IM-A01

MONITORING AND EVALUATION FRAMEWORK

Analytic methodology to define the appropriate monitoring and evaluation framework for the TOD project or program

Type: Spreadsheet + User Guide

TOD

Global Platform for Sustainable Cities

WORLD BANK GROUP

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ABOUT THE MONITORING AND EVALUATION TOOL

PURPOSE

The impacts of key planning and policy interventions can never be anticipated fully and accurately. The process of monitoring and evaluation allows an agency to learn and understand the comparative ability of specific strategies to cause change in their respective context.

Monitoring primarily refers to monitoring "outputs" of a plan, policy, or program, with respect to defined targets. Project outputs are the particular goods or services provided by a project intervention, for example, the length of sidewalks constructed is a project output.

Evaluation primarily refers to evaluating "outcomes" of a plan, policy, or program, with respect to idealistic goals. Project outcomes measure the extent to which a project achieves a long-term, wide-scale objective, for example in the case of the same project, the increase in the modal share of people walking to transit stations is a project outcome.

This Monitoring and Evaluation Framework Knowledge Product provides guidance on defining a framework for project-specific needs. It illustrates the potential methodology to define the baseline, followed by collecting the relevant data to compare using analytic means. It also includes typical indicators that can be used to construct a project-specific framework.

Disclaimer: *The Transit-Orientated Development Implementation Resources & Tools knowledge product is designed to provide a high-level framework for the implementation of TOD and offer direction to cities in addressing barriers at all stages. As the context in low and middle-income cities varies, the application of the knowledge product must be adapted to local needs and priorities, and customized on a case-by-case basis.*

References

ITDP (The Institute for Transportation and Development Policy). 2017. "*TOD Standard. 3rd ed.*" New York.

USGBC (US Green Building Council). 2018. "*LEED v4 for Neighborhood Development*".

World Resource Institute and World Bank Group. 2015. *Corridor Level Transit-Oriented Development Course*. Washington, DC.
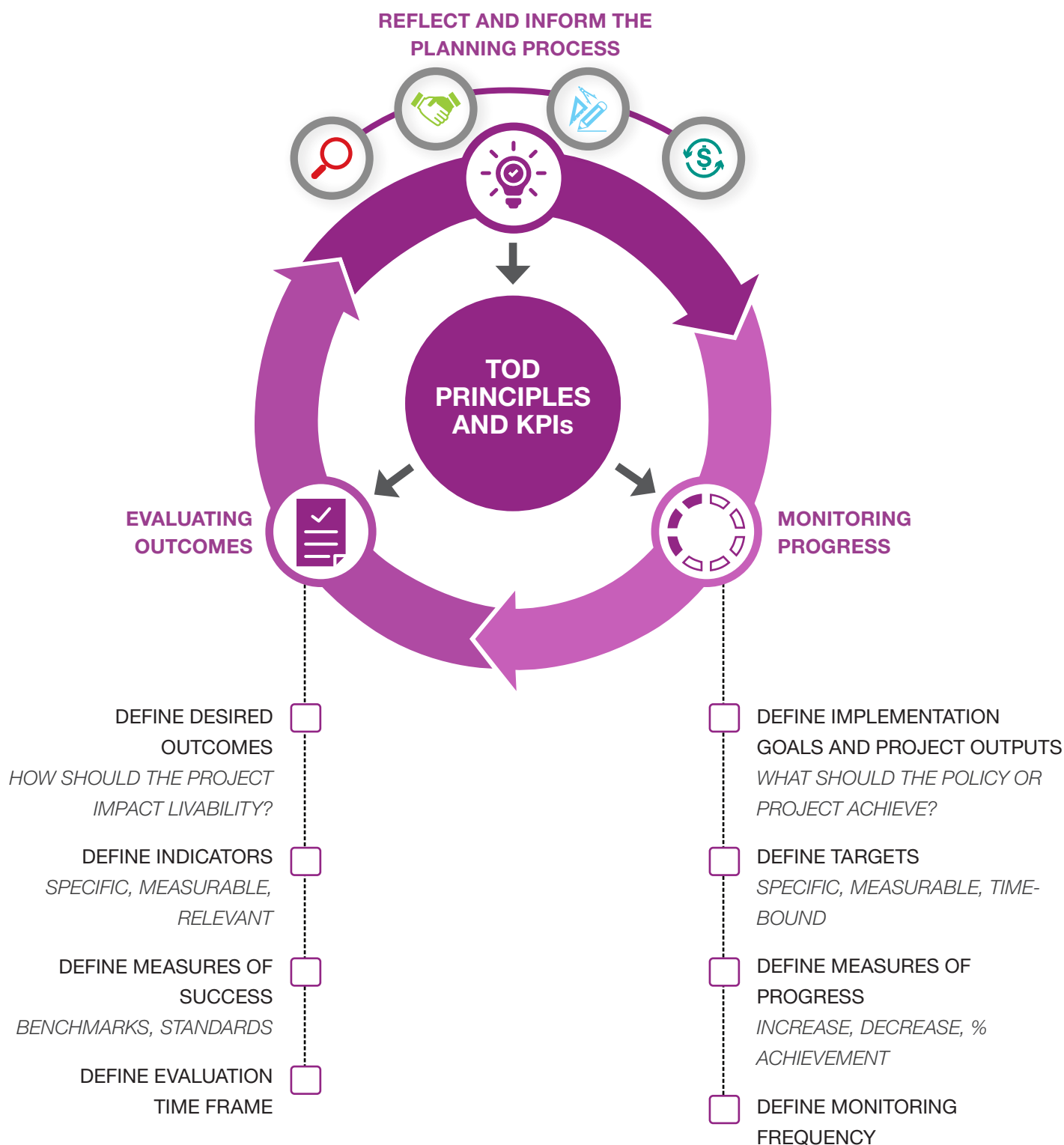
HOW TO USE THE TOOL?

This Tool should be read in combination with an Excel Spreadsheet that contains a series of project output and outcome indicators that will help monitor and evaluate the performance of projects against TOD goals.

The overall framework is largely organized along the lines of the WRI and World Bank generated Corridor level Transit-Oriented Development Course and uses indicators from the ITDP TOD Standard v.3.0, and the LEED v4 for Neighbourhood Development. The TOD benefits measured using this framework are related to **Mobility, Social, Environmental, and Economic Benefits.** Project-specific project outputs and outcomes would need more detailed indicators, which would need to be developed as per project specifics. For each indicator, the framework provides methods of measuring, the scale of application, the best visualization method, and the expected TOD goal.
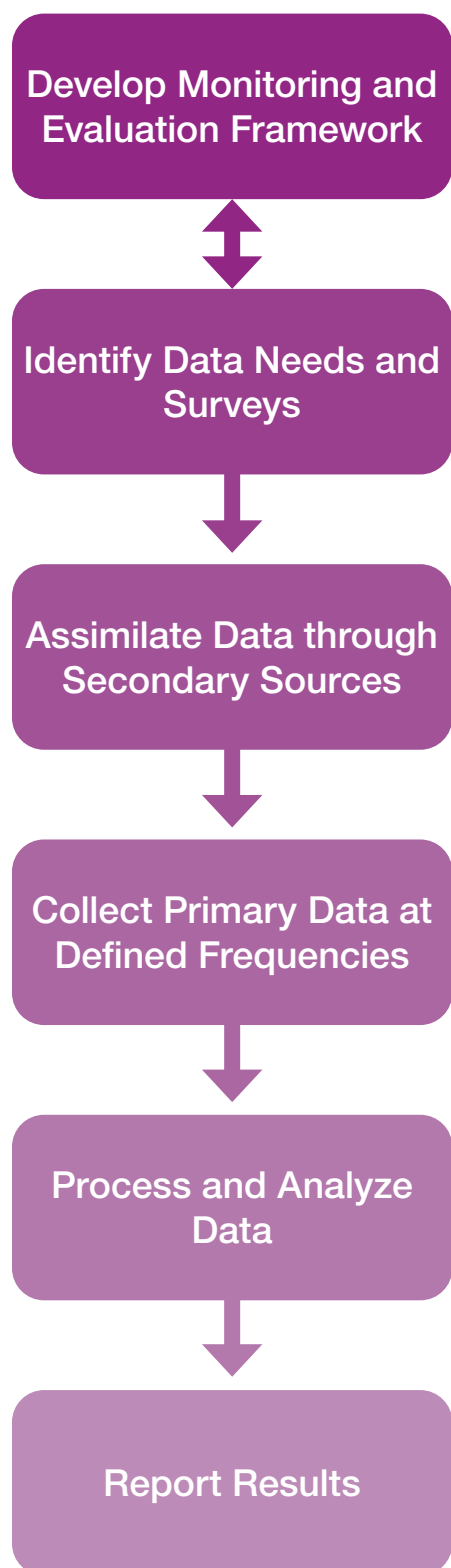
Some examples of how the monitoring and evaluation framework can be used for project-specific needs are given below:

- TOD Planning Project: Use the framework to monitor if the agency is performing the required planning tasks.
- Implementation of a Transit Construction Project: Use the framework to monitor if the agency is prioritizing key TOD requirements and causing minimum damage to the existing public environment.
- Implementation of a Parking Pricing Policy: Use the framework to evaluate the impact of the policy on the pedestrian environment and travel behavior.
- Evaluating Statutory Plans: Use the framework to evaluate the impact of the plans on the ability to plan for TOD.

DEFINE THE FRAMEWORK

REFLECT AND INFORM THE PLANNING PROCESS

TOD PRINCIPLES AND KPIs

EVALUATING OUTCOMES

MONITORING PROGRESS

DEFINE DESIRED OUTCOMES
HOW SHOULD THE PROJECT IMPACT LIVABILITY?

DEFINE INDICATORS
SPECIFIC, MEASURABLE, RELEVANT

DEFINE MEASURES OF SUCCESS
BENCHMARKS, STANDARDS

DEFINE EVALUATION TIME FRAME

DEFINE IMPLEMENTATION GOALS AND PROJECT OUTPUTS
WHAT SHOULD THE POLICY OR PROJECT ACHIEVE?

DEFINE TARGETS
SPECIFIC, MEASURABLE, TIME-BOUND

DEFINE MEASURES OF PROGRESS
INCREASE, DECREASE, % ACHIEVEMENT

DEFINE MONITORING FREQUENCY

HOW TO MEASURE PERFORMANCE

Develop Monitoring and Evaluation Framework

Identify Data Needs and Surveys

Assimilate Data through Secondary Sources

Collect Primary Data at Defined Frequencies

Process and Analyze Data

Report Results

THE IMPORTANCE OF ASSESSING AVAILABILITY AND QUALITY OF DATA TO INFORM THE MONITORING AND EVALUATION FRAMEWORK

The process of measuring is critical to ensure successful outcomes from a monitoring and evaluation framework, which is influenced largely by the availability and quality of data. It is extremely important to understand the prevailing data limitations in the context before defining the monitoring and evaluation framework. Overestimating the ability of an agency to collect reliable data can compromise the effectiveness of the monitoring and evaluation framework to offer constructive lessons for the future.

DEVELOPING PROXY INDICATORS

Where data availability for a particular *target* or *indicator* is unreliable or is of poor quality, it is recommended to utilize proxy indicators that allow for reliable prediction of the performance against the desired outcome.

SAMPLE FRAMEWORK

Two sample frameworks are suggested on the next page. Use the criteria from the Excel Spreadsheet to populate any one of the two frameworks, as preferred for the project goals.

MONITORING AND EVALUATION FRAMEWORK TEMPLATE

SAMPLE FRAMEWORK TYPE 01

TOD PERFORMANCE PARAMETERS	IMPLEMENTATION OBJECTIVES/ OUTCOMES	INDICATORS/ TARGETS	MEASURES	DATA SOURCE	DATA LIMITATIONS/ NOTABLE BIAS	MEASURING FREQUENCY
Mobility and Travel Behaviour*	Objective 1					
	Objective 2					
	Objective 3					

* Refer to IM02 for TOD Key Performance Indicators

The implementation objectives can be analyzed individually, in this case, to monitor progress or analyze the extent to which each objective, output, or outcome is achieved. This allows for evaluation of the impact of a project or program on specific objectives.
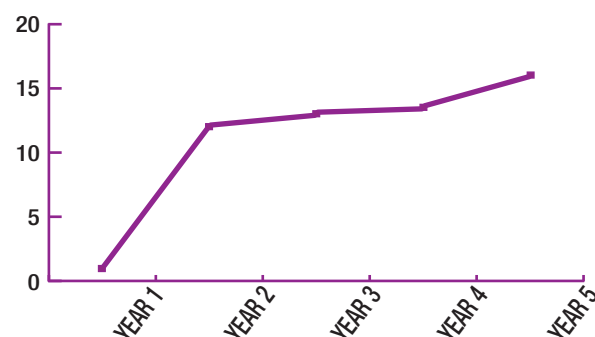
SAMPLE FRAMEWORK TYPE 02

A	MOBILITY AND TRAVEL BEHAVIOUR				
[DESCRIPTION OF INTENT]					
Features		Yes	No	N/A	Comments
A1	Desired Outcome 01				
A2	Desired Outcome 02				
A3	Desired Outcome 03				
	Sub - Total				

This framework allows for a qualitative measurement of the OVERALL performance of a TOD project or program, with respect to desired goals or outcomes.

TRANSIT-ORIENTED DEVELOPMENT SCORECARD

1 point is assigned per item if 'Yes' is checked. 0 points are assigned if 'No' is checked. All 'Yes' and 'No' checks are considered applicable and points from each section should be added and included in the table below. The 'Score' for each section is calculated by dividing the points by the 'Total Applicable'. This produces a percentage score. Comments may be written to explain the score for each section.

		Total Possible	Total Applicable	Points	Score (%)	Comments
A	Mobility and Travel Behavior	X				
B	Economic Performance	X				
C	Environmental Performance	X				
D	Social Benefits	X				
	TOTALS	X				
	FINAL SCORE					

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