SACOG Project Performance Assessment Documentation: Community Design Program

Summary Description

The SACOG Board of Directors has directed staff to increase performance-based planning, monitoring, and programming within the agency. A performance-based approach examines information about roads, trails, and transit systems, the form and function of neighborhoods and communities, and the people living in those communities to make sound investment decisions on projects with demonstrated performance benefits. In response, SACOG has created the Project Performance Assessment (PPA) tool and provides an online platform for its use. The tool brings together the numerous data sets SACOG maintains to provide data, context and performance indicators for individual transportation projects. By drawing on these regional data sources, the tool gives a consistent, transparent baseline to measure performance for transportation projects across the region. SACOG will use the tool in the 2018 regional flexible funding round, as well as possibly in future planning and programming. Local jurisdictions and project sponsors will also have access to the tool in support of other efforts. This documentation describes how the tool will be used in the 2018 Community Design Program.

Part 1. Major Concepts

Seven Blueprint Principles

The Community Design program provides financial support to local agencies for projects that promote placemaking. The program uses the seven SACOG Blueprint Principles to measure placemaking and project performance. For Community Design, the PPA tool translates these seven principles into related performance outcomes.

The seven Blueprint Principles are:

- Transportation choices
- Housing diversity
- Compact development
- Mixed land uses
- Use of existing assets
- Natural resource protection
- Quality design

Buffering for project area

The PPA tool creates a buffered area around a transportation project using GIS (geographic information systems), and examines both existing and forecasted future conditions in the buffered area. All buffers for the Community Design program are for a half mile around the project segment. The data come from a variety of sources including SACOG's parcel based land use data, its integrated land-use transportation data, the regional centerline file, the SACSIM travel demand model, the General Transit Feed Specification (GTFS), and the Transportation

Injury Mapping System (TIMS). Part II below lists the data source for each indicator under the individual performance outcomes.

<u>Performance Evaluation Framework</u>

The PPA online tool provides a series of data indicators about individual transportation facilities and the form and function of the neighborhoods they serve. For Community Design the PPA will report a series of indicators for both existing conditions in the project area, and forecasted future conditions. Data on existing conditions demonstrate the need for, or utility of, a specific type of transportation investment. Forecasted future conditions show how a Community Design project can support the changes envisioned or predicted for the area in the MTP/SCS. SACOG will run the PPA tool on all Community Design projects applying in the competitive categories on behalf of applicants. (in contrast, Regional Program applicants will be responsible for running the PPA tool for their projects, as described in the documentation of that funding program.). The data outputs of the Community Design project performance assessment will be passed along to the working group as part of their evaluation. The working group will use the data indicators to consider the appropriateness of the proposed project supporting Blueprint Principles and the reasonableness of projected land use change relative to the current MTP/SCS. Projects will be compared relative to those of similar place type and size.

Part II. Description of Indicators by the Seven Performance Outcomes

As described above, SACOG uses seven Blueprint Principles to evaluate transportation projects applying to the Community Design Program. To measure performance, the PPA tool provides one to five specific data indicators within each outcome. This section describes what indicators are included in each outcome, the data source for each, and how SACOG interprets each indicator (e.g. is a higher or lower value more supportive of the performance outcome, by indicator). The section starts with a summary table of indicators by outcome, then describes the more detailed data source and methodology of each indicator in turn.

Definitions

Blueprint Principle: one of the seven outcomes used in the Community Design round

Metric: specific data to evaluate performance on the given outcome

Project Value: a numeric score provided by the PPA Tool based on multiple data sets

Table 1. Summary of Community Design PPA Data Indicators

Project Name			
Jurisdiction			
Project Type	Community Design		
Blueprint Principle	**Metric**	**Project Value (current conditions)**	**Project Value (future conditions)**
Transportation Choices	**Single occupancy vehicle mode share** **High occupancy vehicle mode share** **Transit mode share** **Walk mode share** **Bike mode share**		
Housing Diversity	**MTP/SCS Community Type**		
Compact Development	**Jobs per net acre** **Dwelling units per net acre**		
Mixed Land Uses	**Job totals** **Population totals** **Dwelling units totals**		
Existing Assets	**Developed acres** **Available acres** **Proportion of developed acres to available acres**		
Natural Resources	**Percent of acres in agricultural use**		
Quality Design	***No data indicator***		

Table 2. Project Performance Assessment Data Indicators by Blueprint Principles

Blueprint Principle	Data Indicator	Description
Transportation choices	Mode shares for Single Occupancy Vehicle, High Occupancy Vehicle, Bike, Walk, and Transit	The proportion of trips taken by walking, biking, transit, high occupancy vehicle, or low occupancy vehicle in the MTP/SCS base year; increases or decreases in those mode uses in project area by the MTP/SCS horizon year.
Housing diversity	MTP/SCS Community Type	The MTP/SCS identified five Community Types based on information from local land use plans to identify land use patterns. Each Community Type has typical characteristics associated with those patterns.
Compact development	Employment and dwelling unit density	The current employment and dwelling units per net acre for the base year of MTP/SCS, and the increase in density between base and horizon year of MTP/SCS.
Mixed land uses	Jobs, population and dwelling unit totals	Jobs, dwelling units, and population in project buffer area for both base and horizon year of current MTP/SCS.
Existing assets	Developed acres to net total acres	The proportion of developed acres compared to the available acres for development in the MTP/SCS base year and horizon year.
Natural resources	Agriculture acres, agriculture acres preserved	The percentage of acres in the project area in agricultural use currently, and the percentage of acres projected to stay in agriculture through the MTP/SCS horizon year
Quality design	No data indicator	No data indicator

Blueprint Principle #1. Transportation Choices

Community design can help encourage people to walk, ride bicycles, ride the bus, ride light rail, take the train or carpool. For example, streets can be designed to include dedicated bike lanes or special lanes for bus rapid transit. Community design can encourage people to make more trips closer to home, making walking or biking easier. As more people walk, bike, or ride the bus, congestion and air pollution are reduced.

Metrics: Mode shares for single occupancy vehicle (SOV), high occupancy vehicle (HOV), transit, bike and walk trips within project area for both current and predicted future conditions

This indicator reports the proportion of trips in the project buffer area made by individual transportation modes for both the base and horizon year of SACOG's current MTP/SCS. The source of the forecasted data is SACOG's travel demand model. The data on the base year will help contextualize existing conditions in the project area and how the design elements and scope of the proposed Community Design project can provide more multi-modal options in the local context. The data on future conditions will be used to assess how well the proposed investment aligns with conditions predicted in SACOG's MTP/SCS.

Blueprint Principle #2. Housing Diversity

Providing a variety of places where people can live—apartments, condominiums, townhouses, and single-family detached homes—creates opportunities for the variety of people who need them—families, singles, seniors, and people with special needs. This issue is of special concern for the very low-, low-, and moderate-income people for whom finding housing, especially housing close to work, is challenging. By providing a diversity of housing options, more people have a choice.

Metrics: Community type

This indicator reports the community type of the project area, as defined by SACOG's MTP/SCS. The MTP/SCS uses five community types:
- Centers and corridors
- Established communities
- Developing communities
- Rural residential
- Agriculture and open space

If multiple community types are present in the buffer area, the indicator uses the most prominent. Each definition comes from information on local land use plans and patterns. Each community type has typical housing characteristics associated with those patterns which provide context for the working group's review of each application. Future iterations of the PPA tool will look to build out the metrics on housing by major product type.

Blueprint Principle #3. Compact Development

Creating environments that are more compactly built and use space in an efficient but more aesthetic manner can encourage more walking, biking, and public transit use.

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Metrics: Employment and dwelling unit density of project area, base and horizon years

This indicator documents the current jobs and dwelling units per acre in the project area. The data for this indicator come from the parcel-level base year of SACOG's 2016 MTP/SCS. The metrics consist of dwelling units divided by net residential acres and jobs by net employment acres. 'Net' refers to the portion of the buffer area not excluded from development. In other words, the indicator excludes all environmentally constrained lands (rivers/streams, wetlands, vernal pools, hardwood forests, parks, etc.). It also removes the portion of the land used for roads and public right of way. For example, the net density of a project located next to a river would not include any water parcels in the density calculation, and would also take out the land used for the transportation network. The metric then reports the same information for the horizon year of the MTP/SCS. Transportation projects supporting denser land uses relative to similar place types are more supportive of this performance measurement.

Blueprint Principle #4. Mixed Land Uses
Building homes together with small businesses or even light industry is called "mixed-use" development, and it has proven to create active, vital neighborhoods. There are many examples of this type of development: a housing project near an employment center; a small shopping center near houses; or a high-rise building with ground-floor retail and apartments or condominiums upstairs. Mixed-use development near transit can boost ridership.

Metrics: Jobs, population, and dwelling unit totals in project buffer area, base and horizon year of MTP/SCS

This indicator reports the number of jobs, people and dwelling units in the project buffer area. Projects with more parity amongst these metrics are more indicative of mixed land uses relative to those with only one type of activity or use. The metric also shows predicted conditions in the horizon year of the plan. The working group will use the future year indicator to assess how well the proposed investment and its associated land use changes align with conditions planned for in the current MTP/SCS. The data source for the indicator is SACOG's integrated land use-transportation file, used in the current MTP/SCS.

Blueprint Principle #5. Use of Existing Assets
Focusing development in communities with vacant land or intensifying development of underutilized land can make better use of public infrastructure, including roads. Building on existing assets can also mean refurbishing historic buildings or clustering buildings more densely in suburban office parks.

Metrics: Developed acres to net total acres in project area, base and horizon year

This indicator measures how much of the project area is currently developed. Those projects with a buffer area already mostly built out are more supportive of the existing asset indicator compared to those that are developing areas in open space or other uses. Likewise, the horizon year indicator shows how well the project aligns to the growth forecasted in the MTP/SCS. Like

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the above, the data source for the indicator is SACOG's integrated land use-transportation file, used in the current MTP/SCS.

Blueprint Principle #6. Natural Resource Protection
Our quality of life is better when we have clean air to breathe and water to drink, and when we can experience the outdoors—in parks and greenbelts or in natural places. To ensure healthy and attractive natural environments we must preserve and maintain our open spaces and natural places and conserve the most productive farmland. Community design can help accomplish this by encouraging energy-efficient design, water conservation and storm water management, and the planting of shade trees to reduce ground temperatures in the summer.

Metrics: Agriculture acres, agriculture acres preserved

This indicator calculates the percentage of acres in the project area currently in agricultural use for both the current and horizon year of the MTP/SCS. The data layer comes from SACOG's RUCS crop map. SACOG interprets a higher proportion of acres dedicated to agriculture as more supportive of the performance outcome, and those areas that stay in agricultural use as more supportive of this principle.

Blueprint Principle #7. Quality Design
How projects are developed, how they are oriented in relationship to the street, how well designed their façades are, if they have setbacks and where their garages are placed, all contribute to a community's attractiveness. This also influences how much people like to walk or bike and contributes to community pride and sense of ownership.

Metrics: *no data indicators*

There are no data indicators for the seventh Blueprint Principle, as quality design is not something that can be measured quantitatively.