

ALIGNING INVESTMENT AND VALUES

HOW AN ECONOMIC VALUE ATLAS CAN MAP REGIONAL STRATEGIES

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Executive Summary

With the rapid emergence of digital technologies, compounding risk factors from a changing climate, and heightened interest in building competitive and inclusive economies, local and regional stakeholders across the country are seeking new ways to ensure their infrastructure and land use policies act in direct support of regional economic development strategies. However, achieving greater alignment will not just magically happen. Empowered leaders and their practitioner colleagues need new tools and techniques to better understand how economic development and the built environment complement one another—and apply that knowledge to reform the way governments and private actors invest in the built environment of cities and regions.

An Economic Value Atlas, or EVA, is a multifaceted intervention to address this alignment gap. An EVA is a regional engagement, value-setting, and measurement process culminating in an interactive regional map that indexes neighborhood-level, value-based performance metrics. The overall framework helps practitioners delve into geographic disparities in how the region is living up to its values—opening the door to more equitable, place-based decisionmaking for business, infrastructure, and land use purposes.

Over the course of 18 months, Brookings Metro worked with a cohort of three metropolitan regions—Kansas City, MO-KS; Minneapolis-Saint Paul, MN; and Portland, OR-WA—to co-develop and refine the EVA framework. Cohort members shared lessons around community engagement and values alignment, tested new methods to measure progress, and considered various policy reforms. This roadmap summarizes the results of that process, presenting a replicable set of lessons that other interested regional leaders could use to launch their own EVA.

The EVA framework consists of five phases of work, each of which can be adjusted based on unique local conditions:

- The EVA's leadership team **sets a stakeholder table** with a diverse collection of regional voices to serve as the board of directors for the EVA process. These durable partners will serve multiple purposes: debate and finalize the vision for the region, offer feedback on technical components under development, and serve as community advocates for the public-facing toolset.
- The leadership team and stakeholder table **develop a shared vision**—a collection of specific long-term goals a region would like to achieve. The vision should bucket goals around common shared values such as residential well-being, business success, and environmental health.

- A research-driven team **translates values into indicators and metrics** using sets of categorical indicators and quantitative metrics that reflect the goals stakeholders would like to achieve. The objective of this translation process is to give stakeholders a flexible method to assess how well specific neighborhoods perform relative to regional goals.
- A coding team develops and **launches EVA software**—the final step in publicly launching an EVA toolset. EVA software should let users to combine multiple metrics (or “stacks”) at once to allow dynamic and flexible benchmarking of neighborhood performance relative to regional goals. EVA software is also a template unto itself; different data inputs can be used to adapt the software to answer new questions and meet targeted needs.
- The leadership team works with government and civic leaders to **inform and guide policy and investment decisions using EVA outputs**. The EVA’s open data allows regional practitioners to use the EVA’s output to purposely inform capital investments, operational practices, and public information campaigns.
- The EVA processing system could be used to **assess the potential and/or past impact** of major capital investments and policy reforms, including technical integration with other third-party tools already in use.
- The EVA **software can evolve** if supported by a broader community of practice. There are opportunities to test new real-time analytical techniques, address memory issues limiting analyses of smaller geographies, and continue adding reporting options.
- The EVA’s stakeholder table and shared vision can **inspire greater formal coordination** across disparate regional planning practices, including long-range transportation plans, comprehensive economic development strategies, and nascent practices such as climate action plans. Improving marketing of the EVA can lead to greater use and, in turn, further refinement and collaboration.

Critically, the EVA framework is designed to deliver results. Regional leaders can use the EVA’s multiple variables and open access to inform a wide set of common activities, from improving industrial site selection to prioritizing pedestrian infrastructure projects to finding gaps in access to public health and educational institutions. The EVA is especially attuned to locate neighborhoods of interest based on conditions directly tied to regional values.

Even amidst this progress, the EVA framework is not static. The entire process is meant to be refined in each community based on their own goals, tastes, and capacities. Nor is the EVA framework fully mature. There are still clear areas for exploration and refinement, including:

- The EVA’s indicators and metrics can continue to be a place to **test emerging models of data-informed decisionmaking** or deployment of highly granular geospatial data. These tests could be especially important around research priorities such as environmental justice.

The EVA framework offers a versatile system to support stakeholders in any region who want to foster greater alignment between their economic vision and built environment practice. As more people in more places experiment with the framework—building regional consensus, launching their own software, and testing new community engagement methods—the framework will continue to evolve. Our hope is such an emerging community of practice leads to more competitive and collaborative regions across the country.

DEFINING ‘METRO AREAS’ AND ‘REGIONS’

This brief frequently uses the terms “metro area” and “region,” which are similar but have a critical distinction. A **metro area** refers to a formal geography defined by the federal Office of Management and Budget (OMB) as housing at least 50,000 people, bounded by one or more counties, and having a high degree of social and economic integration. **Regions** are a shorthand for a geographic space larger than a single city, but not necessarily the same size as an official metro area. For example, some councils of government (COGs) cover a smaller or larger footprint than the OMB-defined metro area.



Saint Paul, Minnesota

Introduction

Traditional built environment and economic development practices are falling short in the face of a convergent set of environmental, economic, and social challenges. With each passing year, more communities find themselves vulnerable to extreme weather events, threatening both business continuity and personal safety.¹ Income disparities continue to rise, leaving too many households unable to afford essential services such as transportation, health care, and broadband.² Meanwhile, employers often struggle to find talented workers or access financial capital, especially in the case of many young or minority-owned businesses.³

Public, private, and civic leaders increasingly recognize that achieving inclusive growth and designing resilient communities require more than recruiting out-of-town businesses or attempting to reduce highway congestion. Those leaders need a new kind of policy playbook—one that addresses the cross-sectoral challenges regions face and designs strategies across disciplines.

Aligning economic development and built environment goals is one part of that playbook—and it is an enormous job. No single local government, business entity, or civic organization has the sole responsibility

to manage industrial growth, social equity, or environmental health. Instead, it's stakeholders working together—from the regional to neighborhood scale—that can set a course for long-term competitiveness.

The Economic Value Atlas, or EVA, is a framework to incentivize collaboration and build consensus around long-term planning and investment decisions. An EVA framework helps practitioners delve into the geographic disparities in how their region is living up to its values, opening the door to more equitable, place-based decisionmaking for business, infrastructure, and land use purposes.

This brief details how the EVA works and reports the lessons from a cohort of three metropolitan regions: Kansas City, Mo., Minneapolis-Saint Paul, Minn., and Portland, Ore. National practitioners are the core audience, and this brief offers them a replicable blueprint to start local conversations about the need for an EVA or to launch their own process. The brief begins by explaining why the EVA is needed given current planning and investment models. It then transitions to a detailed discussion of the EVA's mechanics, including specific lessons from the cohort. The brief concludes with a discussion of ongoing work that future EVA users could pursue.



Kansas City, Missouri

Why use an Economic Value Atlas?

SHARED CHALLENGES DEMAND A SHARED VISION AND ALIGNED STRATEGIES

Stakeholders enjoy a wealth of formal planning practices to advance their economic development

and built environment ambitions.⁴ Comprehensive economic development strategies (CEDs) establish the strategic direction for a regional economy. Long-range transportation plans (LRTP) translate regional goals into discrete transportation projects. Regional utilities, public works departments, and major civic institutions all use capital plans to sequence future investments. Consolidated plans are a requirement to qualify for federal housing and community grants. In theory, each of these plans could cross-reference and support one another.

TABLE 1

Siloed planning processes have a collective impact on regional built environments

Sector	Sample plan(s)	Jurisdiction(s)	Built environment impacts
Transportation	Long Range Transportation Plan	Metropolitan area	Transportation, land use
Housing	Consolidated Plan; Public Housing Agency Plan	Selected cities and counties; public housing authorities	Subsidized housing, community development
Economic development	Comprehensive Economic Development Strategy	Economic Development Districts	Commercial corridors and employment centers
Workforce	Workforce Development Activities and Sector Strategies	States; counties; municipalities	Hiring and training of infrastructure workers
Climate and environment	Decarbonization and Climate Action Plan(s)	Metropolitan areas; counties; municipalities	Transportation, energy, building retrofits

Source: Brookings Authors

However, in practice, it's unusual to see purposeful alignment among formal planning activities.

First, there is no requirement for horizontal alignment across sectors within the same region. Long-range planning activities like a CEDS, LRTP, or housing needs inventory are not legally mandated to reflect the same long-range goals or even represent the same shared values. Instead, it's much simpler for each plan's authors to draft in isolation. In many cases, organizations seek the support of external consultants to navigate these planning processes, adding a further degree of separation. As a result, formal plans can easily contradict one another or duplicate work. For example, are regional business organizations and public economic development offices targeting the same industry clusters, and in what ways? Most metro areas do not have a designated forum to debate overarching goals and then transfer consensus opinions into formal practice. Nor is there any guarantee that current forums equitably represent the full range of community voices.

Second, planning practice often does not vertically connect regional goals and neighborhood conditions. The use of dashboards has become nearly ubiquitous among regional business groups, public agencies, and civic organizations. However, regional dashboards often fail to measure similar progress at the neighborhood scale; instead, users are far more likely to see comparisons to peer metro areas. Sticking exclusively to a regional measurement focus ignores decades of foundational research demonstrating how neighborhood-level conditions can impact household opportunity and business success.⁵ Omitting neighborhood measurement also limits a region's ability to judge the effects of past built environment interventions. For example, how did construction of a new transit line or bike lane impact travel behavior in some neighborhoods versus others? Failing to measure neighborhood conditions makes it harder for practitioners to diagnose their regional-level conditions.

Now, as the country enters a grand era of federal investment, the limits of our current planning practices will be tested more than usual. The Infrastructure Investment and Jobs Act (IIJA) commits at least

\$850 billion over five years to a mix of transportation, water resources, energy, and broadband projects.⁶ Meanwhile, the American Rescue Plan includes a combined \$350 billion that flows directly to states and localities to invest in their communities.⁷ Combined, federal investment will rise to a five-decade high.⁸ But the federal government will not select which capital projects to build or operational programs to fund. That responsibility rests with local officials and their state partners.

The additional federal funds hitting the marketplace put even greater pressure on metropolitan planning organizations (MPOs), councils of government (COGs), economic development districts (EDDs), and regional business groups to deliver lasting value. These stakeholder categories tend to own regional economic visioning and planning exercises, and are often the most vocal advocates for regional capital projects. Many MPOs and COGs also have a mandate to support their local jurisdictions' planning efforts and ensure local investment plans support regional objectives. Meanwhile, regional business groups closely collaborate with financial institutions and endowed civic actors such as philanthropy and universities to mobilize private financial capital.

Metro areas where regional stakeholders find new ways to align their economic and built environment ambitions will be best positioned to take advantage of this period of heightened investment. The question is how.

AN EVA OPERATIONALIZES REGIONAL ALIGNMENT

The central purpose of an Economic Value Atlas is to better align economic development, regional planning, and infrastructure investment in support of long-term regional goals. Delivering such transformative change requires addressing three structural gaps holding back regional alignment.

First, an EVA offers a central meeting point to help regional stakeholders establish shared regional values. Metropolitan regions do not lack forums in which multiple stakeholders can sit down and meet. MPOs, COGs, business groups, and anchor institutions all tend to have standing committees filled with external

partners who discuss long-run competitiveness and community engagement issues. But those forums are oriented around the host's needs; they are not centralized, nor is the focus on common values. An EVA process ensures this is a more egalitarian table, one where a range of stakeholders are put on equal footing.

Second, an EVA aims to inform strategic planning by building a multidisciplinary and accessible knowledge base. Stakeholders need an array of qualitative and quantitative information to choose between potential regional values and measure progress against them. The information should be **complete**, representing all of the different priorities stakeholders may have. The information should be **flexible**, allowing customization based on the needs of any given debate. And finally, the information must be **trusted**—informed by reputable data sources and frequently updated. The information components of an EVA process reflect all three of these conditions.

Third, an EVA interrelates regional and neighborhood conditions. The past decade-plus has seen an explosion in the availability of hyperlocal data sources. It is now possible to measure many of the same regional conditions at either the census block group or tract level. Yet, when stakeholders strictly deploy regional dashboards to judge progress, the entire civic community misses an invaluable opportunity to track where specific neighborhoods are exceeding,

matching, or falling short of regional targets. An EVA recognizes this neighborhood capability and specifically aims to measure economic, social, and environmental performance at the regional and neighborhood levels.

These three steps promise to build a kind-of regional Rosetta Stone. Convening stakeholders within an egalitarian forum can build consensus around a set of regional values. A flexible mapping and analytical tool—including trusted data from the regional to neighborhood scale—allows measurement against those values. The net effect is a common language among often-disconnected professional disciplines.

Still, an EVA process intends to accomplish more than shared understanding. Ideally, the knowledge held within an EVA can inform the size, scope, and location of regional investments across the economic development and built environment sectors. For example, regional governments can use EVA performance measures when deciding between locations for new transportation projects or reforming local zoning. Economic development groups can use EVA data to inform site selection for real-estate-related incentives. The ability to combine disparate neighborhood-level datasets in real time and anchored around shared values can inspire urgency to act. The opportunity, then, depends on stakeholders embedding EVA outputs within their formal practices.

BOX 1

The cohort process

The EVA cohort included three regional representatives, plus coordinating and centralized work out of Brookings Metro:

Metro (Portland, Ore.): Metro, the MPO for the Portland region, first co-created its Economic Value Atlas with Brookings Metro in 2019 and played a key role in this cohort. The Portland Metro EVA reflects a coordinated vision of Greater Portland 2020 and the updated Comprehensive Economic Development Strategy established in 2021, the 2040 Growth Concept, the Regional Transportation Plan, and Portland Metro's six⁹ desired outcomes. The Portland Metro core team, led by Senior Economic Development Planner Jeffrey Raker, included members with a focus on software design, data, and policy implementation. Together, the team not only shared lessons—and the EVA software platform

BOX 1 CONTINUED

itself—from their initial development, but also iterated with additional targeted development sprints to allow the tool to answer new questions. The Portland Metro team also continued to explore a variety of implementation opportunities and use cases for their EVA, as its successful use established regional trust, credibility, and demand for the tool.

Mid-America Regional Council and KC Rising (Kansas City, Mo.): The Mid-America Regional Council (MARC), the bistate Kansas City region’s MPO and COG, worked together with KC Rising, an initiative of the Civic Council of Greater Kansas City, to create their region’s Economic Equity Value Atlas (EEVA) as part of the cohort. The Kansas City EEVA reflects a set of regional values—or “Pillars of Prosperity”—defined through extensive stakeholder engagement. The MARC core team, led by Frank Lenk, included members with a focus on translating Portland’s EVA software to the Kansas City context, analyzing data, and ensuring metrics and measures reached consensus with KC Rising core stakeholders. Additional team members with a focus on transportation planning are already iterating the EEVA for use as a decision support tool for transportation investments in the region.

Metropolitan Council (Minneapolis-Saint Paul, Minn.): The Metropolitan Council (Met Council), the Minneapolis-Saint Paul region’s MPO and COG, sought to create an EVA platform to support the region’s continued work defining shared values and evaluating possible investments toward those values. The Met Council core team, led by Dan Marckel, sought to carry forward relationships and values established in the recently adopted Regional Economic Framework (a comprehensive economic development strategy equivalent) and tie those values into emerging scenario and long-range planning in the region. The Met Council team included expertise in open-source R Shiny software development, contributing an R Shiny instance of the EVA tool, and economic research.

Together with **Brookings Metro**, these three core teams met regularly throughout the 18-month project cycle. Brookings Metro facilitated quarterly cohort meetings with an emphasis on values, stakeholder engagement, data, software, and policy and tool implementation. Each core team joined the cohort with different regional contexts and project goals: Portland had already completed its EVA tool, Kansas City had already completed its value-setting process and sought to adapt Portland’s tool to their region’s needs, and Minneapolis-Saint Paul aimed to further distill their region’s emerging values while also creating their own open source version of the tool. This region-to-region diversity fueled active co-learning opportunities. Challenges in Kansas City sparked tool updates in Portland, and questions about storytelling and tool accessibility from Minneapolis-Saint Paul inspired similar regional conversations in Kansas City and Portland. The Portland team’s progress on implementation encouraged the other teams to constantly consider potential use cases and implementation needs during tool development.

In addition to workshopping challenges and sharing successes, cohort meetings provided an opportunity for the cohort to think strategically about the tool’s place in each region and how to ensure its continued usefulness and success. Regions faced unique challenges during the cohort timeline—the COVID-19 pandemic; natural disasters including fires, heat waves, and floods; and economic hardship. They also saw dramatic increases in federal spending through the CARES Act, American Rescue Plan, and Infrastructure Investment and Jobs Act. As new challenges and opportunities emerged throughout the project, cohort meetings also became a place for teams to benchmark regional conditions against peers and hear from guest speakers.



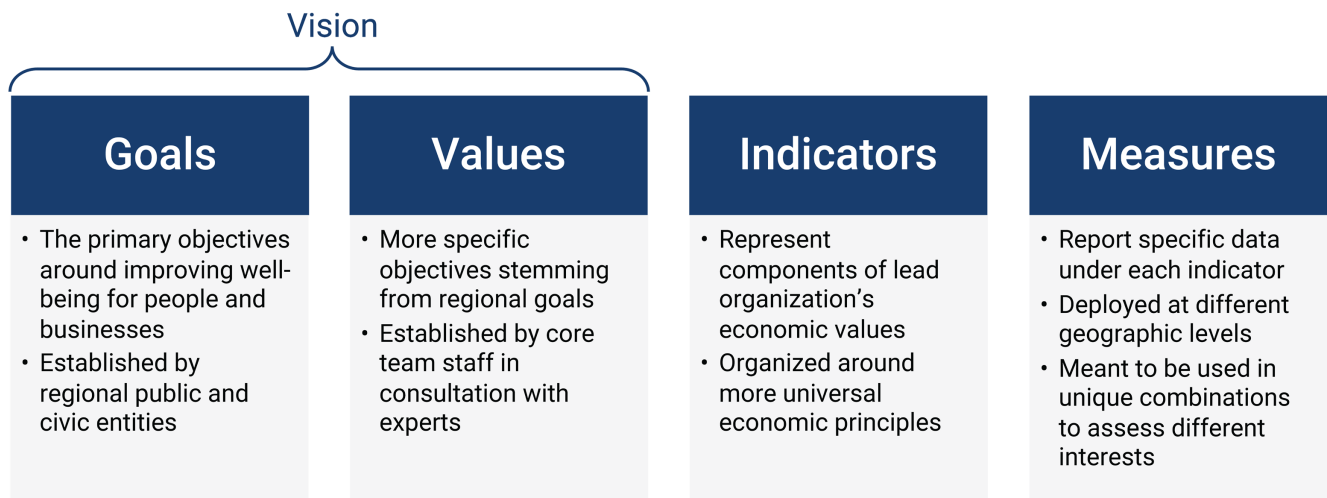
The EVA framework

The Economic Value Atlas framework expands on current practice by establishing a common meeting point to debate cross-cutting regional values, build collective knowledge, delve into intra-regional variation, and embed metrics—and thus

accountability—into decisionmaking. Building a successful EVA depends just as much on early-stage stakeholder engagement and value-setting as it does on well-selected data and functional software. And even the most successfully built tool withers quickly when not sustained by a healthy variety of users across multiple decisionmaking contexts.

FIGURE 1

The EVA framework translates goals to measures



Source: Brookings Authors

SETTING THE STAKEHOLDER TABLE

Much of the hard work of building an Economic Value Atlas happens well before data selection or tool development. Robust stakeholder engagement lays the groundwork for the challenging goal- and value-setting discussions ahead, and curates a primary group of users for the tool itself. ***The EVA stakeholder table functionally serves as the board of directors for the EVA process.***

The EVA stakeholder table can and should include a diverse set of regional actors. Governments are essential participants, including regional entities, local government units, and state offices if possible. Civic institutions are equally important, beginning with regional business groups who already lead long-standing economic development activities. Anchor institutions such as health care providers, universities, and philanthropy offer invaluable perspectives. Nonprofit organizations are a vital conduit to reflect community and residential voices. Across all these potential participants, the EVA owner should look to recruit individuals who can speak to visionary needs—not necessarily those with the best titles.

The stakeholder table in all three cohort regions reflected this general diversity of participants while still conveying the unique community dynamics in each place. In Portland, Metro convened a taskforce and technical work group that included stakeholders from economic development, workforce development, the private sector, research institutions, ports, and state, county, and city offices. In Kansas City, MARC and the Civic Council of Greater Kansas City leveraged the stakeholders who volunteered as part of the KC Rising effort, which included “corporations, foundations, nonprofits, governments, educational institutions, human services groups, civic leaders, and other members of the public square.”¹⁰ In Minneapolis-Saint Paul, the Met Council grew their EVA from previous engagement efforts, the development of the 2020 Regional Economic Framework, and ongoing efforts to produce regional plans for 2050.

A well-represented regional stakeholder table also builds credibility and experience to establish more

specialized leadership groups for future projects. For example, when designing a subsequent EVA iteration to support a planned light rail extension, Metro engaged a deeper set of stakeholders to represent community values. Similarly, a future iteration of the Kansas City EVA will involve local government officials who all work in the transportation planning space.

Formal stakeholders should be seen as a durable component of the entire EVA process. At the onset, stakeholders will be the primary users and drivers of EVA work—working together to set goals and values and vet the research team’s work along the way. As the tool becomes visible to more actors throughout the region, the stakeholders can support community engagement around the tool’s value and potential use cases. And as the EVA process evolves, including through future updates, the leadership team should look to refresh or expand the stakeholder table to keep ideas fresh and bring in new voices.

However, it is important to remember that not every user will be part of the core stakeholder table. Beyond this group, EVA teams should proactively plan engagement and communication with external audiences to establish interest and pique the curiosity of future users. Key external audiences may include elected officials and the public, who might become EVA users in the future and will need an appropriate introduction to the tool, its purpose, and its potential use cases.

ESTABLISHING A SHARED VISION

The first major task for an EVA leadership team and core stakeholder group to complete together is to establish a shared vision for the future of the region. ***A shared vision is a collection of specific, long-term goals a region would like to achieve. The vision should bucket those goals around common shared values such as residential well-being, business success, and environmental health.***

Establishing a shared vision is likely the most challenging part of the EVA framework. The participants should expect multiple rounds of debate to finalize a clear list of goals. In the best-case

scenario, current strategy documents like a CEDS may accurately reflect regional values and a concrete set of goals. At the very least, established strategy documents can serve as a starting point to anchor debate and avoid planning fatigue.

While it may take several attempts to reach consensus

on a shared vision, this hard work is essential to the EVA's success. Stakeholders must be aligned with and committed to this shared vision to hold the region and themselves accountable in the future. Critically, this is the portion of the EVA that will change the least frequently. In other words, establishing a consensus version early reduces work later.

BOX 2

'Grow the economy and include everyone': KC Rising's journey to a shared vision

Home to nearly 2.2 million people in 2020, the bistate Kansas City region's storied history in advanced industries such as logistics, vehicle manufacturing, and telecommunications helped the region rise to prominence over almost two centuries. Still, stakeholders in Kansas City have long understood that past successes do not guarantee future prosperity.¹¹ Competing in the global business environment, creating good-paying jobs for all people, and delivering a high quality of life demand constant evolution.

KC Rising is a direct attempt to incentivize such evolution.¹² Founded in 2015 as a joint effort by three regional business entities—the Civic Council of Greater Kansas City, the Kansas City Area Development Council, and the Greater Kansas City Chamber of Commerce—and the area council of government (the Mid-America Regional Council), KC Rising is a purposeful attempt to use civic collaboration to tackle structural challenges and build regional consensus around a shared vision for regional prosperity.

As KC Rising entered its second strategic planning phase, the organization reconstituted its civic leadership team—including a formal steering committee—to reassess the region's position: what outcomes would define long-run prosperity, what were the threats to those goals, and how to organize to build even deeper regional relationships and forward-looking strategies. This effort led to the adoption of "Seven Pillars of Prosperity": connectivity, neighborhoods, enterprise, industry, inclusion, education, and culture. The chief objective of "KC Rising 2.0" is to align and amplify the efforts of a diverse roster of stakeholders—oriented around those seven pillars—to develop community actions that "grow the economy and include everyone."¹³ Many of those stakeholders now serve on one of seven standalone committees dedicated to removing obstacles to alignment, identifying gaps in capacity, and generating resources to fill them.

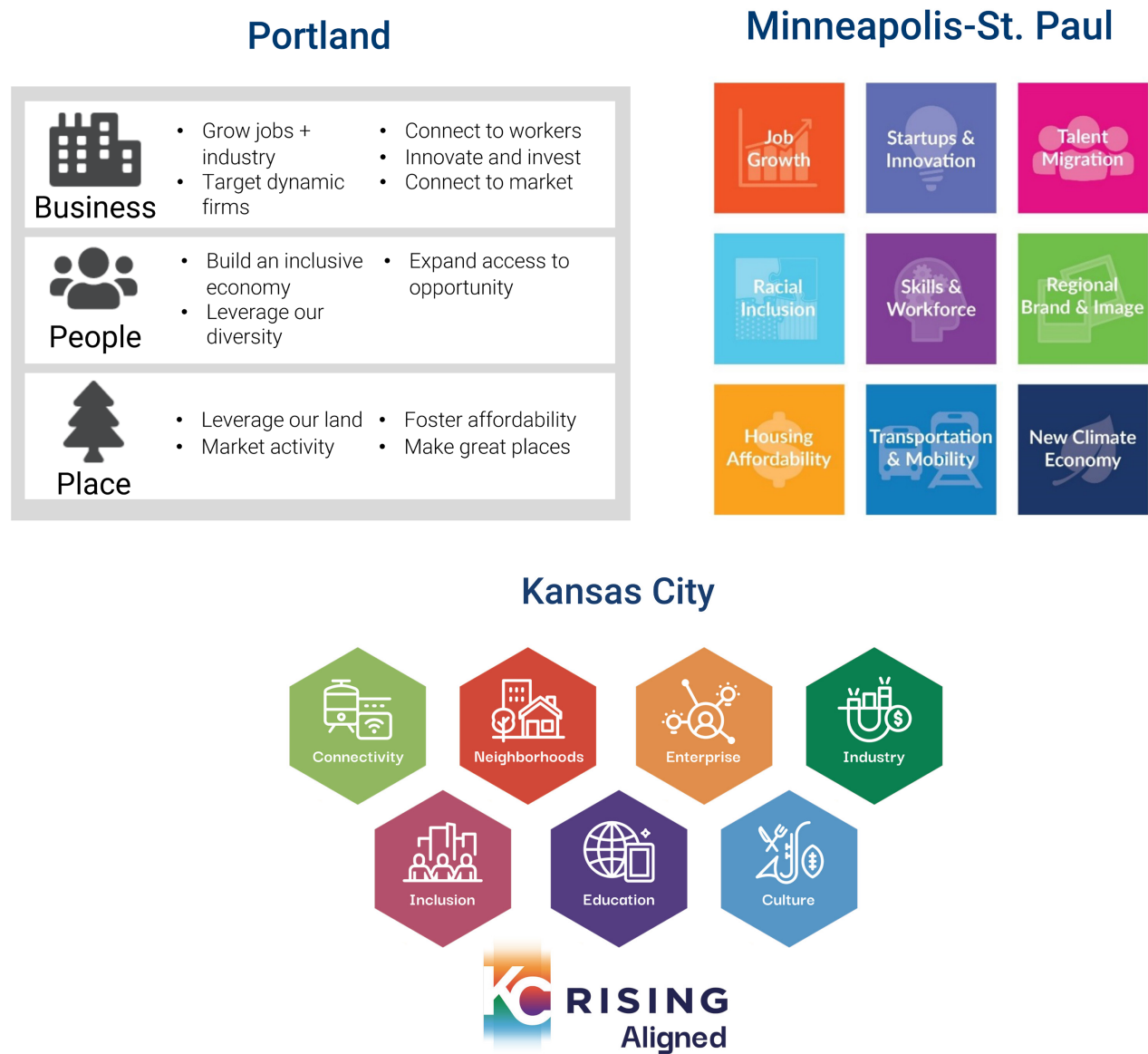
The Economic Value Atlas framework fits squarely within the KC Rising 2.0 approach. KC Rising's staff put together a stakeholder table and adopted a shared vision. Now, the EVA system gives stakeholders a platform to translate those seven regional values into seven categorical indicators supported by a myriad of performance measures. In so doing, it creates a new nomenclature for organizing data and a common language for describing progress on strengthening the pillars—both of which drive greater alignment of efforts. EVA mapping software will enable KC Rising stakeholders and other community members to situate neighborhood conditions against those values; launching KC Rising 2.0 with the EVA framework in mind ensured this neighborhood data component was part of the program from the onset. In the end, the Kansas City region will receive another public-facing communication tool to continue its evolution.

After establishing a shared vision and goals for the future of the region, EVA teams and core stakeholders should organize their goals into a discrete set of well-defined values. These values will inform the EVA’s statistical foundation. In Portland, values were organized into three primary buckets: business, people, and place. In Kansas City, values were broken down into seven “Pillars of Prosperity”:

inclusion, connectivity, culture, neighborhoods, and education. In Minneapolis-Saint Paul, values forged during the creation of the 2040 regional plans (stewardship, prosperity, equity, livability, and sustainability) are being updated for 2050 plans to reflect current issues and opportunities. Shared values will look entirely different across regions—reflecting unique cultural, economic, and governance contexts.

FIGURE 2

Shared value frameworks vary across regions



Source: Portland Metro, Met Council, and KC Rising

Each of the regions in the cohort used previous work to inform their EVA, although none of those prior efforts perfectly informed the eventual set of goals and values. This is a savvy strategy. Constructing the EVA's shared vision as an original, standalone process ensures the EVA's leadership team, stakeholder table, and other community members can be heard and, hopefully, feel energized before proceeding to the translation stage. However, it can take months to settle on a common vision—meaning participants must have patience.

TRANSLATING VALUES TO INDICATORS AND METRICS

Once shared values have been defined and agreed upon, EVA work shifts to a research team to construct a set of categorical indicators and quantitative metrics that reflect the full range of shared values. Assembling and organizing relevant performance measures is critical to ensuring that the EVA can connect to a variety of audiences and respond to different levels and types of analysis. ***The objective of this translation process is to give stakeholders a flexible process to assess how well specific neighborhoods perform relative to regional goals.***

There are two inherent tensions in this translation process. First, high-level economic, social, or environmental goals often will not map perfectly to just one performance metric. For example, an equitable labor market is vital to a stronger regional economy, but there is no single measure to judge progress. Second, data availability is often

inconsistent between the regional and neighborhood scales, with regional data likely to be more varied and more closely connected to specific goals. Gross metropolitan product (GMP) data is one example that does not exist at the neighborhood level.

The EVA's design attempts to respond to both tensions. The EVA promotes using more universal data building blocks at the neighborhood scale—including income, demographic, or land use data—and then allows flexible combinations of those data points to effectively create new measures. Since each neighborhood measure can be indexed against regional averages, any combination of neighborhood measures—or “stack”—will always include a regional benchmark. Ideally, an EVA includes combinations of measures that map to specific indicators, creating a through-line back to regional goals.

The EVA design can also host data that offers important geographic context, but either cannot be consistently measured across each neighborhood or is atypical in some other way. The Overlay Layer is a place to park any of these additional elements. These layers can visualize anything from proposed or planned transportation investments to community assets like schools and hospitals to regionally defined priority areas. Overlay layers can provide meaningful context to a broader range of users without distracting from the shared values framework underlying indicator and metric visualization.



Saint Paul, Minnesota

FIGURE 3

EVA metrics bundle together into indicators

Values	Indicators	Metrics
Connectivity	Broadband	Access to a desktop or laptop computer
		Subscription to high-speed broadband internet
	Job Access	Low-wage jobs within 20 minutes
		Middle-wage jobs within 20 minutes
		High-wage jobs within 20 minutes
	Labor Access	Low-wage workers within 20 minutes
		Middle-wage workers within 20 minutes
		High-wage workers within 20 minutes
		Low-education workers within 20 minutes
		Middle-education workers within 20 minutes
		High-education workers within 20 minutes
	Home-to-work	Commute to work by transit
		Travel time to work by transit
Travel time to work		
Jobs-housing balance for low-wage workers		
Jobs-housing balance for middle-wage workers		
Jobs-housing balance for high-wage workers		

Source: Kansas City EEVA

Creating this data system requires research teams to inventory the variables they are able to measure at the neighborhood and regional levels from the data sources they have access to. In the three cohort regions, this included a mix of census data, primarily from the 5-year American Community Survey, agency-collected

data, and proprietary data from a variety of providers offering hyperlocal granularity. The geography of the data is especially important; not all sub-county data is available at the same geographic fidelity. Also important is how frequently data is updated, since the EVA can be a permanent analytical tool.

BOX 3

Balancing confidentiality and geographic and temporal scale in data

The past several years have brought major shifts in the availability of public data at the neighborhood scale. Concerns about the anonymity of hyperlocal public data have continued to rise, causing the Census Bureau to take a close look at their methods, and in some cases, change them.¹⁴ Similarly, demand for geographic granularity can sometimes push beyond the capabilities of a single survey. One of the major responses to this pressure has been the increased adoption of synthetic data—through the combination of multiple datasets or generation of fully simulated datasets—to balance competing concerns around geographic granularity, timeliness, anonymity, and accuracy.

In the EVA, synthetic data already makes an appearance. LEHD Origin-Destination Employment Statistics are used to calculate neighborhood-level accessibility to jobs and workers. This dataset includes both noise infusion and synthetic data methods to protect confidentiality,¹⁵ but cohort members noted an accuracy tradeoff in some cases. Especially when working at the hyperlocal scale of the EVA, even small losses of accuracy could negatively impact the tool's usefulness. The Census Bureau is currently exploring the use of synthetic data in the American Community Survey—the primary source of all demographic and socioeconomic data included in the EVA.

Meanwhile, private providers continue to offer ever-more spatially precise data, updated more frequently than public data sources and often promising nuanced insight into a variety of topics. These private data sources, including mobile geolocation data, bring the same concerns, but without the methodological transparency users have come to expect from public data sources. With multiple private data providers now offering timely data at the hyperlocal scale, data procurement decisions will continue to become more difficult for regions across the country.

As with previous steps in the process, the research team must consider how much approval they will need from the core stakeholder group. Researchers in our cohort presented and refined their indicators and metrics multiple times based on feedback from key stakeholders. This process resulted in a set of indicators and metrics that clearly connected back to shared values, was approachable to a variety of users, and included all measurable aspects of the shared vision. Key questions for stakeholders to consider include:

- *Are the proposed indicators and metrics measuring what we're interested in?* Concentrated poverty has been used as a common metric of urban economic distress for decades. Yet the cohort found this

deficit-focused metric to not be an ideal fit for the EVA. Concentrated poverty metrics stigmatize very low-income neighborhoods without engaging in the larger structural inequalities shaping them and causing continued disinvestment. The metric also ignored the flipside—areas of concentrated affluence. The Met Council presented their Equity Considerations Database¹⁶ to the cohort, identifying several alternative, place-based metrics for economic equity. This cohort learning sparked the creation of a new “mixed-income” measure in Kansas City's EEVA.

- *Are the proposed indicators and metrics approachable and understandable?* In Kansas City, the research team found stakeholders were

most willing to approve metrics that were quickly and easily digestible. More complex measures are possible, but may require explanation and definition within the context of the tool. In Minneapolis-Saint Paul, a tree-prioritization project built using EVA software included a scrollable storytelling panel to allow users to better understand what the tool was measuring and why.

- *Do the proposed indicators and metrics capture the shared vision, or are they missing out on certain aspects?* When layered together on a map, the metrics should show how neighborhoods are performing toward a shared regional vision. This is only possible if all values are properly translated into metrics. In some cases, key regional conditions such as infrastructure investments or environmental health may not emerge as part of the regional vision, but are clearly necessary to provide context. Portland demonstrated the value of adding new fields to their Overlay menu, offering a way to display key contextual data without including it in the values-based score calculation.

There is no perfect number of metrics. Instead, EVA architects should find a natural balance between the complexity of too many measures and the limitations of too few. As EVA teams decide which approach to take, they should consider project budget and timeline, as well as how much potential there is for future EVA tool refinement. A more exclusively curated set of metrics is likely a good fit for a region where future conversations revisiting values, indicators, and metrics are likely to be sporadic. In regions where these conversations are charted to continue consistently, there may be more space and flexibility to start with a generous mix of metrics and refine them over time, as users familiarize themselves with the tool and begin to express preferences.

Once the research team has successfully finalized the metric list and gathered all of the data, the database needs to be standardized so that variables with different scales can be effectively compared and bundled together. This is not an insignificant decision. The selected method will directly influence performance values.

We recommend using one of two standardization methods—nominal weighting or standard score weighting—depending on the research team and stakeholders’ preferences. Each of these methods can be used to put all metrics on a 0-10 scale and will allow the EVA visualization to draw attention to outlier cases.

THE EVA SOFTWARE

Software is what makes the Atlas portion of the EVA possible and is the final step to publicly launch an EVA toolset. The Tool Tour box (p. 17) uses a working EVA to demonstrate how all of the statistical details work in a functioning software environment.

To launch EVA software, the EVA leadership team will need to decide which underlying codebase works best for them. Portland’s original EVA is a JavaScript tool built within an Ember framework and hosted within a proprietary Esri environment. Kansas City adopted the same software platform in constructing their EVA, demonstrating its ability to be customized for a new place with new data indicator categories, metrics, and overlay data. Minneapolis-Saint Paul chose to develop their EVA on an open source R Shiny platform.

Any region launching an EVA will need to make a clear assessment of their capacity to launch under proprietary or open source software. Each system has its own advantages and disadvantages, ranging from financial costs, labor hours around development, and likelihood of long-term code maintenance.



Kansas City, Missouri

BOX 4

Open source software in Minneapolis-Saint Paul

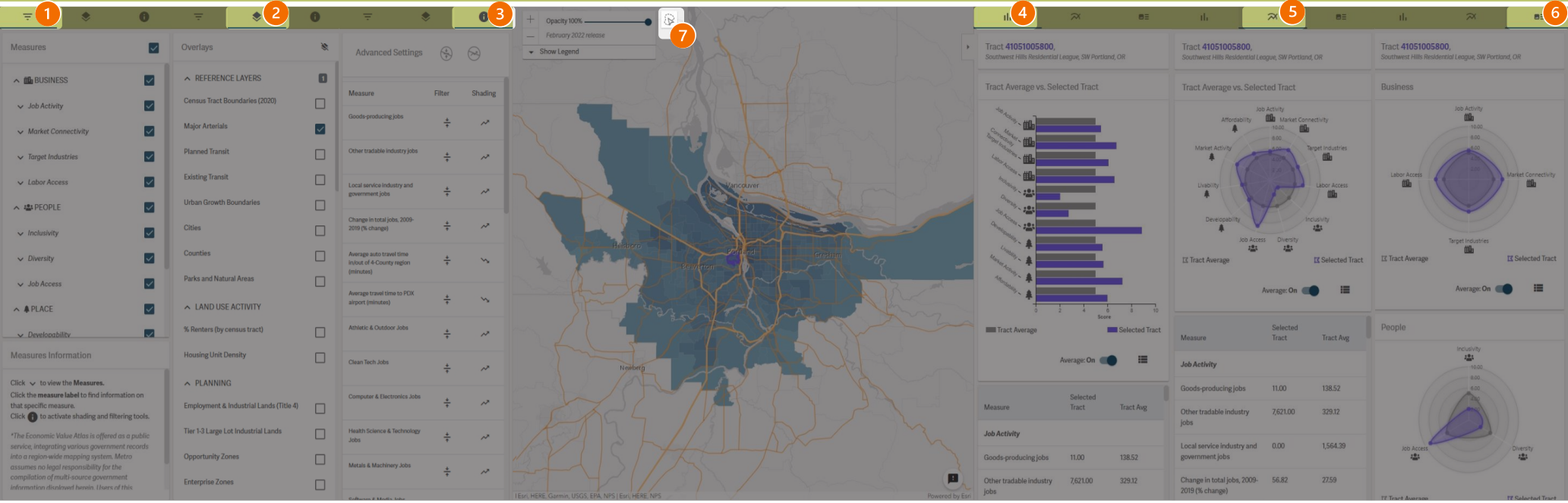
Minneapolis-Saint Paul took a different approach to EVA software than other regions. Recognizing the value of open source software tools and the Met Council's own in-house talent, their staff developed a version of the EVA platform which can be deployed into a web application using R Shiny. While the Met Council's EVA is not yet live, the tool has already proven easily adaptable. In Baltimore, the Baltimore Development Corporation is using the tool to assess commercial corridors and their progress toward regional values.

The Met Council has demonstrated what the R Shiny platform can deliver through an entirely new use case: a tree prioritization project known as Growing Shade. The Growing Shade tool uses a similar conceptual backbone to the EVA platform to synthesize complex data into simple metrics bundled under priority areas (climate change, conservation, environmental justice, and public health). The tool was developed with external audiences in mind and features a scrollable storytelling feature to share lessons about regional issues and priorities intersecting with the tree canopy, as well as the EVA-informed mapping tool itself. Through development of the Growing Shade tool, the Met Council team augmented the storytelling capabilities of the same coding backbone, prompting other cohort participants to consider the potential for accessible storytelling linked to the EVA tool.

The Met Council's open source Growing Shade tool can be viewed online at <https://metrotransitmn.shinyapps.io/growing-shade/>, and the Met Council's open source EVA tool is live on GitHub: <https://github.com/Metropolitan-Council/economic-values-atlas>



Saint Paul, Minnesota



- 1 Selecting this symbol opens the **Measures** menu. This nested menu allows users to turn on and off core data layers of their choosing. In the Portland EVA, measures like “Goods-producing jobs” nest into values like “Job activity”, which are then bucketed in three focus areas: business, people, and place. Measure selection can be done at any level in this hierarchy—a user only interested in place-based values and metrics could uncheck “Business” and “People” to remove all related measures. They could then focus their selection even further by either choosing a particular place-based value such as “Affordability” or selecting a customized set of metrics under multiple values to answer their own research question. *By default, the application loads with all measures automatically turned on, indexing neighborhood performance on all regionally-shared values at once.* A Measures Information table includes data sourcing and other important context.
- 2 Selecting this symbol opens the **Overlays** menu. This menu functions similarly to the **Measures** menu, with layers nested into one of the following groupings: reference layers, land use activity, proposed transportation projects, community assets, and so on. Overlays add flexibility to the tool by providing the contextual data necessary to ask more targeted questions but are not statistically measured to judge tract performance. The **Overlays** menu is designed to add data that feels essential to understanding a region but does not nest neatly into the shared value framework in the **Measures** menu.
- 3 Selecting this symbol opens the **Advanced** menu. This menu allows users to fine-tune the way measures are visualized in the map. More advanced users may want to change the directionality of certain variables to answer specific research questions and can do so using the **Advanced** menu. This menu also allows users to filter the map to show only those neighborhoods that perform above or below average on specific metrics. Filtering helps practitioners focus in on both areas of concern and areas of success.

- 4 Selecting this symbol allows users to view a clustered **bar chart** that compares the performance of a particular tract to regional benchmarks. While the bar chart shows these comparisons at a values level, users can also scroll down to see a table comparing the tract to the region on a measure-by-measure basis. The bar chart and table are responsive to the user’s selections in the **Measures** and **Advanced** menus.
- 5 Selecting this symbol displays the **context chart**. Similar to the **bar chart**, this chart compares tract-level values performance to regional values performance. It also includes a table for measure-by-measure comparison and is reactive to user selections in the **Measures** and **Advanced** menus.
- 6 Selecting this symbol displays the **category breakdown**. The category breakdown uses the same reactive charting feature as the context chart but allows users to focus their comparison across the three major categories of values: business, people, and place. Users can ‘flip back’ on each chart, showing the underlying data. As with the other charting features, the category breakdown is reactive to user selections in the **Measures** and **Advanced** menus.
- 7 Selecting this symbol allows users to use a **lasso tool** to select tracts of interest. Users can also use SHIFT + click to select multiple tracts or remove a single tract from a group. This function is essential to analyses comparing certain groups of neighborhoods to the region as a whole. Early use cases used this feature to select certain municipalities or transportation corridors. All charting features are reactive to the custom selection.

IMPLEMENTATION

The EVA framework can create regional impact throughout—and hopefully beyond—the tool development timeline. Identifying and engaging with EVA stakeholders is a rich relationship-building and stewardship process, with the potential to increase collaboration and communication across traditional sectoral silos. Value-setting discussions cut to the core of how a region sees itself and its aspirations. Translating those values into indicators and metrics requires stakeholders to think critically about how their values are playing out across the region.

The most measurable impact the EVA framework can deliver, however, requires formally integrating an EVA's outputs within a regional policymaking environment. ***Stakeholders can use an EVA to purposely inform capital investment decisions and build public trust across a region.***

Intentional and proactive implementation strategies are essential to ensuring tool longevity and impact beyond the initial development phase. From the very beginning, the leadership team and core stakeholder group should have key implementation goals in mind to drive the work; these goals are likely to shape tool design and data choices. Specifying EVA-related goals upfront can also reduce scope creep. Yet this kind of ideation around implementation opportunities cannot end after one round. As the system becomes more familiar to a broader range of regional stakeholders, new users may become involved and new use cases may emerge. We recommend a continued approach to embedding the EVA in regional policymaking.

Regions should complete an initial “policy audit” to identify decision points that are a potential match for the EVA. The three regions in the EVA cohort reviewed policy opportunities in different ways based on the variety of decisionmakers involved in the EVA process. Portland and Brookings worked together to conduct a formal set of use case and user interviews during the tool's initial development. Kansas City focused on aligning their tract-level EVA metrics with the region-wide metrics concurrently developed to gauge the strength of each of KC Rising's seven

Pillars of Prosperity. The lessons learned were then deployed to create a separate Atlas to inform the Planning Sustainable Places program (see “Planning sustainable places in Kansas City” box below). Minneapolis-Saint Paul sought to embed the EVA in its long-range policy plan updates (due in 2024) to incorporate policy updates that steer implementation tools, including: local comprehensive plans; regional transportation funding; capital programs for transit, wastewater, and regional parks; grant programs for affordable housing, transit-oriented development, equity, and water quality; and research and convening for water supply and regional data analysis.

As regions grow and change beyond the EVA's initial development, new implementation opportunities are likely to emerge. The Portland EVA has grown and evolved considerably over the past three years, reflecting how regional stakeholders continue to find new uses for the EVA framework the longer it's available. The EVA provided content to support successful federal Economic Development Administration and Federal Transit Administration grant applications.¹⁷ Portland Metro staff also used a repurposed EVA instance to develop materials for a light rail extension, including support for local community engagement.¹⁸ Even other departments have begun to use the EVA framework to analyze targeted issue areas such as equity and capacity-building with community organizations.¹⁹ (See “Measuring equity in Portland” box for more details.)



Portland, Oregon

BOX 5

Planning sustainable places in Kansas City

From the orientation of the street grid to the permitted density of buildings, the underlying design decisions and capital investments made in each neighborhood shape the behavior of local residents and workers. The vast majority of these public rules and investments are made at the city, county, and regional level. While major, federally supported highway projects and new transit lines tend to grab attention, it's the array of decisions made solely by local and regional leaders that do the most to shape neighborhood activity.

It's through this lens that the Mid-America Regional Council's (MARC) Creating Sustainable Places (CSP) initiative was launched.²⁰ The CSP established a vision of centers and corridors that are: *vibrant* (offering a variety of housing choices, jobs, and local amenities); *connected* (offering multimodal alternatives and access to regional destinations); and *green* (protecting the natural environment and human health). Established with a federal planning grant in 2010, the CSP worked with over 60 local jurisdictions to invest in community plans and related projects by convening partners, using advanced tools, and offering grants. This focus on collaboration elevated the importance of community engagement within the CSP and ultimately in the initiative's demonstration program: Planning Sustainable Places (PSP).

The PSP has become an ongoing grant program that encourages local governments to plan as intensively for the redevelopment of existing areas as they do for new development in greenfield areas. The program, now celebrating its 10th year, is where MARC staff are piloting a center- and corridor-focused EVA to inform future grantmaking. The PSP grant program offers grants to Kansas and Missouri communities to cover up to 80% of eligible project costs for planning activities at a variety of scales to integrate transportation, land use, and environmental planning. The proposed planning project submissions can be as small as an intersection or as large as an entire community. Utilizing data elements at the census block level, the 2023 call for projects asks context-setting questions of how existing conditions will inform a project's scope of work.

For MARC staff, an EVA offers a common platform that all applicants can use, which reduces some advantages for higher-capacity applicants and standardizes some of the data analysis when comparing applications. MARC staff will explore how an EVA can impact grantmaking during their 2023 call for projects. For potential applicants, an EVA allows their teams to evaluate the needs of their targeted centers and use that data to present their case to PSP grantmakers. For grantmakers, the data illuminates the context for proposed planning studies and facilitates better comparisons between study areas.

An EVA is not intended to serve as an all-knowing decisionmaking tool. What an EVA can do, though, is better situate broader economic, social, and environmental needs of a given location versus others. Combined with other local context, an EVA can be an invaluable support to the enormous amount of neighborhood infrastructure and land use decisions made each year across the country.

BOX 6

Measuring equity in Portland

Metropolitan Portland is one of the most productive and competitive areas of the country. Powered by jobs in advanced manufacturing and tradable service industries, the metro economy saw some of the largest increases in median earnings and reductions in relative poverty over the last decade among metro areas housing over 1 million people.²¹ The region continues to attract relatively young talent and create jobs at young firms at rates faster than peer metro areas.²²

However, the metro area's overall prosperity is not universal. There is a persistent wage and poverty gap between white households and people of color.²³ Cost of living is rising faster than wages in the city of Portland, especially for housing.²⁴ Educational, public health, and livability outcomes continue to deviate by neighborhood geography and composition.²⁵

For this reason, Portland Metro's staff—along with colleagues at partner organizations and local governments—continue to make equity an operational priority. Their Strategic Plan to Advance Racial Equity, Diversity and Inclusion adopts internal reforms and builds external relationships to remove barriers to opportunity based on race and improve overall equity outcomes.²⁶ Now, Portland Metro staff have found a way to use the EVA framework to advance their broader agenda.

The Equitable Development Index is a standalone EVA instance built with equity-focused community members to track equity-related neighborhood conditions.²⁷ The Index uses a new set of categories and measures and allows users to weigh each measure individually. The result is a completely different way to communicate with regional stakeholders and build consensus for action.

The Index has already demonstrated its ability to deliver results. Portland Metro used the Index to work with community stakeholders to establish equitable development principles related to a future light rail line.²⁸ Both the Index and the EVA informed a series of corridor-specific materials for the region's 2020 Moving Forward ballot referenda and its racial equity strategy, allowing residents to understand how transportation investments would align with underlying neighborhood conditions.²⁹ The Index and EVA also allowed Portland Metro to self-evaluate the racial impacts of the overall package.³⁰ Going forward, Portland Metro staff can continue to refine the Index and similar products to ensure stakeholders continue to address the equity needs in alignment with infrastructure and other community investment.



Portland, Oregon

McLoughlin Blvd

Park Ave Park & Ride expansion

Expand the parking capacity of the existing park & ride structure at the MAX Orange Line terminus.



Bus Rapid Transit Full Line 33 route (Clackamas Community College to Clackamas Town Center)

Enhancements to Lines 33 and 99 to improve speed and reliability including electric buses, bus priority lanes and new bus stations with realtime arrival info.



Safety

Milwaukie to Oregon City (6.5 miles)

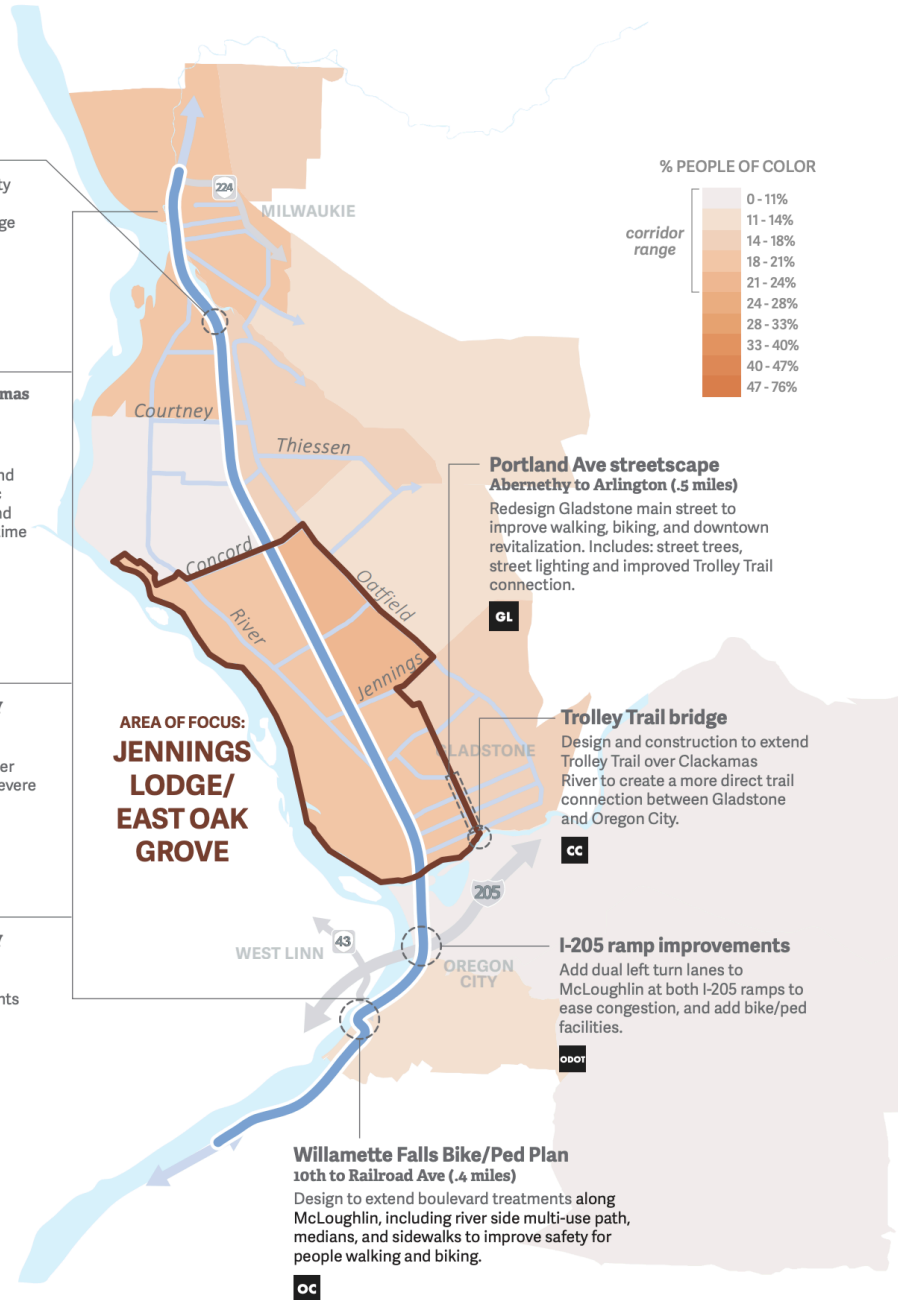
Add/improve sidewalks, crossings, lighting, and other safety features to reduce severe injury and fatal crashes.



Corridor Planning

Milwaukie to Oregon City (6.5 miles)

Design for longer term transportation improvements including transit.



Portland Ave streetscape Abernethy to Arlington (.5 miles)

Redesign Gladstone main street to improve walking, biking, and downtown revitalization. Includes: street trees, street lighting and improved Trolley Trail connection.



Trolley Trail bridge

Design and construction to extend Trolley Trail over Clackamas River to create a more direct trail connection between Gladstone and Oregon City.



I-205 ramp improvements

Add dual left turn lanes to McLoughlin at both I-205 ramps to ease congestion, and add bike/ped facilities.



Willamette Falls Bike/Ped Plan 10th to Railroad Ave (.4 miles)

Design to extend boulevard treatments along McLoughlin, including river side multi-use path, medians, and sidewalks to improve safety for people walking and biking.



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20013





Kansas City, Missouri

Areas for growth

The EVA process—which flows from engaging stakeholders to defining values to translating values into neighborhood-level performance metrics and finally to launching a public-facing tool—is clearly defined. However, those major steps leave enormous room for ongoing evolution. Throughout the cohort process, Portland, Kansas City, and Minneapolis-Saint Paul considered several iterations of their EVA components to serve different purposes and reach different stakeholder groups. Together with the cohort regions, we identified areas ripe for future growth while also learning some of the inherent limits of our current EVA development environment.

Ongoing demand for data-informed decisionmaking and innovations in highly granular data production will unlock new possibilities for neighborhood-level analysis, including within the EVA. Cohort members carefully considered the tradeoffs of public versus private data sources and timeliness versus geographic specificity as they constructed their EVA analyses. In some cases, limitations in data availability did impact the indicators and metrics that could be featured in the EVA. As data availability continues to evolve, EVAs could continue to add more targeted metrics. Future priority research areas with burgeoning data availability may include neighborhood-level climate

risks and environmental justice metrics like those considered under the Biden administration’s Justice40 initiative.³¹ The EVA would be a likely match for these emerging measurement tasks—not just because of its data processing and visualization capabilities, but also because of its foundation in regional values and stakeholder engagement.

The EVA’s analytical methods can also grow to meet the needs of regions as they track historic built environment investments and weigh future investments. Ever since the first EVA development sprint in Portland, user groups have expressed interest in using the EVA to forecast and backcast how capital investments and other policy initiatives impact regional conditions. Forecasting the potential impacts from built environment investments on future neighborhood-level performance could be a particularly powerful use case in the current federal funding environment, where regions may have more opportunities to seek out transformational projects than in recent decades. Minneapolis-Saint Paul is employing an EVA logic—refining metrics and indicators to evaluate policies and investments in regional plans and evaluate performance over time—to explore alternate futures as part of a scenario planning process.

Backcasting could allow regions to compare neighborhood-level performance before and after

major investments—applying a values- and data-informed approach to evaluating the impacts of past projects. Beyond its obvious merits as a potential impact measurement and reporting tool, an EVA that backcasts would have the potential to reveal whether the positive impacts of regional investments in the built environment have been distributed equitably, or study how far benefits spread from more geographically limited projects.

The EVA software is also primed to evolve if supported by a broader community of practice. Portland's Java- and Ember-based software has already been transferred and adapted successfully to Kansas City, and Minneapolis-Saint Paul's R Shiny software has already been implemented in Baltimore. Portland's in-house development team continues to add new toolboxes—including a multi-tract selection tool—that confirm how much development space is still available. The tool has the potential to grow and spread to new regions through open source repositories, allowing other regions and developers to add features and functionality to meet their needs. Likewise, new developers could add new features like tutorials and custom reports.

However, there are likely limits to what the EVA can do as it is currently designed. The cohort discovered that the Java application's use of a mock client-side backend limits the tool's capability to save work between browser sessions. It also has a memory limit, meaning the application starts to experience processing challenges if too much data is provided. While tract-level analyses have so far been ideal for most EVA implementation opportunities and are well within the EVA's processing capabilities, the cohort identified this limitation when attempting to process census block-level data for each block in the Kansas City region. Workarounds like filtering to a smaller set of blocks or displaying a larger geography do exist, but the limitation should be noted.

While already proven as a transformative tool to inform decisionmaking, the EVA cannot be treated as a "black box." The EVA alone will not tell practitioners what to build or make exact recommendations when comparing neighborhood need. The software also can't represent critical nuances like contemporary

attitudes built on historic experiences. The EVA is a technical decision-support tool complemented by cultural and qualitative data, and it only can work when part of a healthy collaborative environment among regional partners.

The EVA's growth potential goes beyond data, analytics, and software, to innovations in planning practice itself. Stakeholders across the three cohort regions included planners, business leaders, and community groups with interests in nearly every major facet of the built environment. Cohort meetings and regional project collaboration spurred conversations about the missed opportunity to align a region's many planning processes around a shared set of regional values. Any given region and its composite localities are federally incentivized to produce a long-range transportation plan, comprehensive economic development strategy, or public housing agency plan, while likely also producing a range of workforce development activities and other sector strategies. Many regions and localities are now beginning to produce climate action and decarbonization plans too.

Yet for all the planning taking place, there is often little coordination—resulting in formal plans that often directly contradict one another. Those contradictions may occur between the local and regional levels, or within different planning documents written by the same local government or regional entity. A tool like the EVA has the potential to provide a unified measurement scheme and a shared forum to better coordinate planning moving forward.

Tapping the EVA's potential also requires purposeful marketing of the tool and the underlying framework. For example, Portland Metro's staff regularly met with regional officials to demo the public-facing tool, explain its uses, and answer questions. Formally using EVA outputs within regional grant applications will also require potential applicants to understand how to use the software. Media members and communications staff within regional organizations and businesses could use the EVA to color local reporting, but only if they're aware of the tool's mechanics. Future EVA managers should continue to develop marketing tactics to reach these critical audiences.

BOX 7

The continued evolution of equity mapping

Over recent years, more national, state, and local leaders have begun to prioritize inclusive economics as a goal for their respective government, organization, or business. While national and state inclusion measures may work best in a traditional chart or table format, studying inclusion at a neighborhood level also adds the potential to judge progress spatially. The EVA is part of a broader movement toward transparent values-based local mapping and dashboarding.

Some of these efforts are long-standing. Over a decade ago, many organizations launched equity atlases to judge specific equity-focused conditions. Many of these efforts continue. The National Equity Atlas—a partnership between PolicyLink and the University of Southern California Equity Research Institute—uses charts to visualize demographics, economic vitality, readiness, connectedness, and economic benefits; users can explore underlying indicators and metrics in states, regions, cities, and counties across the country.³² The Environmental Protection Agency (EPA) has long published mapping applications focused on environmental justice, such as EnviroAtlas and EJScreen.³³

Since the 2020 national election, federal officials initiated another wave of investment in equity mapping. The federal Infrastructure Investment and Jobs Act (IIJA) includes a \$50 million Prioritization Pilot Program, for which states and metropolitan planning organizations are eligible for grants to fund “publicly accessible, transparent prioritization processes to assess and score projects according to locally determined priorities.”³⁴ Earlier in 2021, the Department of Transportation sought information from the public on the availability and use of transportation equity data.³⁵ The Biden administration’s EPA also continues to emphasize the need for local data to understand the prevalence and distribution of environmental risks across the country.

National and local organizations also continue to pursue equity-driven spatial analysis, although often with tailored focus areas. The TransitCenter Equity Dashboard measures access to destinations on transit, transit service intensity, transit fares, service reliability, and ADA accessibility in New York, Los Angeles, Chicago, Philadelphia, Washington, D.C., and San Francisco, and shares results through stories, maps, and data.³⁶ The LINK Houston Transportation Equity Demand Index is a map-based analysis combining 15 indicators—including demographic demand, likely high-transit use, population density, job density, and walkability—into an index that highlights the neighborhoods where people are in the greatest need of affordable transportation options.³⁷ The Urban Institute’s Unequal Commute tool visualizes the spatial mismatch between low-wage workers and job access in Baltimore, Lansing, Mich., Nashville, Tenn., and Seattle.³⁸ A recent Brookings Metro report, “A roadmap to developing inclusive regional economic indicators,”³⁹ compiles best practices from a cohort of places developing indicator projects at the regional scale.

As these tools continue to emerge, the planning practice has an opportunity to move beyond a patchwork of sector-by-sector regional planning, and instead address complex challenges in the interconnected ways communities face them and prioritize the investments that can help regions live up to their visions.



Portland, Oregon

Conclusion

Developing competitive regional economies is a complex and ongoing endeavor. An Economic Value Atlas offers a framework to ease that nonstop development process and provide stakeholders a common meeting point to discuss long-term goals, evaluate progress against them, and use the information to adjust a range of public and private investment programs.

Launching an Economic Value Atlas, however, requires commitment. Stakeholders must be willing to meet and genuinely debate what could be conflicting visions. A designated organization needs the labor hours to translate a consensus into quantifiable

performance measures and web-based software. Leaders at governments and organizations must then be willing to audit how the EVA's findings can inform a range of investment and programmatic choices.

Fortunately, the EVA framework is a democratic and flexible system. A range of new analytical techniques, software services, and related policy interventions should emerge as more regions, researchers, and software developers experiment with the underlying fundamentals. The bigger an EVA's supporting community, the easier it should be for each succeeding region to launch a local version. Our hope is such emerging communities of practice lead to more competitive and collaborative regions across the country.

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END NOTES

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