



WSP

Social and Economic Sustainability Measures for Public Transportation

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Agenda

- Project Objectives
- APTA Recommended Practice for Social and Economic Sustainability
- Using the TCRP Guidance Document

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TCRP Research Report 205 Pre-Publication Draft—
Subject to Revision


Social and Economic Sustainability
Performance Measures for
Public Transportation

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TCRP J-11/Task 32 Project Objectives

- **Expand metrics** addressed in the *APTA RP for Quantifying and Reporting Transit Sustainability Metrics* to include social and economic metrics
- **Provide guidance** on how to operationalize the social and economic sustainability metrics
- **Investigate and document** emerging sustainability metrics and best practices and how to operationalize these metrics

APTA Social and Economic Sustainability Goals

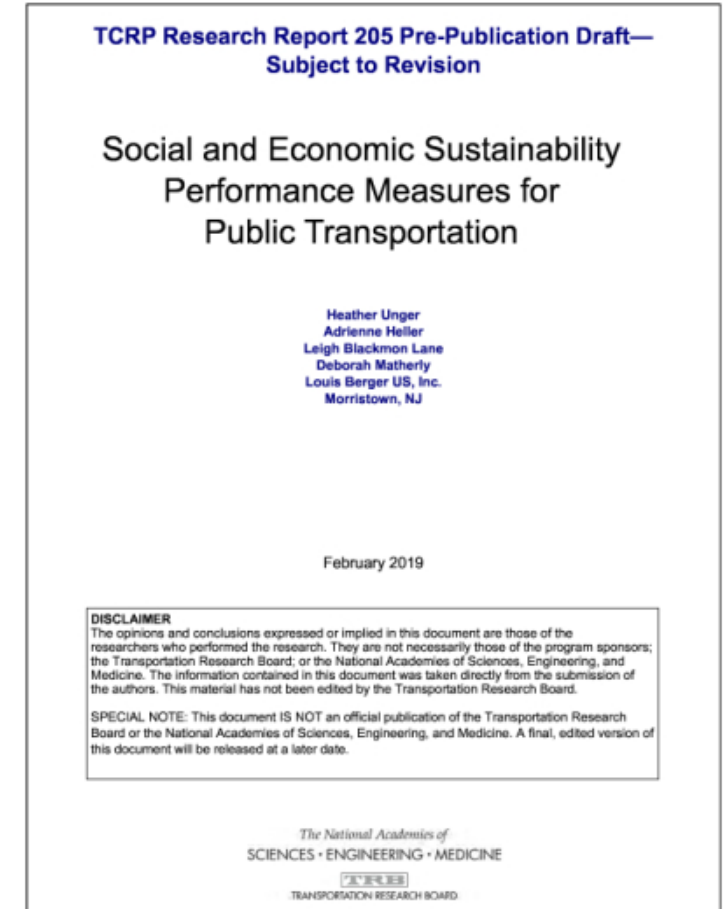
Goal	Social		Economic	
	<i>Internal</i>	<i>External</i>	<i>Internal</i>	<i>External</i>
Community Building and Engagement : Engage diverse groups to improve transit service, create hospitality in customer service, and demonstrate good will through engagement techniques and commit to good design in the public realm.	X	X		
Economic Impact: Support the economic growth of our regions and the nation.		X	X	X
Employees and Workforce: Create a conducive and supportive environment for all employees.	X			
Financial: Ensure the reliability of transit services through financial stability.			X	X
Mobility and Accessibility: Make it easier for people of all abilities to affordably and reasonably access different goods and services to meet their daily needs.		X		X
Safety and Emergency Preparedness: Ensure operations are safe and do not compromise the well-being of riders, staff or the public.	X	X	X	X

APTA Social and Economic Sustainability Objectives

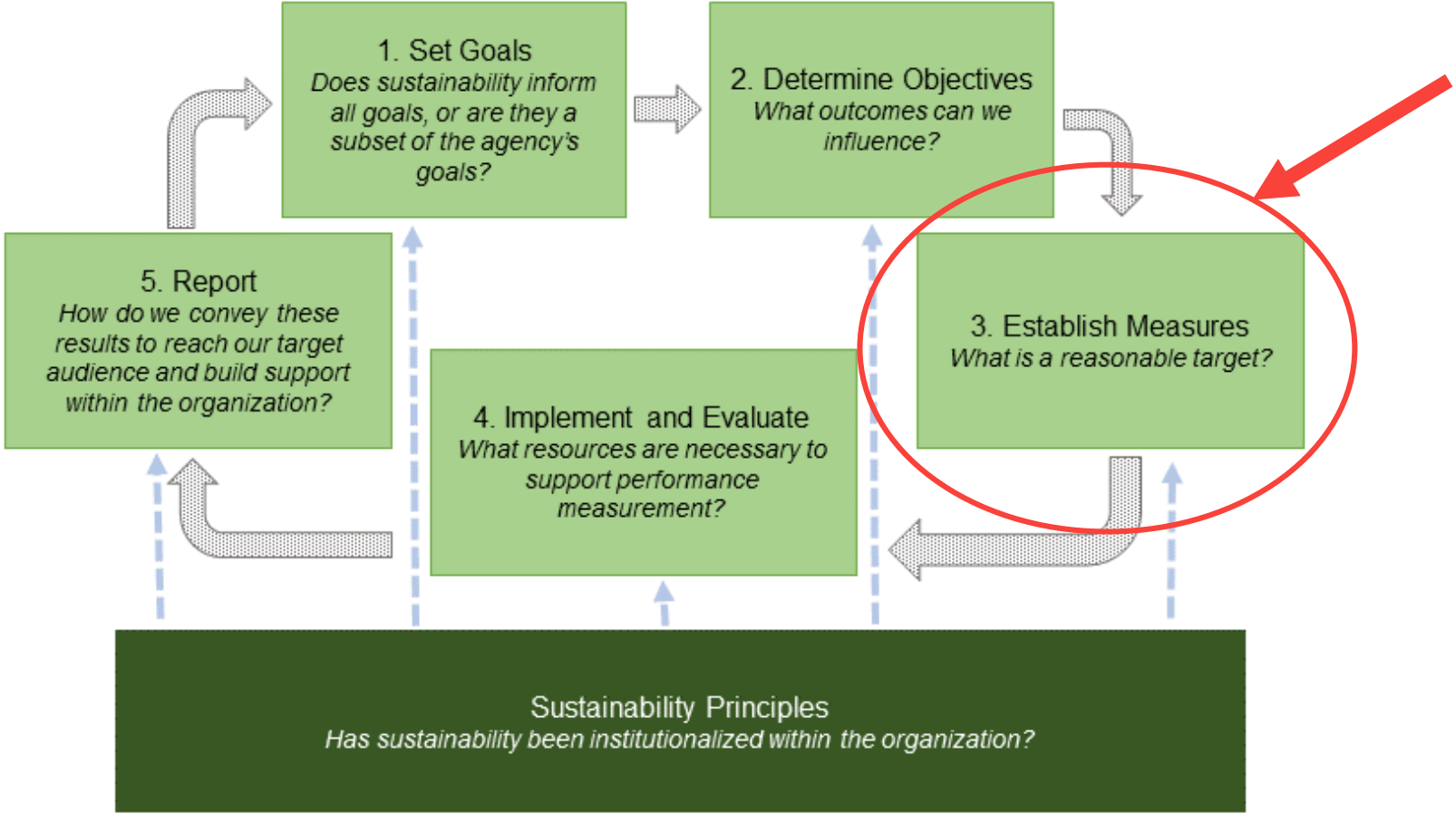
Goal	Objective
Community Building and Engagement	Collaboration and Partnerships, Community Engagement, Good Design Elements, Rider Engagement
Economic Impact	Measure and Communicate Economic Benefits of Transit, Politically Leverage Economic Benefits, Understand Distributional Effects on Specific Areas or Groups, Extend Economic Reach of Public Transportation
Employees and Workforce	Employee Recruiting, Employee Retention, Organizational Culture and Workforce Engagement
Financial	Fiscal Responsibility, Procurement Strategies, Sustainable Investments
Mobility and Accessibility	Access, Affordability (housing and transportation), Multimodal Connectivity
Safety and Emergency Preparedness	Emergency Preparedness, Health and Wellness, Safety, Security

Guidance Document Format

- **Chapter 1** provides information on the project purpose
- **Chapter 2** presents key findings
- **Chapter 3** summarizes the research process and presents the list of top social and economic sustainability performance measures
- **Chapter 4** discusses strategies for operationalizing the performance measures
- **Chapter 5** identifies areas for further research
- **Social and Economic Sustainability Performance Measures Database** is a separate Excel®-based document that includes the complete list of social and economic performance measures identified as part of this project



Operationalizing the Performance Measures



Key Questions when Establishing Performance Measures

Goal: Improve accessibility

- How are we defining accessibility?
- What mobility data do we currently track?
- How many stations/stops and vehicles are currently ADA accessible?
- Which stations currently require improvements?
- How many vehicles must be purchased or retrofitted in order to be made accessible?
- What targets should be set?



Social and Economic Sustainability Excel Tool

	A	B	C	D
1	APTA Goal	APTA Objective	Performance Measure	Top Measure
2	Community Building and Engagement	Collaboration and Partnerships	Number of planning studies led or collaborated on per year	X
3	Community Building and Engagement	Collaboration and Partnerships	Number/percent of employees receiving customer service or engagement training (e.g., equity and social justice, hospitality, conflict resolution) by type of training	X
4	Community Building and Engagement	Collaboration and Partnerships	Number of Community-Based-Organization (CBO) events sponsored by/attended by transit staff	X
5	Community Building and Engagement	Community Engagement	Number/percent of projects that follow a public participation/engagement plan	X
6	Community Building and Engagement	Good Design Elements	Percentage of transit stops with transit schedule and route information provided	X
7	Community Building and Engagement	Rider Engagement	Number of customer complaints responded to by type of complaint	X
8	Community Building and Engagement	Rider Engagement	Overall satisfaction of the transit system by user group (e.g., non-drivers, people with disabilities, environmental justice populations, gender, age, choice riders)	X
9	Community Building and Engagement	Collaboration and Partnerships	Number/percent of schools included in the Enhance Safe Routes to School program	
10	Community Building and Engagement	Rider Engagement	Number of free "how to use transit" trainings each year	
11	Community Building and Engagement	Collaboration and Partnerships	Number of farmers markets hosted on agency property	
12	Community Building and Engagement	Community Engagement	Number of events and people contacted per service area, corridor or community	
13	Community Building and Engagement	Good Design Elements	Number of stations with areas for nursing mothers	
14	Community Building and Engagement	Good Design Elements	Number of stations with public toilets	
15	Community Building and Engagement	Good Design Elements	Customer satisfaction rating of station interior/exterior environment	
16	Community Building and Engagement	Good Design Elements	Percent of transit stops with access via sidewalks	
17	Community Building and Engagement	Good Design Elements	Percent of transit access intersections that are ADA compliant	
18	Community Building and Engagement	Good Design Elements	Percent of transit access intersections with crosswalks	
19	Community Building and Engagement	Good Design Elements	Percentage of fleet that include real time announcements and displays	
20	Community Building and Engagement	Good Design Elements	Percentage of stations that include real time announcements and displays	
21	Community Building and Engagement	Rider Engagement	Number of passenger comments received by method and by type of comment	

Social and Economic Sustainability Excel Tool

	C	G	H	I	J	K	L	M
	Performance Measure	Mode(s)	Urban/Rural	Internal/External	Social/Economic	Type of Measure	Could Measure Consider Env	Span of Control
2	Number of planning studies led or collaborated on per year	All	Both	External	Social	Input	No	Yes
3	Number/percent of employees receiving customer service or engagement training (e.g., equity and social justice, hospitality, conflict resolution) by type of training	All	Both	External	Social	Input	Yes	Yes
4	Number of Community-Based-Organization (CBO) events sponsored by/attended by transit staff	All	Both	External	Social	Input	Yes	Yes
5	Number/percent of projects that follow a public participation/engagement plan	All	Both	External	Social	Input	Yes	Yes
6	Percentage of transit stops with transit schedule and route information provided	All	Both	External	Social	Output	Yes	Yes
7	Number of customer complaints responded to by type of complaint	All	Both	External	Social	Outcome	No	Yes
8	Overall satisfaction of the transit system by user group (e.g., non-drivers, people with disabilities, environmental justice populations, gender, age, choice riders)	All	Both	External	Social	Outcome	Yes	Yes
9	Number/percent of schools included in the Enhance Safe Routes to School program	Bus	Both	External	Social	Outcome	Yes	Yes
10	Number of free "how to use transit" trainings each year	All	Both	External	Social	Input	Yes	Yes
11	Number of farmers markets hosted on agency property	All	Both	External	Social	Outcome	Yes	Yes
12	Number of events and people contacted per service area, corridor or community	All	Both	External	Social	Outcome	Yes	Yes
13	Number of stations with areas for nursing mothers	Rail	Both	External	Social	Output	Yes	Yes
14	Number of stations with public toilets	Rail	Both	External	Social	Output	Yes	Yes
15	Customer satisfaction rating of station interior/exterior environment	Rail	Both	External	Social	Output	Yes	Yes
16	Percent of transit stops with access via sidewalks	All	Both	External	Social	Output	Yes	Yes
17	Percent of transit access intersections that are ADA compliant	All	Both	External	Social	Output	No	Yes
18	Percent of transit access intersections with crosswalks	All	Both	External	Social	Output	Yes	Yes
19	Percentage of fleet that include real time announcements and displays	All	Both	External	Social	Output	No	Yes
20	Percentage of stations that include real time announcements and displays	Rail	Both	External	Social	Output	Yes	Yes
21	Number of passenger comments received by method and by type of comment	All	Both	External	Social	Outcome	Yes	Yes
22	Percent increase in the number of partners who agree or strongly agree that Caltrans is a collaborative partner	All	Both	External	Social	Outcome	No	Yes

Types of Performance Measures

Type	Description	Example
Input	Measures of resources invested by the transit agency	The number/percent of employees trained by type of training, level and gender
Process	Measures of the types of policies and planning activities the transit agency has in-place to support performance management	A process and database to track and report health and safety data
Output	Measures direct results	The percentage of transit stops with transit schedule and route information provided
Outcome	Measures ultimate results	The overall satisfaction of the transit system by user group

Source: Adapted from Litman 2016

Example H&S Performance Measures

Goal: Reduce accidents at rail crossings

Objective: Eliminate at-grade rail crossings

Output Measures: Total number of at-grade crossings

Outcome Measure: Number of accidents at rail crossings

Input Measures:

- Number of at-grade crossings eliminated
- Investment in additional at-grade rail crossing safety measures
- Number of near-misses reported

Process Measures: Process in-place to report near-misses



Anatomy of a Performance Measure

Count

Measure

Qualifier

Normalization Factor



Number of | planning studies led | or collaborated on | per year |

Performance Measure Goal: Community Building and Engagement

Performance Measure Objective: Collaboration and Partnerships

Performance Measure Type: Process

Common Counts and Normalization Factors

Count

Number

Percent

Percent Increase

Dollars

Miles

Rate

Normalization Factor

PMT

VMT

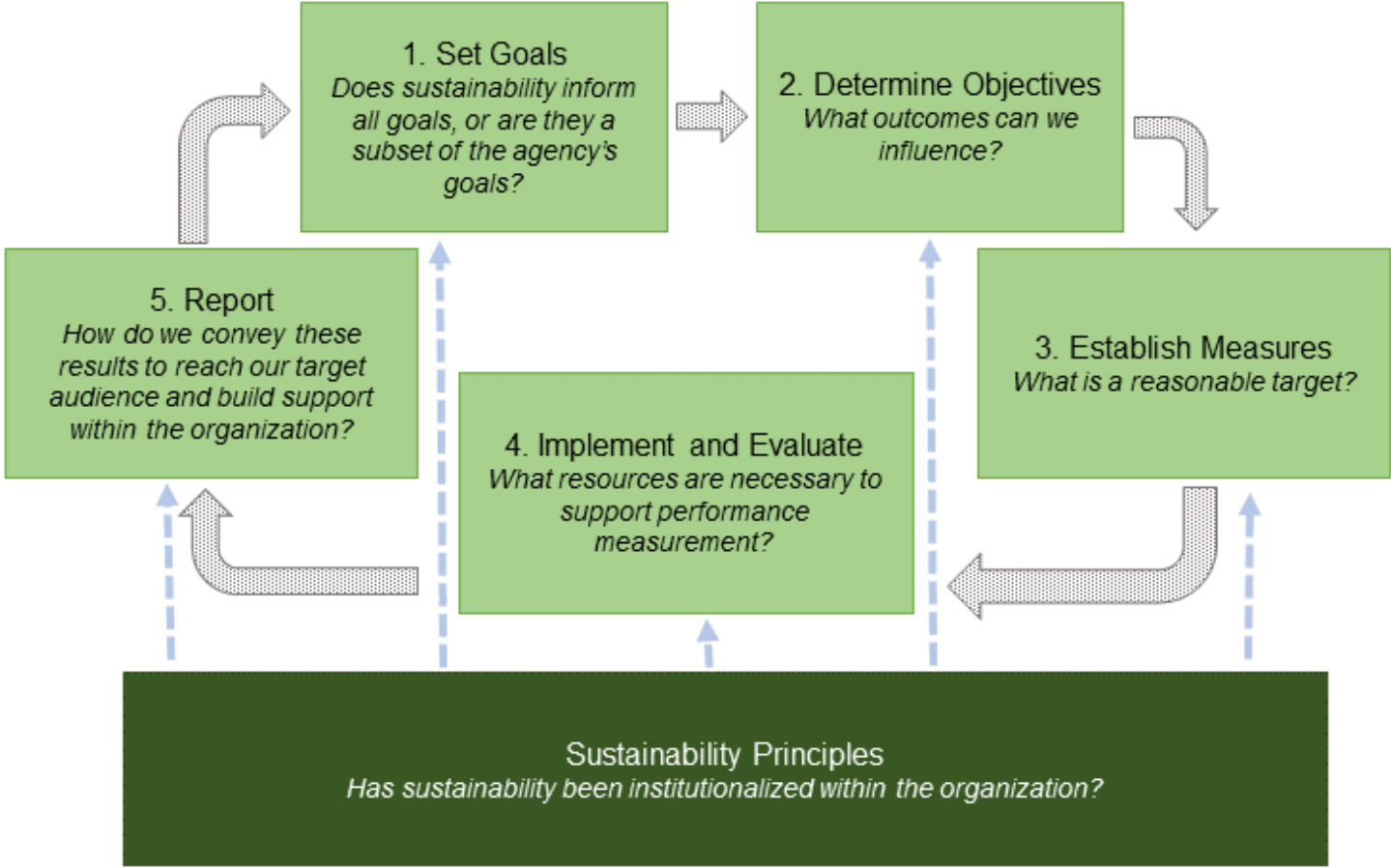
UPT

VRM

Per Capita

Per Year

Operationalizing the Performance Measures





TRB Webinar

Date: August 6, 2019

Time: 1:00 PM – 2:30 PM EST

<http://www.trb.org/Main/Blurbs/179280.aspx>



TCRP Pre-Publication Report

<http://www.trb.org/Publications/Blurbs/179093.aspx>

Thank you!

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