. Thus in the case of potential opportunities around lithium extraction, greater and more meaningful community involvement, the intentional inclusion of marginalized groups and those that would be most impacted at the decision-making table and in the decision-making process (e.g., some form of voting/veto power), project-related benefits that are specifically tailored to advance the larger public interest (e.g., community benefit agreements), workforce hiring requirements, and investments in workforce preparation/upskilling and educational opportunities are among several examples of how equity can be more intentionally incorporated into any related agreement. As the Ready to RISE framework takes phasing into account, and because discussions about what this lithium opportunity might look like in practice are so nascent, including all of the Ready to RISE elements can be addressed from the ideation stage, which ideally will help normalize incorporating all of the elements through the rest of the planning, implementation, and evaluation phases.

Additionally, the diverse demographic makeup of the Southern California region provides an invaluable demonstration opportunity to illustrate how increased equitable and inclusive civic participation can produce more ideal outcomes. Demographic estimates point to the possibility of a Latino majority within the Southern California region, so it becomes important to address the region's racial composition and how this factors into equity concerns and actions.

Discussion and conclusions

Frameworks are useful mechanisms to help planners, policymakers, and stakeholders link general goals to concrete ways to measure them and track progress. Since the contexts and

circumstances surrounding projects and programs often change, it is important to allow for framework to evolve and change through a process of evaluation, learning, and revision. For instance, if a particular set of indicators are constantly scoring low on the evaluation metrics, that may call for a reevaluation of the metrics or a retooling of how the indicator is being defined and/or contextually situated. For instance, the UN SDGs indicators framework was reviewed in 2020 and subsequently revised.[39] While this does mean that it becomes difficult to do longitudinal comparisons because some indicators may end up getting replaced, revised, added, or deleted, it does illustrate the need for flexibility to be able to adequately respond to and accurately reflect situations on the ground.

Within the context of a region such as Southern California, the role of county governments becomes key. If counties want to reduce disparities they should target not only by racial group, but also pay close attention to the geographic dispersion of poverty. For instance, if population rich cities have higher concentrations of poverty, a major issue is that the majority of this group (i.e., those below the poverty line) tend to have low turnout in local elections. Stakeholders need to think about the role of sound public policy in reaching these groups as well as the role of population centers in addressing equity concerns.

Additionally, aspects such as economic sectoral diversification provide an opportunity to scale, but also to address resilience more broadly. The opportunity to capitalize on lithium extraction in Imperial County is a prime example of a case study in the potential for inclusive economic development to impact not only Imperial County, but also the SCAG region and Southern California generally. Comparative indices such as the SME and SMI - the proposed modification of the Hoover index - can help aid policymakers in understanding the current situation as well as the potential impacts of various investments and/or tradeoffs. The intent is to create a quickly digestible snapshot of a particular scenario, and provide the necessary tools to help with scenario planning toward best weighing and evaluating the impacts of various decisions on communities. Further study and refinement can lead to different examples of practical applications for these indices, including revisions and adaptations to meet the needs of particular sectors and communities.

---

[1] Community Economic Resilience Fund (CERF) Planning Phase Guidelines https://opr.ca.gov/economic-development/just-transition/docs/20220419-CERF_Planning_Phase_Draft_Guidelines_Public_Input.pdf

[2] Sherry R. Arnstein (1969) A Ladder Of Citizen Participation, Journal of the American Institute of Planners, 35:4, 216-224, DOI: 10.1080/01944366908977225

[3] https://www.gov.ca.gov/2022/02/22/governor-newsom-joins-president-biden-to-uplift-californias-vision-for-an-inclusive-sustainable-clean-energy-economy-in-lithium-valley/

[4] https://www.icpds.com/planning/maps/renewable-energy-maps

[5] https://lao.ca.gov/Publications/Report/3879

[6] John M. Halstead & Steven C. Deller (1997) PUBLIC INFRASTRUCTURE IN ECONOMIC DEVELOPMENT AND GROWTH: EVIDENCE FROM RURAL MANUFACTURERS, Community Development, 28:2, 149-169, DOI: 10.1080/15575339709489780

[7] https://iri.hks.harvard.edu/files/iri/files/the_capital_absorption_capacity_of_places_2012.pdf

[8] https://iri.hks.harvard.edu/files/iri/files/putting-dollars-to-work-in-the-community-9-things-local.pdf

[9] https://www.atlantafed.org/news/speeches/2016/1025-lockhart-community-development-financial-institutions-on-front-lines

[10] Aldrich, Daniel P., and Michelle A. Meyer. "Social Capital and Community Resilience." *American Behavioral Scientist* 59, no. 2 (February 2015): 254–69. https://doi.org/10.1177/0002764214550299.

Nakagawa, Yuko, and Rajib Shaw. "Social capital: A missing link to disaster recovery." *International Journal of Mass Emergencies and Disasters* 22, no. 1 (2004): 5-34.

[11] Karl Kim & Robert B. Olshansky (2014) The Theory and Practice of Building Back Better, Journal of the American Planning Association, 80:4, 289-292, DOI: 10.1080/01944363.2014.988597

Robert B. Olshansky (2006) Planning After Hurricane Katrina, Journal of the American Planning Association, 72:2, 147-153, DOI: 10.1080/01944360608976735

[12] Ibid.

[13] Ron Martin, Peter Sunley
Journal of Economic Geography, Volume 15, Issue 1, January 2015, Pages 1–42, https://doi.org/10.1093/jeg/lbu015

[14] Rolf Pendall, Kathryn A. Foster, Margaret Cowell, Resilience and regions: building understanding of the metaphor, Cambridge Journal of Regions, Economy and Society, Volume 3, Issue 1, March 2010, Pages 71–84, https://doi.org/10.1093/cjres/rsp028

[15] https://ascelibrary.org/doi/10.1061/%28ASCE%291527-6988%282003%294%3A3%28136%29

[16] https://link.springer.com/article/10.1007/s40685-019-0085-7Duchek, S. Organizational resilience: a capability-based conceptualization. Bus Res 13, 215–246 (2020). https://doi.org/10.1007/s40685-019-0085-7

[17] https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world; https://executiveeducation.wharton.upenn.edu/thought-leadership/wharton-at-work/2021/08/rethinking-your-supply-chain/; https://sloanreview.mit.edu/article/what-everyone-gets-wrong-about-the-never-ending-covid-19-supply-chain-crisis/; While just-in-time was widely blamed for supply chain issues during the COVID-19 pandemic, many executive management scholars have argued that just-in-time isn't the only culprit, more that there are inherent issues with the larger supply chain process and manufacturers' processes.

[18] https://www.undp.org/publications/cobra-conceptual-framework
https://www.undp.org/publications/cobra-implementation-guidelines

Identify the priority characteristics of disaster resilience for a target community;
Assess the community's achievement of these characteristics at the time of the assessment (generally carried out during a 'normal' period) and during the last crisis or disaster;
Identify the characteristics and strategies of disaster-resilient households; and
Identify the most highly rated interventions or services in building local disaster resilience.

[19] Judith E. Innes & David E. Booher (2004) Reframing public participation: strategies for the 21st century, Planning Theory & Practice, 5:4, 419-436, DOI: 10.1080/1464935042000293170

[20] Umemoto, Kare. "Walking in Another's Shoes: Epistemological Challenges in Participatory Planning." *Journal of Planning Education and Research* 21, no. 1 (September 2001): 17–31. https://doi.org/10.1177/0739456X0102100102.

[21] Laurian, Lucie, and Mary Margaret Shaw. "Evaluation of Public Participation: The Practices of Certified Planners." *Journal of Planning Education and Research* 28, no. 3 (March 2009): 293–309. https://doi.org/10.1177/0739456X08326532.

[22] Roger Few , Katrina Brown & Emma L. Tompkins (2007) Public participation and climate change adaptation: avoiding the illusion of inclusion, Climate Policy, 7:1, 46-59, https://doi.org/10.1080/14693062.2007.9685637

[23] Quick, Kathryn S., and Martha S. Feldman. "Distinguishing Participation and Inclusion." Journal of Planning Education and Research 31, no. 3 (September 2011): 272–90. https://doi.org/10.1177/0739456X11410979.

[24] Jovanna Rosen & Gary Painter (2019) From Citizen Control to Co-Production, Journal of the American Planning Association, 85:3, 335-347, DOI: 10.1080/01944363.2019.1618727

[25] Gwendolyn Blue, Marit Rosol & Victoria Fast (2019) Justice as Parity of Participation, Journal of the American Planning Association, 85:3, 363-376, DOI: 10.1080/01944363.2019.1619476

[26] https://www.un.org/esa/socdev/publications/measuring-social-inclusion.pdf

[27] "an indicator should identify the essence of a problem and have an agreed normative interpretation"
"an indicator should be robust and statistically validated"; 'indicator should be measurable in a way that commands general support'
"an indicator should be interpretable in an international context"
"an indicator should reflect the direction of change and be susceptible to revision as improved methods become available"; and
Measurement of "an indicator should not impose too large a burden on countries, on enterprises, nor on citizens"

[28] Koichiro Mori and Aris Christodoulou, "Review of Sustainability Indices and Indicators: Towards a New City Sustainability Index (CSI)," *Environmental Impact Assessment Review* 32, no. 1 (January 1, 2012): 94–106, https://doi.org/10.1016/j.eiar.2011.06.001.

[29] Frederickson, H. George. "Public administration and social equity." *Public Administration Review* 50, no. 2 (1990): 228-237.

[30] Broadnax, W.D. (Ed.). (2000). Diversity and Affirmative Action in Public Service (1st ed.). Routledge. https://doi.org/10.4324/9780429500954

[31] John Rawls, *A Theory of Justice* (Harvard University Press, 2009).

[32] National Academies of Sciences, Engineering, and Medicine 2019. Monitoring Educational Equity. Washington, DC: The National Academies Press. https://doi.org/10.17226/25389.

[33] "We have chosen this set of indicators because they are measures of outcomes that we judged to be critically important milestones for success as students proceed from kindergarten through the postsecondary transition (see Figure 2-2 in Chapter 2). The proposed indicators are appropriate for different developmental stages (i.e., grade level): that is, they can measure the contours of (in)equity at different stages from pre-K through grade 12 and the transition to postsecondary activities. They also offer diagnostic capability: understanding when key inequities arise, narrow, or widen is useful for identifying targeted interventions."

[34] Scott D. Campbell (2016) The Planner's Triangle Revisited: Sustainability and the Evolution of a Planning Ideal That Can't Stand Still, Journal of the American Planning Association, 82:4, 388-397,DOI: 10.1080/01944363.2016.1214080

[35] https://innovation.luskin.ucla.edu/2022/06/15/california-is-making-big-hyperlocal-investments-to-fight-climate-change/

[36] https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB616

[37] See: https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/22/fact-sheet-securing-a-made-in-america-supply-chain-for-critical-minerals/

[38] See: https://www.energy.gov/articles/biden-administration-announces-316-billion-bipartisan-infrastructure-law-boost-domestic

[39] https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf