# Mathics Fundamentals



Regional Plan for Sustainable Development

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hank you for your continued commitment to the Sustainable Communities planning process and the development of metrics. This Metrics Fundamentals Toolkit has been developed to help you better understand how metrics will be used as a critical part of the Regional Plan for Sustainable Development.



### What are sustainable metrics?

A sustainable metric is a method for measuring a concept. A good metric is comprised of three pieces of related information: knowing the current state, knowing which direction you are headed, and knowing how far you are from the goal.

### Why are sustainable metrics important?

Sustainable metrics are important because they enable the user to control and evaluate the progress of a concept. They also allow the user to communicate what they value and how performance will be evaluated. Metrics frame expectations.

#### How will sustainable metrics be used?

Sustainable metrics will be used to communicate the values of the region, to measure progress and to develop a basis for making informed decisions.

### Where can I find examples of metrics?

Metrics can be found easily on the internet. Some reputable organizations that have produced information about sustainable metrics include planning organizations such as the Delaware Valley Planning Commission and the Shell Center for Sustainability.

#### What makes a good sustainable metric?

A good sustainable metric contains the following variables: It is related to a programmatic goal It is informed by data that is reliable, trusted and available It is predictive or forward looking in nature It is stakeholder supported It is actionable

#### What time period should a metric cover?

The length of time a metric should cover is situational and dependent upon the subject and the community's goals. However, sustainability is comprised of several principles to be considered, including intergenerational equity, long-term perspectives, and carrying capacity. The time horizon for the Regional Plan for Sustainable Development is 2040.

### How many metrics should there be?

There is not a pre-set number of metrics for this process, and the ultimate number included will be dependent upon the input received from the workgroups, the community's goals, and the availability of data. A smaller number of welldesigned metrics can be more powerful than a laundry list that attempts to capture the universe of potential metrics.

### How will we determine which topics should be measured?

The process for deciding which topics should be measured will be an iterative one, incorporating input from the public outreach efforts, the Technical Advisory Groups, the Regional Transect Groups, the Government Advisory Committee, and the Coordinating Committee.

### How will we engage the public so they are part of the metric development process?

The public will be engaged in multiple ways to give their input on the most appropriate and meaningful metrics. This will include not only public meetings throughout the 13-county region but also use of social media, kiosks, focus groups, and personal interviews. There will be a feedback between the Technical Advisory Groups, the Regional Transect Groups, the Government Advisory Committee, the Coordinating Committee, and the public to help ensure the metrics reflect the full range of input received.

### How is this initiative unique from other planning efforts that have developed metrics?

The Regional Plan for Sustainable Development will be the region's first regionally-adopted, consensus-based plan that will articulate an inclusive vision and set measurable goals that can be tracked through metrics and data. It will build upon previous planning efforts that have occurred in the region at varying scales.

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### What is the process for getting data to measure the metrics on a regular basis?

One of the key components that will determine what metrics are included in the plan will be the availability of data to measure the metric. The Houston-Galveston Area Council will be responsible for managing, analyzing, and collecting the data concerning the metrics and will engage the Coordinating Committee and workgroup members to support data collection.

### Who will be responsible for tracking and reporting the metrics results?

H-GAC will be responsible for tracking progress in reaching the metric benchmarks. Implementation of sustainability strategies will be tracked to highlight successes and model transferable initiatives. H-GAC will disseminate the results of the progress tracking through annual reports and more detailed three- and five-year report cards.

### Who will "approve" the metrics?

The metrics will go through an iterative review process, with review occurring between the technical and transect groups, the Coordinating Committee, the Governmental Advisory Committee, and the public. Ultimately the Coordinating Committee is the body that will approve the metrics to be included in the plan. Inclusion of metrics in the plan does not constitute a requirement that any entity commit to fulfilling the benchmarks set. The metrics will also be presented to the Governmental Advisory Committee to help gain traction for municipalities moving forward with implementation.

### How do the metrics relate to the HUD livability principles?

The U.S. Housing and Urban Development livability principles are overarching principles that are intended to guide creation of the Regional Plan for Sustainable Development, including the metrics. Compatibility of the metrics with the HUD livability principles will be one factor to take into consideration when determining the viability of individual metrics.

| Glossary                     |  |  |
|------------------------------|--|--|
| benchmark -                  | a mark or reference point used for comparisons. Benchmarks are often used to evaluate performance of an outcome against an industry-wide best-practice. Dimensions typically measured are quality, time and cost.  |  |
| goal -                       | a desired result a system or program commits to. Goals are best expressed in SMART format.   |  |
| metric -                     | is a way to measure. It is also referred to as an indicator.   |  |
| outcome -                    | are the desired state change sometimes referred to as the "bottom line."   |  |
| output -                     | is a measure of activity.  |  |
| performance measure -        | a quantitative or qualitative characterization of performance. It can also be referred to as a metric.   |  |
| performance<br>measurement - | a framework to clearly articulate the cause-and-effect relationship between inputs, outputs, and outcomes.   |  |
| SMART -                      | an acronym to help the user remember how to construct an outcome statement (i.e. specific, measureable, achievable, relevant, time). A strong SMART statement often looks like - reduce the amount of gas used by 10% between January and December 2012. |  |

Métrics frame expectations.

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| Sustainable Metric Checklist   |           |     |
|--|-----------|-----|
| The purpose of this checklist is to serve as a tool for both developing and evaluating a metric. It is intended<br>user think about the metric in a contextual and comprehensive manner. Tallying the check marks is an effect<br>nique for helping users evaluate the relative merits of different indicators. While it is desirable to attain metric responses than "no" responses, the final decision to use a metric will be a subjective one. | ective te | ch- |
| Criteria   | Yes       | No  |
| Purpose  |           |     |
| Has the metric's purpose been made clear (i.e. inform decisions, raise awareness, monitor progress)?   |           |     |
| Is the metric aligned with the publicly defined regional vision statement?   |           |     |
| Principles   |           |     |
| Does the metric allow for each dimension of sustainability (i.e. environmental issues) to be realized?   |           |     |
| Is the metric compatible with HUD's Livability Principles?   |           |     |
| Provide more transportation choices  |           |     |
| Promote equitable, affordable housing  |           |     |
| Enhance economic competitiveness.  |           |     |
| Support existing communities   |           |     |
| Coordinate policies and leverage investment  |           |     |
| Value communities and neighborhoods  |           |     |
| Transect Group   |           |     |
| Have the concerns and interests of the transect group been considered?   |           |     |
| Coastal  |           |     |
| Rural  |           |     |
| Suburban   |           |     |
| Urban  |           |     |
| Has the Governmental Advisory Committee provided input?  |           |     |
| Method   |           |     |
| Is the metric quantifiable?  | ļ         |     |
| Is the metric bounded within a designated time frame?  |           |     |
| Has the unit of measure been defined?  |           |     |
| Is the metric expressed as a SMART statement?  |           |     |
| Is there a baseline of data?   |           |     |
| Has a data source been identified?   |           |     |
| Is the data provider considered reliable and trustworthy?  |           |     |
| Will the source provide the data for the foreseeable future?   |           |     |
| Is the metric predictive in nature (i.e. future oriented) so trends can be observed?   |           |     |
| Has a successful threshold been defined for the subject being measured?  |           |     |
| Communication  |           |     |
| Is the metric's meaning and significance easily understood?  |           |     |
| Can the metric be explained in one sentence?   |           |     |
| Is there a clear explanation for what/why/when/where/how something is being tracked?   |           |     |
| Obstacles  |           |     |
| Is the metric free from any legislation, agreements, or regulatory standards that could impede or block its intended purpose?  |           |     |
| Is the metric free from potential limitations (i.e. standard changing, availability, relevance)?   |           |     |
| Supporting Information   |           |     |
| Are additional and related resources identified (i.e. references, case studies, examples)?   |           |     |