PORTLAND ECONOMIC VALUE ATLAS

SELECTING DATA AND ECONOMIC PERFORMANCE MEASURES

The Economic Value Atlas (EVA) will be a statistical and mapping platform that improves understanding of how built environment policies and investments support Portland's regional economic priorities. Building this platform begins with conveying how the regional economy functions at both a metropolitan and community level. This first step rests on a foundation of data and performance measures. 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.

Based on a review of past literature, an assessment of efforts from other metropolitan areas, and ongoing collaboration with Metro staff, this memorandum collects Brookings' initial recommendations of which performance measures to include within the EVA and how to organize those measures.

Brookings recommends a three-tiered system of data and performance measures: *metropolitan measures*, *community measures*, and *overlay data*. Each tier focuses on different kinds of data and related measures, which allows the inclusion of a wide range of datasets. It also enables complementary relationships that can respond to multiple use cases. Metropolitan data creates a broader framework to include economic targets established by Metro and other regional actors—some of which may not be available at a more local level—and facilitates benchmarking against peer metro areas. Community data helps situate local conditions against metropolitan averages. Overlay data adds spatial context to the other two tiers, but may not inherently involve measures that should be interpreted as scores.

The memorandum is organized around three core sections. The first section frames the task of translating the Portland region's core economic values into specific measures. The next section describes the three measurement

tiers in detail and includes specific measurement recommendations. Critically, this section notes which data is currently available to Metro and which is aspirational. The concluding section briefly sketches how the three-tiered system could be designed in the eventual tool. The memorandum's final pages include an appendix (Appendix B) with all selected measures in one place.
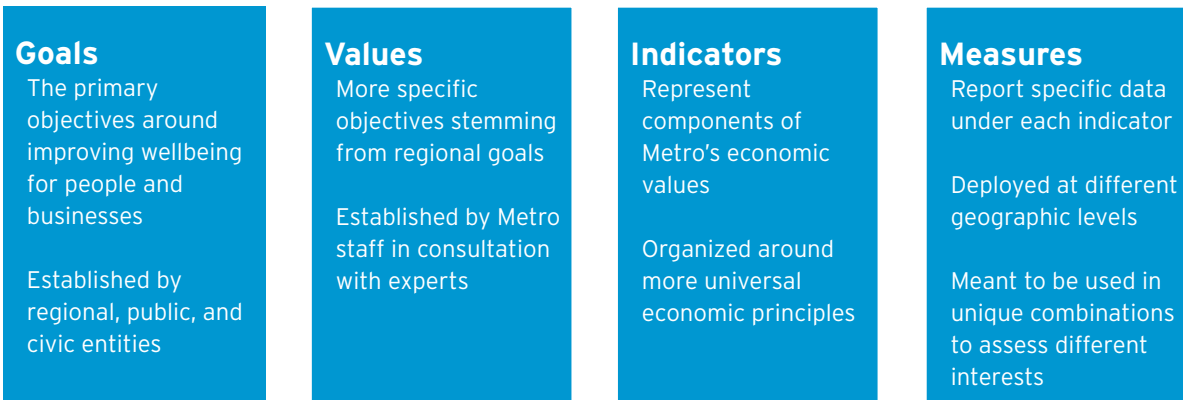
Framing Selection: Translating Region Economic Values into Performance Measures

The EVA Market Scan highlighted three broad-based *economic development goals* shared among Portland regional actors, including civic organizations, many cities, plus statewide plans in Oregon and Washington. The first is promoting industrial competitiveness and diversity. The second is retaining talent, attracting new workers, and fostering equitable opportunity. The third is preserving and enhancing quality places. Those three goals effectively follow a categorical division of Business, People, and Place.

Metro staff, in collaboration with the EVA Task Force, have begun defining specific *economic values* that represent more granular pursuits under each economic development goal (Appendix A lists the values). The values are normative by definition, encompassing the shared ideals that define what a prosperous, inclusive, and sustainable Portland region looks like to local constituents. These economic values are an important signpost for selecting performance measures so that the EVA can capture where the region stands and track progress against these values.

However, there is a natural geographic tension to these economic values. As they are sourced directly from regional governments, regional civic organizations, and published strategy documents, the values inherently represent

Figure 1. Moving from Goals to Measures

Goals	**Values**	**Indicators**	**Measures**
The primary objectives around improving wellbeing for people and businesses	More specific objectives stemming from regional goals	Represent components of Metro's economic values	Report specific data under each indicator
Established by regional, public, and civic entities	Established by Metro staff in consultation with experts	Organized around more universal economic principles	Deployed at different geographic levels Meant to be used in unique combinations to assess different interests

desired economic outcomes at the regional level. The challenge within the EVA context, then, is identifying measures that can represent those values at a more local level. One reason is that the ideal datasets to measure many of the economic values are not available below the metropolitan or county level. The best example is output (or GDP or GRP), which is a critical indicator for industrial development and fundamental to measuring industry and worker productivity. The same constraint applies to median income by race and patenting activity. A second reason is that certain economic values should not be judged the same way in every local geography. For example, not every community is expected to host tradable industry jobs, nor is every area zoned for industrial land.

While most community level datasets cannot thoroughly reflect on economic values, many local datasets do offer new ways to relate community level conditions to region-wide economic performance. Some of these datasets are the building-blocks of economic values, such as jobs by industry, population by race, educational attainment, and housing prices. Other datasets do not measure performance but still enhance understanding of how the regional economy functions and how communities relate to regional trends. Examples here include the location of workforce development facilities, presence of public parks, and truck volumes.

To address the geographic tension while still using the best available data, the Brookings team designed a performance measurement inventory that would enable both accurate measurement of economic values and include a range of complementary data to capture how Greater Portland communities relate to region-wide economic performance. If designed and executed effectively, this approach can circumvent data constraints, facilitate regular data updates, enable benchmarking both within and outside the region, and facilitate a deeper understanding of how the Portland economy functions in spatial terms.

Finally, to facilitate selection of specific performance measures, the Brookings team used a set of *indicators* to bucket specific performance measures. These indicators roughly correlate to general economic development principles found across the country. They are also less specific than the economic values currently proposed under the EVA, which would allow values to change in the future without having to change the related indicators or performance measures.

1. **Business:** Industry Mix; Dynamism and Innovation; Labor Access; Trade Connectivity

2. **People:** Population Base; Economic Attainment; Racial Inclusion; Physical Access

3. **Place:** Developmental Capacity; Market Strength; Affordability; Livability

Performance Measurement Structure

Brookings recommends a three-tiered measurement structure to capture the broad array of data that can enhance understanding of how the region's economic values interrelate to the built environment (See Figure 2). This structure creates a flow between economic values, relevant indicators, and then three tiers of performance measures:

Figure 2. Structure of the Economic Value Atlas

1. The **metropolitan tier** includes measures that aggregate data from the seven-county Portland metropolitan area (including Metro's three-county area). This tier enables regional trend analysis, benchmarking against peer regions, and the inclusion of measures that may not be available at smaller geographies. These measures also relate directly to economic values.

2. The **community tier** includes measures that can be captured at local geographies. This tier enables disaggregated trend analysis at the local level and benchmarking between communities within the Greater Portland region. These measures are primarily meant to be indexed, not necessarily scored; in other words, not every measure has 'good' or 'bad' values.

3. The **overlay tier** includes data that can provide additional geographic context to both metropolitan and community tier measures. These function as additional mapping layers available based on users' interests.

This structure attempts to balance modern economic geography: metropolitan areas are economies, while communities represent distinct places within a metropolitan economy. The structure also alleviates the risk of dismissing measures that relate to regional economic competitiveness and inclusion through a limited focus on only community-level analysis. Finally, it should enable Metro's staff to design a tool that can flexibly narrate economic stories based on users' interests. The following subsections describe each tier in more detail and explain the proposed performance measures under each.

Metropolitan Measures (Table 1)

Metropolitan measures point to aggregate trends at the Metropolitan Statistical Area (MSA) level of geography for the Portland Metro region. They directly evaluate progress towards achieving the economic values related to each indicator. For example, the inflation-adjusted median wage growth by race measure offers a proxy to track the racial equity value in support of Portland's goal of equitable wealth for workers and entrepreneurs from all backgrounds. In some instances, the measures also create regional benchmarks to compare against community-specific performance.

Informed by regional documents and the EVA's Market Scan, metropolitan measures correspond to accepted global standards for economic development metrics. This universality facilitates benchmarking against peer regions. And, critically, adopting a metropolitan tier allows inclusion of measures that may not be available at smaller geographies. For example, GDP growth in Portland can only be measured at the MSA level, but that enables comparison with similar metros like Austin, Denver, Baltimore, Hartford, San Diego, San Jose, and others.

Another benefit of the metropolitan measures is that they correspond to a unit of geography regularly used in federal statistical data sources and new research by external scholars. Many of the datasets published by federal agencies are annually updated at the county- or metropolitan-scale. Likewise, scholars are often publishing new ways to measure economic development at the county- and metropolitan-scale. For example, innovation research now often reports patenting data at this scale.

Community Measures (Table 2)

While the metropolitan measures present collective regional trends, community measures offer an opportunity to disaggregate those trends at a more granular level. Brookings recommends using census tracts as the geospatial foundation for multiple reasons. First, their design at the federal level facilitates longitudinal study and simple access to numerous public datasets. Second, the 7-county Portland Metro region includes 491 census tracts, enabling a scale of measurement that is appropriately disaggregated to represent and evaluate more localized conditions. Third, tracts are flexible enough to include data aggregated from smaller Traffic Analysis Zones (TAZ) or to combine tracts to reflect larger geographies like Metro's internal E-Zones. By using individual tracts or collections of tracts as the unit of analysis, the EVA can expose local variation that might differ from regional patterns and provide clear direction on lagging priorities at the local scale.

Critically, community measures often will not be the exact same as metropolitan measures under the same indicator. This is due to incongruencies between data availability at the two geographic scales. However, this use of different measures will allow users to view different sets of community economic conditions as they relate to different metropolitan measures. Combining different community measures—irrespective of which indicator they group under—will allow unique forms of local benchmarking. Since Brookings expects these measures to be used in different combinations and are not meant to offer overarching benchmarks to users, there are less total community measures than metropolitan measures.

Every community measure will allow different indexing techniques, which can be decided later in the project. First, indexing can be done either in relation to optimal performance (if a clear target is established) or to the current top-performing community. Similarly, the datasets can also support the indexing of data against a standard score or reported values. Regardless of the

indexing technique chosen, Brookings recommend uses a 0- to 10-point scale to mask exact values.

Overlay Data (Table 3)

Spatial overlays offer supplemental information—important data that are not directly related to the primary measures for each indicator, but are useful in illuminating related trends. They are less adjoined to specific indicators and regional priorities, but rather serve as critical pieces of visual information that clarify patterns found in the metropolitan and community measures by offering additional geographic context. Overlays are spatial measures, but not necessarily geographically consistent with either metropolitan or community layers. They might even contain point data or data specific to a certain section of the city.

In database terms, the overlay measures have a "many-to-many" relationship with the other tiers. Multiple spatial overlay layers can relate to multiple metropolitan or community measures. For example, the location of schools, universities, and financial institutions likely have a strong association with innovation, patent activity, and venture capital funding, but do not directly measure such trends. They also should enable new versions of other community measures. For example, travel times could be measured from each community to Tier 1-3 lands, Title 4 lands, and key facilities.

The key advantage of including overlay layers is the ability to toggle them on/off when needed, keeping the primary focus of the EVA on the indicators and measures that directly relate to the economic values of the region. For example, Equity Atlases often deliver an exhaustive list of all possible measures related to regional equity, but leave decision-makers with too much data. This separation of primary and supplemental information can help address this concern.

This introduces the primary challenge for Metro's EVA team: deciding how many overlay layers to include. Theoretically, any geospatial data could be included as an EVA overlay layer. However, this would tax Metro staff to collect all the data and program the software to include it; it could also overburden users by forcing them to choose from too many mappable layers (rather than providing guidance about which layers best align with regional values). Brookings recommends the EVA team consult with stakeholders about the most valuable data, and then monitor software use once launched to determine which kinds of overlay measures are used the most often. There may even need to be different user modes based on interest levels. Brookings also recommends maintaining a list of compelling measures that are either not currently available at any local geography or are appropriate for county-level assessment. This will help respond to community requests and to create a list of future measures if data becomes available. Table 3 represents a sample list of overlay measures based on available data.

Next Steps

The next major task will involve creating, testing and finalizing the EVA online software in conjunction with Metro's Data Research Center (DRC), including the following steps:

Confirming data availability and potential budgeting. The recommended performance measures in the prior section all rely on actual datasets. However, many of the datasets may not yet be in Metro's possession, either because they have not yet been downloaded from public sources or require procurement from private providers. Metro staff and Brookings should survey what data is available and—for any private datasets not yet on Metro's servers—the cost to complete procurement.

Establishing initial context for the EVA. The EVA should include language or an entire use case to help explain why it was built in the first place. This can include the core economic pursuits the EVA wants to inform, the broad principles used in its design, and how the specific measures were selected.

Designing regional dashboards. Due to the range of metropolitan measures, it will be critical to design a software that can switch between regional, localized, and combination views.

Designing specific use cases. The development of a controlled range of use cases for the tool can help clarify the roles of involved stakeholders and required decision-making processes to ensure that the priorities identified through the tool

can translate into targeted action. In particular, a mapping exercise between specific community measures and metropolitan measures can help create templates that would improve the experience for certain information queries. This design effort aligns with upcoming phases of work, particularly Phases 4 and 5 of the EVA.

Creating connections to other activities within the region. Many of the economic values and specific performance measures directly relate to work underway elsewhere within Metro or at partner agencies and organizations. For those users interested in learning more about any single lens of the EVA, introducing hyperlinks will add value. It will also serve as a future roadmap for updated data and strategy documents when Metro staff update the EVA in the future.

TABLE 1

Metropolitan Measures

Category	Indicator	Measure	Public Data
Business	Industry mix	Job growth (overall, by key sectors, and by wage level)	✓
		Output growth (overall and by key sectors)	✓
		Employment shift share (by sectors)	✓
		Focus clusters (employment and output growth)	✓
	Dynamism and innovation	Net firm creation (births-deaths)	✓
		Opportunity share of new entrepreneurs	✓
		Patent activity	
		Venture capital funding	
	Labor access	High-skill workers within 30 minutes	✓
		Medium-skill workers within 30 minutes	✓
		Low-skill workers within 30 minutes	✓
	Trade Connectivity	Goods trade volumes (by partner and/or freight mode)	✓
		Commercial aviation (growth in passengers and/or direct desfinations)	✓
People	Population Base	Working-age population change	✓
		Share of adults by education levels	✓
	Economic Attainment	Poverty level (% living below local poverty line)	✓
		Income change by AMI tier (10%, 25%, 50%, 75%, 90%)	✓
		Income change by education levels	✓
	Racial Inclusion	Income/wage by race (nominal and change)	✓
		Labor force participation by race (nominal and change)	✓
		Educational attainment by race (nominal and Change)	✓
	Physical Access	Low-wage jobs accessible in 30 minutes	✓
		Middle- and high-wage jobs accessible in 30 minutes	✓
Place	Development Capacity	Buildable lands	✓
		Changes in industrial and commercial sq. ft.	
	Market Strength	Permit activity	✓
		Property value	✓
	Affordability	Housing cost burden (renters and owners)	✓
		Home sales volume change by housing type	
		Average sales price by housing type	
	Livability	Vehicle availability rate	✓
		All jobs reachable in 60 minutes by non-autos	✓
		Non-car commute share	✓
		Travel mode for other trip types	✓
		Amenity Index (e.g., Walk Score, Metro internal data)	

TABLE 2

Community Measures

Category	Indicator	Measure	Public Data
Business	Industry mix	Goods-producing jobs	✓
		Other tradable industry jobs	✓
		Service industry and government jobs	✓
		Change in total jobs	✓
		Average establishment size	
	Labor access	High-skill workers within 30 minutes	✓
		Medium-skill workers within 30 minutes	✓
		Low-skill workers within 30 minutes	✓
	Trade Connectivity	Average travel time to airports + Amtrak	✓
		Average travel time to major freight facilities	✓
People	Population Base	Working-age population change	✓
		Share of adults with BA+	✓
	Economic Attainment	Poverty level	✓
		GINI coefficient	✓
		Change in median income	✓
	Racial Inclusion	Racial composition (% people of color)	✓
		Racial change (growth in % people of color)	✓
	Physical Access	Low-wage jobs accessible in 30 minutes	✓
		Middle- and high-wage jobs accessible in 30 minutes	✓
Place	Development Capacity	Acres of buildable land	✓
		Zoned capacity (FAR/acres)	✓
		Changes in industrial and commercial sq. ft.	
	Market Strength	Permit activity	✓
		Property value	✓
	Affordability	Renter housing cost burden (local income target)	✓
		Owner housing cost burden (local income target)	✓
		Total rental units	
	Livability	Vehicle availability rate	✓
		All jobs reachable in 60 minutes by non-autos	✓
		Amenity Index (e.g., Walk Score, Metro internal data)	

TABLE 3

Sample Overlay Measures

Category	Measure	Public Data
Business	Focus clusters employment	✓
	Job density	✓
	Research institutions	✓
	Firms certified by Office for Business Inclusion and Diversity	✓
	Primary freight corridors	✓
	Truck volumes by corridor	✓
	Major freight depots	✓
People	High school graduation rates	✓
	In-migration levels (from outside MSA)	✓
	Labor force participation rate	✓
	Households with children (share)	✓
	Health insurance rate	✓
	Elderly population	✓
Place	Tier 1-3 lands	✓
	Title 4 lands	✓
	Metro 2040 Growth Concept Centers	✓
	Brownfield sites	✓
	Housing unit density per acre	✓
	Access comparisons by mode	✓
	Healthcare, adult education, and workforce facilities	✓
	Variable congestion levels	✓

APPENDIX

Prospective Economic Values

Category		Economic Values
Business	1	Grow local jobs + increase jobs access
	2	Grow traded sector jobs + target firms that bring new capital to the region
	3	Support entrepreneurs and startups that advance innovation
	4	Improve market access + supply chain linkages to increase productivity
People	5	Improve access to workforce with necessary education + in-demand occupational skills
	6	Grow + improve access to businesses with middle wage job opportunities
	7	Foster an economy that benefits + improves conditions for people affected by poverty + systemic racism
	8	Eliminate hurdles to people of color, women, + marginalized communities to leverage all workers + entrepreneurs
Place	9	Facilitate more efficient use, access, and market readiness of industrial/employment lands + major institutions
	10	Stabilize communities + enhance local real estate markets
	11	Improve housing + transportation affordability that maintains competitive cost of living
	12	Invest in assets + infrastructure that support vibrant communities with access to opportunity

Additional Measurement Details

Category	Measure	Data Source	Procure?	Explanation
Metropolitan Measures				
Business	Job growth (overall, by key sectors, and by wage level)	Moody's / BLS	✓	Indicates change in overall employment opportunities, across three key sectors (goods trade, other tradable industries, and local services and government), and by wage tiers
	Output growth (overall and by key sectors)	Moody's / BEA	✓	Indicates change in overall production and among three key sectors: goods trade, other tradable industries, and local services and government
	Employment shift share (by sectors)	Moody's / BEA / Others	✓	Measures employment competitiveness, both by industry groups and in comparison to other places
	Focus clusters (employment and output growth)	Moody's / BEA	✓	A specific cut of the tradable sectors from above, creates an entrée point to understand the size and production of these six clusters.
	Net firm creation (births-deaths)	Census LEHD or BDS		Signals churn between new businesses and ones closing
	Opportunity share of new entrepreneurs	Kaufman Index		Signals growth of entrepreneurs who started businesses because they saw market opportunities
	Patent activity	National Venture Capital Association (NVCA) or US PTO	✓	Best available measure of innovative capacity among local businesses and institutions
	Venture capital funding	Dealbook	✓	Best available measure of investment in potentially innovative companies
	High-skill workers within 30 minutes	Metro transportation data, LEHD jobs + workforce data		Indicates the average number of workers (by education level) a business can expect to reach within a slightly longer-than-average commute. Can be aggregated for the 3-, 4-, or 7-county region. High skill relates to adults with a BA or more, medium-skills to adults with some college or an associate's degree, and low-skill is to those with no more than a high school diploma.
	Medium-skill workers within 30 minutes			
	Low-skill workers within 30 minutes			
	Goods trade volumes (by partner and/or freight mode)	US DOT FAF		Suggests how goods enter/leave the market and who the MSA's major trade partners are
	Commercial aviation (growth in passengers and/or direct destinations)	Port of Portland/ BTS		Indicates aviation health for industries looking to use PDX
People	Working-age population change	ACS 1-yr estimates		Determines whether working age population growth is occurring
	Share of adults by education levels	ACS 1-yr estimates		Proxy for the skill level of local population base

People	Poverty level (% living below local poverty line)	ACS 1-yr estimates		Captures the population living in the toughest economic conditions
	Income change by AMI tier (10%, 25%, 50%, 75%, 90%)	BLS OES		Establishes compensation levels and growth by income tiers
	Income change by education levels	ACS 1-yr estimates		Establishes income growth among levels of formal education
	Income/wage by race (nominal and change)	ACS 1-yr estimates		Combined, creates a robust comparison of economic opportunity between different races
	Labor force participation by race (nominal and change)			
	Educational attainment by race (nominal and change)			
	Low-wage jobs accessible in 30 minutes	Metro transportation data, LEHD jobs + workforce data		Proxy for low skill jobs reachable by any transportation mode
	Middle- and high-wage jobs accessible in 30 minutes	Metro transportation data, LEHD jobs + workforce data		Proxy for medium and high skill jobs reachable by any transportation mode (note: LEHD does not offer enough earnings data to differentiate job skill levels besides low-wage and all others)
Place	Buildable lands	Equity Atlas / RLIS		Suggests trends in land development over time
	Changes in industrial and commercial sq. ft.	Equity Atlas / RLIS		Proxy for currently available square footage and construction underway
	Permit activity	Metro building permits data		Demonstrates the amount of construction activity taking place
	Property value	CoStar Suite (potentially public records)	✓	Flags whether the community is relatively valuable to locate in (business or people)
	Housing cost burden (renters and owners)	ACS 1-yr estimates		Shows the share of renters and owners who pay over a certain percent of gross income for housing; to be determined by local actors
	Home sales change by housing type	CoStar Suite (potentially public records)	✓	Represents health of the housing market (SFH, Condo, Townhome)
	Average sales price by housing type	CoStar Suite (potentially public records)	✓	Represents benchmarks for housing prices (SFH, Condo, Townhome)
	Vehicle availability rate	ACS 1-yr estimates		Creates a foundation to understand why certain households may use personal vehicles less

Category	Measure	Data Source	Procure?	Explanation
Place	All jobs reachable in 60 minutes by non-autos	Metro transportation data, LEHD jobs + workforce data		Determines the ability to access jobs by non-private vehicles (transit, bike, walk)
	Non-car commute share	ACS 1-yr estimates		Shows how many Portland workers choose non-automobile modes to get to work, including change
	Travel mode for other trip types	Public survey data		Creates a sensible baseline for how Portland residents choose to travel in the majority of instances
	Amenity Index (e.g., Walk Score, Metro internal data)	Redfin / Metro	✓	Creates a regional average for typical amenities by community

Category	Measure	Data Source	Procure?	Explanation
Community Measures				
Business	Goods-producing jobs	InfoUSA		Measures whether a community produces goods, suggesting potential freight intensity
	Other tradable industry jobs	InfoUSA		Measures if the community hosts other tradable work
	Service industry and government jobs	InfoUSA		The employment remainder, determines if other industries locate in the area
	Change in total jobs	InfoUSA		Determines whether the community is growing, shedding, or holding jobs
	Average establishment size	InfoUSA		Measures the diversity of business sizes (relates to physical size and business mix)
	High-skill workers within 30 minutes	Metro transportation data, LEHD jobs + workforce data		Data on local occupations is impossible to obtain, but this flags the kind of workers who can reach the community. Complements industry mix facts. High skill relates to adults with a BA or more, medium-skills to adults with some college or an associate's degree, and low-skill is to those with no more than a high school diploma.
	Medium-skill workers within 30 minutes			
	Low-skill workers within 30 minutes			
	Average travel time to airports + Amtrak	Metro transportation data		Measures ability to get tradable service occupations (and their guests) to/from airport
	Average travel time to major freight facilities	Metro transportation data		Measures physical trade connectivity for communities. Should include a mix of airports, seaports, and major warehouse and distribution establishments.
People	Working-age population change	ACS 5-yr estimates		Determines whether working age population growth is occurring
	Share of adults with BA+	ACS 5-yr estimates		Proxy for the skill level of local population base

People	Poverty level	ACS 5-yr estimates	Captures those living in the toughest economic conditions; flags concentrated poverty
	GINI coefficient	ACS 5-yr estimates	Judges inequality, but also signals homogeneity
	Change in median income	ACS 5-yr estimates	Determine how community-level incomes are changing
	Racial composition (% people of color)	ACS 5-yr estimates	The only consistent community-level measures of racial demographics
	Racial change (growth in % people of color)	ACS 5-yr estimates	
	Low-wage jobs accessible in 30 minutes	Metro transportation data, LEHD jobs + workforce data	Proxy for low skill jobs reachable by any transportation mode
	Middle- and high-wage jobs accessible in 30 minutes	Metro transportation data, LEHD jobs + workforce data	Proxy for medium and high skill jobs reachable by any transportation mode (note: LEHD does not offer enough earnings data to differentiate job skill levels besides low-wage and all others)
Place	Acres of buildable land	Equity Atlas	Indicates how much land is available for development
	Zoned capacity (FAR/acres)	Portland Metro	Indicates potential for development density
	Industrial and commercial sq. ft.	Internal Metro data	Amount of space available for employers
	Permit activity	Portland's building permits data	Demonstrates the amount of construction activity taking place
	Property value	CoStar Suite (potentially public records) ✓	Flags whether the community is relatively valuable to locate in (business or people)
	Renter housing cost burden (local income target)	ACS 5-yr estimates	Shows the share of renters who pay over a certain percent of gross income for housing; to be determined by local actors
	Owner housing cost burden (local income target)	ACS 5-yr estimates	Shows the share of owners who pay over a certain percent of gross income for housing; to be determined by local actors
	Total rental units	ACS 5-yr estimates	Represents the ability to rent units (and provide more flexibility to households)
	Vehicle availability rate	ACS 5-yr estimates	Creates a foundation to understand why certain households may use personal vehicles less
	All jobs reachable in 60 minutes by non-autos	Metro transportation data	Determines the ability to get to jobs by non-private vehicles (transit, bike, walk)

Category	Measure	Data Source	Procure?	Explanation
Place	Amenity Index (e.g., Walk Score, Metro internal data)	Redfin / Metro	✓	Judges immediate community amenities

Category	Measure	Data Source	Procure?	Explanation
Overlay Measures				
Business	Focus clusters employment	InfoUSA		Flags which communities have the highest concentrations of employment in the six focus clusters
	Job density	InfoUSA		Indicates where jobs cluster
	Research institutions	Portland Metro		Includes educational facilities and other primary research facilities
	Firms certified by Office for Business Inclusion and Diversity (COBID)	Oregon		Rough measure of firms established by minorities and/or women
	Primary freight corridors	Portland Metro		Confirms designated areas for truck travel
	Truck volumes by corridor	Portland Metro		Confirms where trucks tend to travel
	Major freight depots	Portland Metro		The nodal points related to the freight access measure
People	High school graduation rates	ACS 5-yr estimates		Suggests if households see their children graduate from high school; May signal other economic challenges in the area
	In-migration levels (from outside MSA)	ACS 5-yr estimates		Can include domestic and/or international migration; Confirms where new residents are settling
	Labor force participation	ACS 5-yr estimates		A different angle than selected measures on community-level populations' involvement in workforce
	Households with children (share)	ACS 5-yr estimates		Confirms where families tend to locate (and the resultant planning and infrastructure needs)
	Health insurance rate	ACS 5-yr estimates		Share of population with health insurance
	Elderly population	ACS 5-yr estimates		Elderly population have variable infrastructure and planning needs
Place	Title 1-3 lands	Portland Metro		Designates where specific land uses are restricted
	Title 4 lands	Portland Metro		Designates where specific land uses are restricted
	Metro 2040 Growth Concept Centers	Portland Metro		Ability to show intended activity centers in the region; valuable as another destination for transportation access
	Brownfield sites	Portland Metro		Real estate sites in need of environmental cleanup

Place	Housing unit density per acre	ACS 5-yr estimates	Confirms where the greatest population density is
	Access comparisons by mode	Metro transportation data, LEHD jobs + workforce data	Breakdown of advantages for specific modes to reach employment opportunities
	Healthcare, adult education, and workforce facilities	Portland Metro	Locations of workforce development establishments
	Variable congestion levels	Metro transportation data	Suggests where automobile travel is difficult (and resultant incentives to use alternative modes)

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