

Per Metro's request, the Brookings staff interviewed 15 regional stakeholders to discuss external use cases for the Economic Value Atlas (EVA). The interviewees included experts from economic development organizations, financial institutions, real estate organizations, and logistics/trade organizations, among others. Each interview included a similar set of questions, and the experts' diverse industrial and occupational backgrounds ensured we received a wide range of opinions. The findings are intended for Metro staff, but the content herein is welcome to be used in future publicly-available materials.

Overall, Brookings found consistent interest in the EVA and its prospective interactive usage. To varying degrees, every interviewee expected to use the tool in at least some capacity. The tool's design around three systems—metropolitan statistics, local mapping, and additional overlay layers—resonated and there were consistent requests for the same specific UI features. Interviewees also found the EVA's proposed metropolitan and local datasets to correspond with datasets critical to their work, confirming the data design's potential. Somewhat unexpectedly, the interviewees also provided an enormous set of prospective overlay layers.

The interviews also exposed some of the significant risk factors around usability. The region already is data-rich, including many other applications available to the public, so the EVA will need to find a niche in that marketplace and promote connection to the other applications – especially since some interviewees showed a deep reliance on internal data and a hesitancy to go to other sources. The EVA will also need to assure regional stakeholders about its continually-updating, long-term status. Finally, interviewees expressed general concerns that the EVA's results could lead to unintended consequences among regional economic decision-makers; there is no easy solution for this concern.

The following memorandum summarizes the key findings in more detail. Critically, these should be updated in the future based on the results of interviews with internal Metro staff and based on feedback during workshops.

User Experience Objectives

The interviews made clear that Portland regional stakeholders were excited about the EVA's potential—but there was also a palpable sense that the EVA would need to create professional value to attract usage. With that in mind, we found the following objectives by reviewing our notes. Users are curious, and the EVA should feed their curiosity

- Interviewees frequently said they wanted the tool to "surprise them" and to show them things that they wouldn't have thought about or considered.
- Users want to understand the historical context to the region's economic development
 - Interviewees mentioned that they would like to see longitudinal data, and regular updates to the datasets in the tool if possible
- Users want to better understand "economic inclusion" and "tradability" at a local level
 - The interest in inclusion and equity concepts were clear across multiple people
 - With that said, there was clear interest in better understanding tradability, both through industries and freight flows
- Users want to know up-front what the tool can and cannot do

- For example, if the EVA does not initially support scenario planning, it should be clear it will not offer that experience.
- However, scenario planning is of greater professional use than just the pure display of information, so providing that functionality could be critical to long-term usage.
- Users want to see how the tool connects to their professional responsibilities
 - Interviewees supplied many of the key situations to inform specific tutorials.
 The interviews confirmed our belief such tutorials that would be instrumental to include with the EVA launch.
 - Interviewees frequently mentioned the need to streamline mapping-related analytical requests that currently go through other colleagues

User Interface Requests

Interviewees responded positively to our requests about specific interface components they would want to see within the tool. Helpfully, many of these requests were repeated across multiple interviews.

- Maps and tables are preferred as downloadable images or raw data (for tables). Users rarely print maps. However, they would want static images for PDFs, presentations, and the like.
- Data presented in tables and in charts on map should be downloadable as analytics.
- Being able to toggle layers on and off is important to maintain visual simplicity.
- Multiple interviewees wanted ways to "draw their own boundaries" around tracts that would

- constitute neighborhoods due to concerns that tracts didn't perfectly represent Portland's neighborhood geography.
- The option to query or "slice and dice data" would be essential for many users.
- Users regularly requested some form of individualized functionality.
 - Saved views by user were frequently requested, wherein a user can create a customized view for themselves that only loads in the datasets they frequently use in their work. Interviewees frequently spoke about how they rely on a few key datasets in their work and they don't necessarily need to see the whole gamut of data every time.
 - Users also tended to focus on one specific scale of data: they were either interested in metropolitan data, or in local neighborhood level data. It was rare to find someone who would want to work with both scales of datasets frequently.
- People said they could provide feedback on "mock-ups" of the tool since they don't know what it could look like right now - this could be a pilot group for user-testing
- Connections to other regional interface tools and major data centers would be helpful

Risk Factors

The general interest and curiosity among interviewees was tempered by the reasons the EVA could fail to gain a critical user base and positively impact local decision-making.

Across the interviewees, there was a sense that Portland already has a wealth of

online information and data on economic development.

- People tend to feel overwhelmed by just how much data there is, so they would like to see a simple, clean interface for the EVA that is easy to navigate and use.
- A limited number of key datasets would be more helpful than having a laundry list of all relevant data. Some felt like they had all the resources they needed already and implied the tool would be superfluous.
- How can the EVA potentially add value—or even interconnect—with tools internal to other outfits?
- Metro will need to be careful about how the EVA displays proprietary datasets and makes

them publicly available (or not available).

- The clearest example and reference was real estate data, which the EVA will need. Many interviewees use proprietary subscription-based CoStar data for real estate information, but there was concern whether the EVA would have the same level of data they can see in private. How could a data sharing agreement work in this regard?
- Especially during conversations with real estate-oriented interviewees, there was concern that the display of visual and easily accessible information on vulnerable communities could exacerbate existing inequalities by driving investment away from these neighborhoods.

Proposed Overlay Layers

To a person, interviewees listed multiple datasets they would like to see on the EVA map. The below list includes all data categories suggested, showing the breadth of possible data to include. This only serves to confirm the need for a set of overlay layers that display key additional information, per our mutual design. Critically, note that the metropolitan and local layers already make use of some of these datasets; this list is meant more to communicate what interviewees requested.

Skilled workforce, characteristics, & associated jobs	Change in homeownership by race
Transportation/transit/multimodal routes	Household self-sufficiency
Freight access/routes	High poverty households
Small businesses	Middle wage jobs
Location of returning incarcerated individuals	Unemployment gap between whites and POC
Housing availability, type, cost	Foreign Direct Investment
English language learners	Access to capital
Inbound/outbound migration	Household wealth
Commuting patterns vs. commuter sheds	Cluster-based employment
Neighborhood demographics (age, income, etc.)	Congestion levels
School ratings/districts	Access to healthcare/mental health services
Walkability score/pedestrian infrastructure	Last mile connections
Bike routes	Business sizes
Supply chain (industries & cluster locations)	Location of healthcare workforce
Employer concentration	Access to interstate bridges
Airport/port proximity; time from port to freeway	Average drive time through Portland
Car shares	Location of certain skillsets
Gross Regional Product	Healthcare geography (hospitals & other facilities)
Median household income	Access to Vancouver/Seattle

Employment	Access to fresh groceries
Industry growth	Minority, women-owned businesses
Manufacturing/trade as share of economy	Living wage level by tract
People in STEM occupations	Zoning/land use
Shovel-ready land	Parcel sizes + land prices
Multi-family housing	Property tax contributions
Electric Vehicle infrastructure	New firms
Access to major commercial centers	Community Development Block Grants
Labor force participation	Educational attainment/graduation rates (sometimes number of graduates in certain fields)
Location of daycare centers	

Acknowledgements

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars.

The Metropolitan Policy Program at Brookings would like to thank Portland Metro for their generous support of this research. The authors would like to thank the members of the Economic Value Atlas Task Force and other organizations around Portland who provided feedback to earlier versions of this research presented in July, 2017. The authors would also like to thank the individuals who contributed thoughts and comments related to an earlier draft of this report: Alan Berube, Joseph Kane, Annibel Rice, Ranjitha Shivaram, and other colleagues in the Portland metro area.

Brookings is committed to quality, independence, and impact in all of its work. Activities supported by its donors reflect this commitment.

Image Credits

Icons via Flaticon

Photos: Zack Spear and Abigail Keenan on Unsplash; Drown Soda and Bill Young on Wikimedia Commons

About the Metropolitan Policy Program at Brookings

The Metropolitan Policy Program at Brookings delivers research and solutions to help metropolitan leaders build an advanced economy that works for all.

To learn more, visit www.brookings.edu/metro.

The Brookings Institution is a nonprofit organization devoted to independent research and policy solutions. Its mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations for policymakers and the public. The conclusions and recommendations of any Brookings publication are solely those of its author(s), and do not reflect the views of the Institution, its management, or its other scholars. Brookings is committed to quality, independence, and impact in all of its work. Activities supported by its donors reflect this commitment.

For More Information

Adie Tomer Fellow Metropolitan Policy Program at Brookings atomer@brookings.edu

B | Metropolitan Policy Program

1775 Massachusetts Avenue, NW Washington, D.C. 20036-2188 telephone 202.797.6139 fax 202.797.2965 website www.brookings.edu/metro