

# IMPLEMENT

## INTRODUCTION

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Tie the diverse interventions needed to ‘Make TOD happen’ from prioritizing projects, to capacity building and monitoring

## ABOUT IMPLEMENT

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Developing successful TOD projects requires mobilizing a multitude of resources, partnerships and innovative implementation mechanisms that help leverage public sector investment in transit and infrastructure with private sector development. The ‘Implement’ stage is a discussion of programs and interventions that can convert plans into reality.

Once the visioning and detailed planning stage is completed, the stage to turn ideas into reality starts to take shape. Similar to any urban transformation project, the implementation of TOD projects typically takes place over 10-20 years, with public and private sector interests being constantly balanced. Developing successful TOD projects requires mobilizing a multitude of resources, forging partnerships, balancing trade-offs, complex negotiations, and constant monitoring to ensure success.

This section builds on the previous research related to TOD implementation, that suggests a sequencing of implementation steps with a caveat that the steps typically do not follow a linear process, but instead is often an iterative process with continuous feedback loops. Two key sources- Regenerating Urban Land (Amirtahmasebi, et al. 2016) and Module 6: Sequencing for Implementation of the TOD Corridor Course (World Bank Group and WRI 2015) - inform the key components of the TOD Implementation Framework:

- Monitoring and Evaluation
- Phasing Strategy
- Capacity Building

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. Key Performance Indicators (KPI) provide a way for cities to measure the performance of their TOD initiatives against larger, global standards and outcomes. Smaller TOD projects need individual monitoring and evaluation frameworks that should be developed based on the specific project objectives. A number of performance indicators for TOD were considered in deriving the Monitoring and Evaluation Knowledge

Product, including the TOD Standard (ITDP 2017), Module 8: Monitoring and Evaluation of the TOD Corridor Course - (World Bank Group and WRI 2015), and the LEED v4 for Neighbourhood Development (USGBC).

Capacity building has become one of the recurring themes in institutional literature and in the agenda of public administrations, international agencies, government and nongovernment organizations. The United Nations Development Programme (UNDP) sees capacity development as the process through which individuals, organizations and societies obtain, strengthen and maintain the capability to set and achieve their own development objectives over time. The UNDP Primer on Capacity Development (UNDP 2009) has informed the Capacity Development Knowledge Product.

Implementing TOD is both a time and resource-intensive undertaking. As such, a phased approach to transit-oriented development is key to success over the long-term. Phasing allows for development to be scheduled based on factors such as overall time frame, resource availability, priority to the city, possible risks and the required stakeholder responsibilities. ‘Quick Wins’ are generally the first activities to take place in a TOD, as they bring about positive changes for a city with little risk or financial/time constraints. This allows the, often controversial, transit-oriented development to enhance public buy-in and reputation. Consequently, activities that are higher risk and financially or resource intensive are scheduled for the long-term, providing a buffer for contingencies, potential resource delays and budgetary constraints.

While some of the components identified above are covered in previous frameworks, products for the ‘Implement’ Framework, presented in this section, are repurposed to be applied in the context of World Bank client cities, with an emphasis on highlighting the challenges faced from a political, regulatory, enforcement, financing, and other factors related to monitoring and evaluation of TOD projects, establishing Key Performance Indicators (KPI's) for TOD projects, project phasing and capacity building.

# KNOWLEDGE PRODUCTS

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## ANALYTICAL

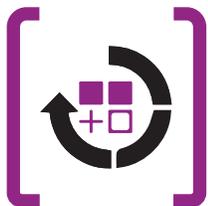
**IM-A01** Monitoring and Evaluation *(Spreadsheet + User Guide)*

**IM-A02** TOD KPI *(Spreadsheet + User Guide)*



## COMMUNICATION

**IM-C01** Applying Safe Access in TOD Areas *(Ref Doc.)*



## 'HOW-TO' GUIDES

**IM-H01** How To Undertake Capacity Building *(Step-by-Step Guide)*

**IM-H02** How To Develop A TOD Phasing Strategy *(Step-by-Step Guide)*



## PROCUREMENT

**IM-P01** Capacity Building Terms Of Reference *(TOR Template)*

## REFERENCES

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- Amirtahmasebi, Rana, Mariana Orloff, Sameh Wahba, and Andrew Altman. 2016. *Regenerating Urban Land - A Practitioner's Guide to Leveraging Private Investment*. Washington, DC: World Bank Group.
- Carlton, I., & Fleissig, W. (April 2014). *Steps to Avoid Stalled Equitable TOD Projects*. Living Cities.
- ITDP (The Institute for Transportation and Development Policy). 2017. "*TOD Standard. 3rd ed.*" New York.
- UNDP (United Nations Development Programme). 2009. *Capacity Development: A UNDP Primer*. New York.
- USGBC (US Green Building Council). 2018. "*LEED v4 for Neighborhood Development*".
- Urban Management Centre (UMC). 2013. "*Training Needs in Sustainable Urban Transport in Madhya Pradesh*". Ahmedabad: Shakti Foundation and Climate Works Foundation.
- World Resource Institute and World Bank Group. 2015. *Corridor Level Transit-Oriented Development Course*. Washington, DC.

# 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*



# 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-Oriented 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.*

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## 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?

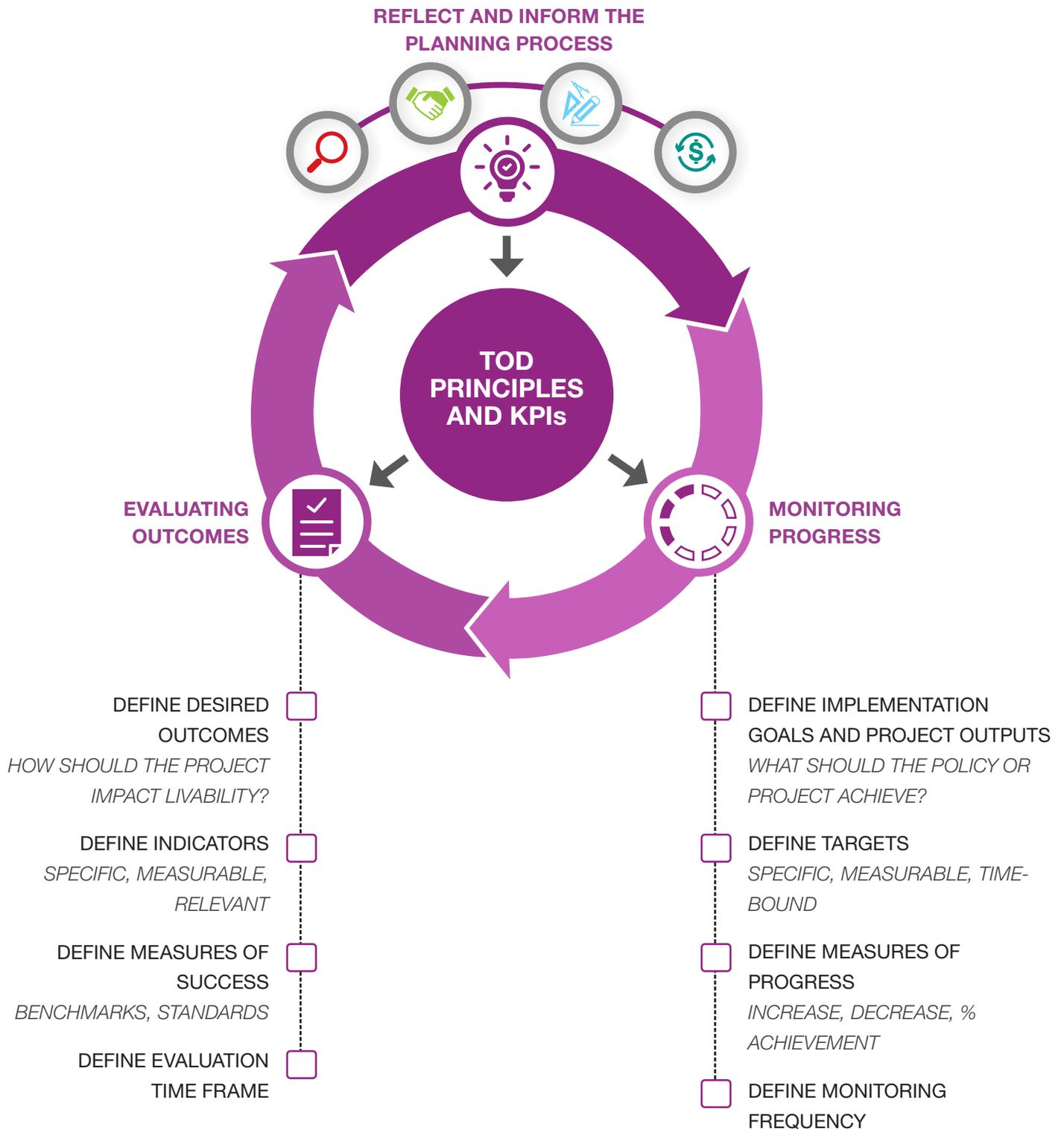
This Tool should be read in combination with an Excel Spreadsheet that contains a series of project output and outcome indicators that will help monitor and evaluate the performance of projects against TOD goals.

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:

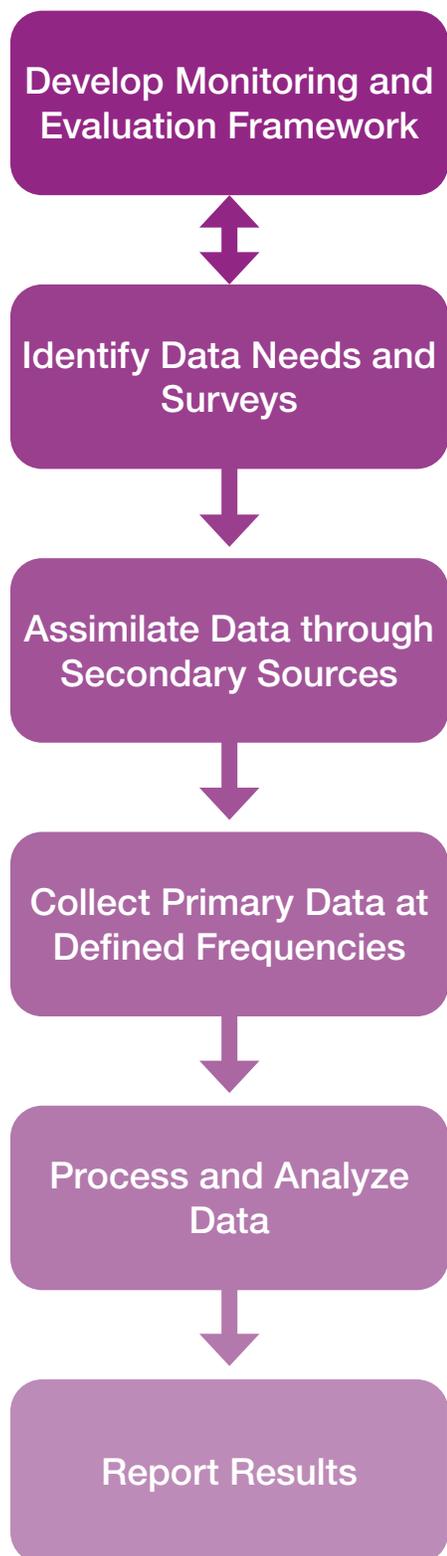
- **TOD Planning Project:** Use the framework to monitor if the agency is performing the required planning tasks.
- **Implementation of a Transit Construction Project:** Use the framework to monitor if the agency is prioritizing key TOD requirements and causing minimum damage to the existing public environment.
- **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



## HOW TO MEASURE PERFORMANCE

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### 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.

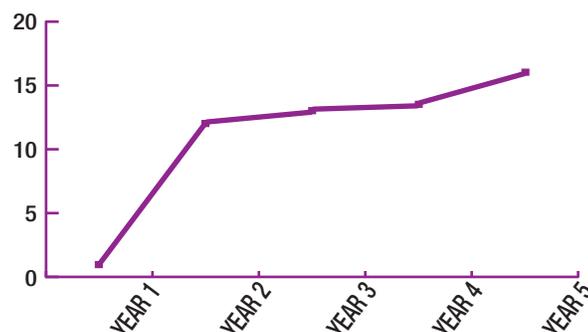
# MONITORING AND EVALUATION FRAMEWORK TEMPLATE

## 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						



Rio de Janeiro, Brazil

# IM-A02

## KEY PERFORMANCE INDICATORS FOR TOD



This Knowledge Product is intended to be used as an interactive Excel spreadsheet. These tools are available online on the GPSC's TOD website and the World Bank's TOD CoP website. The reader should first review the summary presented below before using the spreadsheet tool

*Type: Spreadsheet + User Guide*



# ABOUT THE TOD KEY PERFORMANCE INDICATORS

## PURPOSE

This TOD Key Performance Indicator (KPI) tool provides a way for cities to measure the overall performance of their TOD initiatives against larger, global standards and outcomes. Smaller TOD projects need individual monitoring and evaluation frameworks that should be developed based on the specific project objectives (**Refer IM-A01**). This tool allows a city to measure how the city is performing as a whole, with respect to TOD.

Structurally it follows the same organization as the Monitoring and Evaluation Framework Tool, along with the Corridor-level TOD Course (WRI and World Bank 2015), including **Mobility, Socio-Economic, and Environmental Benefits**.

The ratings for each indicator are simplified from the ITDP generated TOD Standard v3.0 (ITDP 2017).

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## References

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

World Resource Institute and World Bank Group. 2015. *Corridor Level Transit-Oriented Development Course*. Washington, DC.

## THE TOOL INCLUDES:

- ➔ USER GUIDE
- ➔ MOBILITY ASSESSMENT
- ➔ SOCIO-ECONOMIC ASSESSMENT
- ➔ PHYSICAL ENVIRONMENT ASSESSMENT
- ➔ SUMMARY SHEET
- ➔ ASSESSMENT SCORING

Within **EACH ASSESSMENT TAB**, a list of key performance indicators are provided under three main **CRITERIA**:

- A. SUPPORTIVE PLANNING FRAMEWORK:** Under this criteria, the tool evaluates the existence and effectiveness of key planning instruments required to enable change.
- B. PERFORMANCE OF INVESTMENTS:** Under this criteria, the tool evaluates the ability and commitment of public and private investment to create the kind of change desired. This includes providing more mobility options, improving the public realm, improving the value of land and increasing accessibility for poorer populations.
- C. DESIRED OUTCOMES:** Under this criteria, the tool evaluates the impact of TOD initiatives on the larger behavioral aspects and quality of life for all citizens.

# HOW TO USE THE TOOL?

## 01 ENTER INPUTS IN ASSESSMENT TABS

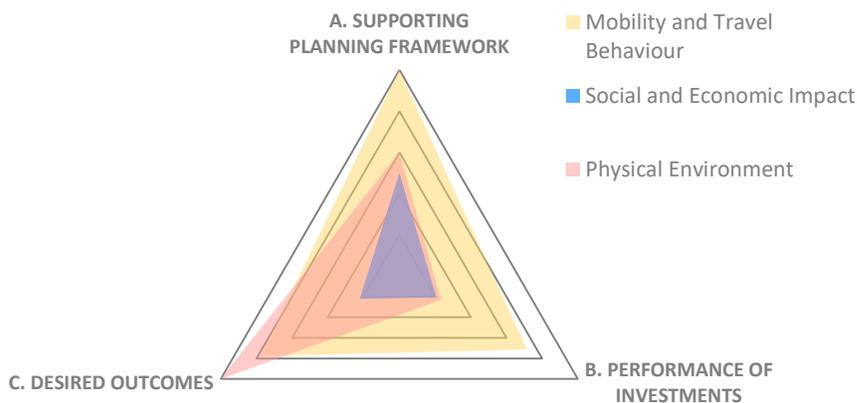
**EACH ASSESSMENT TAB** consists of indicators and measures. The indicators include the parameters that must be considered in the performance evaluation. The measures include a description of how each indicator should be rated.

Read the measure carefully and select the rating that should be applied to each indicator. While most indicators are measured qualitatively, some quantitative measures are also included.

**INPUT SELECTION BOX**  
Rating from 0 - 3

## 02 VIEW RESULTS IN THE SUMMARY TAB

The Assessment Scoring Tab is where the raw calculations of the TOD performance are determined. These automatically populate **THE RESULTS CHART** in the Summary Tab as shown below.





Ciudad Cayala, Guatemala City

# IM-C01

## APPLYING 'SAFE ACCESS' IN TOD AREAS



Activity designed to identify and prioritize strategies  
for safe access in TOD

*Type: Reference Document*



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# INTRODUCTION

## OBJECTIVE

To identify concerns around a given station area, and develop implementable solutions based on safe access principles, using an interactive ‘hands-on’ activity involving all stakeholders.

The *Safe Access Manual – Safe Access to Mass Transit Stations in Indian cities* (WRI India, 2014) aims at addressing challenges within a station area. It outlines five principles which define the ‘Safe Access’ approach:

1. Pedestrian and Cyclist Priority
2. The Public Realm
3. Feeder Services
4. Parking Management
5. Safety and Security

These principles are chosen such that people of all ages, gender and physical abilities are given the highest priority and are able to make the most of the public services provided to them.

[Refer to **EN-C02** ‘TOD Role-out Game’ for detailed description and understanding of the five principles of Safe Access]



5 People-centered principles of safe access  
(Source: © WRI India)



[DOWNLOAD SAFE ACCESS MANUAL HERE](#)

Or Visit the link below to download the manual.

[www.wrioscities.org/research/publication/safe-access-mass-transit-manual](http://www.wrioscities.org/research/publication/safe-access-mass-transit-manual)

**FORMAT:** Design charrette

**TYPICAL TIME:** This session typically takes 1.5-2 hours.

As it involves developing interventions around a station area, it is advisable to include a station area visit beforehand. This generally would take 2.5-3 hours. It is however optional, and can be replaced by presentation about the pre-selected station area.



#### SESSIONS:

The game includes two sessions:

- » Presentation of Safe-Access principles
- » Formulating key strategies and interventions for the station area based on the five principles of Safe Access



#### AUDIENCE(S):

A list of stakeholders (but not limited to) of the station area who can participate are mentioned below:

- » Residents and station area users
- » Representatives of residents' associations, shop associations, market associations, business owners and others
- » Institutional representatives, i.e. schools, colleges, hospitals and others
- » Traffic and transport representatives, i.e. traffic police, wardens, etc.
- » Elected representatives, decision makers and experts in the area
- » Government officials



#### IDEAL ENGAGEMENT SIZE:

30-40 participants. Minimum 12.

*Note: The participants of the activity should be chosen, such that they represent the diversity of the population/users in the station area. This can be achieved by identifying the nature of activities in the station area and identifying representatives from the same.*

## HOW TO PLAY

### 01 CHOOSING THE STATION

↓ Identify a prime mass transit station (i.e. a Bus Rapid Transit station or a metro station) which has a high inflow of users, with a vibrant mix of land use and other activities.

### 02 BASE MAP

↓ This map showing important landmarks serves as a reference for the participants, to better identify issues and strategies for the chosen station area with two circles: one of 150m radius (core area) and the second one of 1km radius (buffer area). An additional circle with 1250m is marked on the map to set a context of the surroundings.

### 03 'SAFE ACCESS' PRESENTATION

↓ A presentation is made to the participants to set out the principles and strategies of safe access.  
The coordinators also explain the role-play activity to the participants.

### 04 STATION AREA VISIT

↓ The moderators and participants visit the station area to gain a first-hand experience of safe access issues and opportunities in the station area, by using the mass transit and feeder systems present and walking in the station area.  
In case there is no station area visit, organizers should select a station area themselves – preferably within the same city, and give a short presentation about the site explaining challenges and opportunities within the station area.

### 05 HANDS-ON ACTIVITY

↓ The groups choose a principle from the five safe access principles. Then the participants are asked to identify issues and opportunities for the given station area, based on their chosen principle.  
The participants then collectively identify short term and long term strategies for the station area based on the chosen principle and then prioritize them.

### 06 PRESENTATION OF STRATEGIES

At the end of the session, the teams present their strategies which is followed by any 'Question and Answer' session. After presentations by all the groups, top 10 strategies are collectively chosen by the participants for the station area.





Pune, India

# IM-H01

## HOW TO UNDERTAKE THE CAPACITY BUILDING PROCESS



Guide to building the institutional arrangement for  
TOD projects or programs

*Type: Step-by-Step Guide*



# ABOUT THE IMPLEMENTATION TOOL

## PURPOSE

Capacity building is emerging as one of the most critical challenges in World Bank client cities. The lack of institutional and technical capacity has resulted in the improper implementation of large-scale projects including TOD interventions. Capacity building refers to the process of education and optimizing the skills of individuals and institutional support of one or more organizations.

This Knowledge Product is informed by the Capacity Building Primer developed by the United Nations Development Programme (UNDP 2009).

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## UNDP's APPROACH TO CAPACITY DEVELOPMENT

UNDP sees capacity development as the process through which individuals, organizations and societies obtain, strengthen and maintain the capability to set and achieve their own development objectives over time. It involves employing, educating and empowering individuals, leaders, organizations and societies in order to help them achieve the desired targets.

In particular, the UNDP's approach stresses that "developing countries should own, design, direct, implement and sustain the process themselves"

## OBJECTIVES OF CAPACITY BUILDING

In keeping with the UNDP's approach to capacity building, the following results can be derived from successful capacity building applications in World Bank client cities:

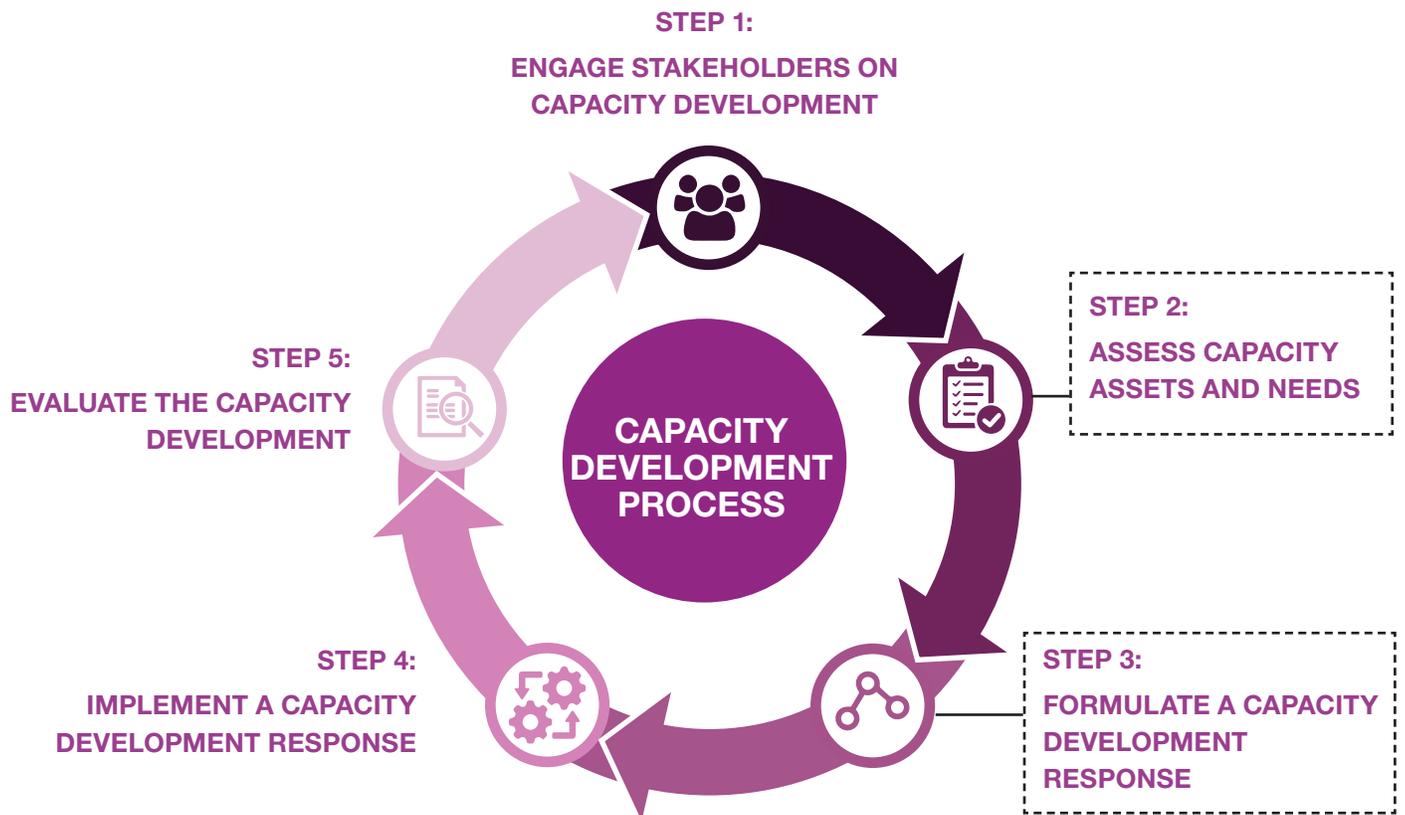
- ➔ Make the most of local resources– people, skills, technologies, institutions– and builds on these
- ➔ Favor sustainable change
- ➔ Take an inclusive approach in addressing issues of power and inequality in relations between rich and poor and mainstream and marginalized (countries, groups and individuals)
- ➔ Emphasize deep, lasting transformations through policy and institutional reforms
- ➔ Value 'best fit' for the context over 'best practice'; as one size does not fit all

## References

- UNDP (United Nations Development Programme).2009. *Capacity Development: A UNDP Primer*. New York.
- Urban Management Centre (UMC). 2013. "Training Needs in Sustainable Urban Transport in Madhya Pradesh". Ahmedabad: Shakti Foundation and Climate Works Foundation.

# UNDP'S CAPACITY DEVELOPMENT FRAMEWORK

Developing capacity is a process of growth and evolution. The capacity development process uses a five-step cycle to organize programming work:



## 01 IDENTIFY AGENCIES THAT WOULD HAVE A ROLE IN TOD

Implementing TOD projects at any scale requires the coordination of multiple public and private sector entities. However, too often, these sectors work in silos and fail to align efforts to achieve common goals. Identifying the agencies that would have a role in a TOD project, and their effective collaboration, is essential to successfully plan for and implement TOD and ensure safety for all users.

## 02A ASSESS THE TECHNICAL CAPACITY OF AGENCIES

Assess the gaps in the capacity of the technical and management staff with regard to:

-  INSTITUTIONAL ARRANGEMENT
-  LEADERSHIP
-  KNOWLEDGE
-  ACCOUNTABILITY

Actions for successful implementation of the TOD principles by concerned agencies should be assessed as fully realized, partially realized, and not realized.

*\*For greater details, refer 2A*

## 02B ASSESS FINANCIAL CAPACITY OF AGENCIES

One of the biggest barriers to TOD planning in cities is the lack of adequate budgets to hire and retain the requisite technical capacity. It is therefore essential to assess the financial capacity of the organization in order to suggest viable capacity building responses. Additionally, funding available with the institution should be assessed as well to determine implementation of capital projects, particularly for road safety improvements.



### DATA SOURCES

- Municipal Budgets/ Organization Budgets
- Existing Resource Plans

*\*For greater details, refer 2B*

## 03 FORMULATE THE CAPACITY BUILDING RESPONSE FOR TECHNICAL CAPACITY

Strategies to augment the current staff capacity with regard to TOD practices and planning processes should be undertaken. The type of shortages should be identified for potential responses.

-  INSTITUTIONAL ARRANGEMENT
-  LEADERSHIP
-  KNOWLEDGE
-  ACCOUNTABILITY

*\*For greater details, refer 3*

## 04 DEFINE CAPACITY BUILDING PRIORITIZATION NEEDS DEPENDING ON CITY NEEDS

Prioritize the capacity building response based on the urgency of the needs.



## 05 CREATE A 5-YEAR RESOURCING PLAN TO ENSURE CONTINUED FINANCIAL SUPPORT FOR CAPACITY BUILDING

It is essential to identify the required budgetary needs and prepare a 5-year plan, to ensure committed and continued support to the resourcing plan.

## 2A ASSESS THE TECHNICAL CAPACITY OF AGENCIES

### HOW TO ASSESS TECHNICAL CAPACITY?



#### INSTITUTIONAL ARRANGEMENTS

- Are there existing institutions, such as line agencies or special purpose vehicles, which are used to convene multiple sectors around a development project?
- Does the agency have an institutional mandate to enable TOD?
- Does the agency have a larger vision of ensuring road safety and reduce crashes?
- Do these entities engage private sector and civil society groups?



#### KNOWLEDGE

- What is the number of technical resources in the organization?
- What are their qualifications?
- How familiar are they with TOD concepts and planning processes?
- Do they have experience in designing complete streets?
- Are they aware of safe systems approach in enabling road safety?



#### ACCOUNTABILITY

- Is there a mechanism to ensure accountability?
- What is the quality of enforcement?



#### LEADERSHIP

- Is the leader aware of and supportive of TOD?
- Is there an existing political will for TOD?
- Is the leader aware of road safety concerns in urban areas?
- Is there a political will for implementing road safety strategies?

## 2B ASSESS THE FINANCIAL CAPACITY OF AGENCIES

### HOW TO ASSESS FINANCIAL CAPACITY?

- Do they have financial capacity to hire the required resources?
- Do they have local/municipal financing means to fund TOD capital investments?
- Do they have budget allocated to conduct road safety studies and implement safe system infrastructure?
- Do they have access to external sources of funding for TOD and road safety?
- How well do current policy and regulatory tools foster and incentivize TOD?
- Are there any incentives for developing non-motorized infrastructures and ensuring road safety?
- What funding sources can be unlocked over the course of the investment?

### 3 FORMULATE A CAPACITY BUILDING RESPONSE

The existing capacity is assessed (in Step 2) to identify the gaps and shortages. These are overcome by forming capacity development responses and can collectively cater to immediate needs, mid-term needs and long-term needs.

#### HOW TO FORMULATE A RESPONSE?



##### INSTITUTIONAL ARRANGEMENTS

TYPES OF SHORTAGE	POTENTIAL TYPE OF RESPONSES
Lack of Single Nodal Agency	<ul style="list-style-type: none"> <li>Formulate an agency with dedicated roles and responsibilities for implementing a TOD Project</li> </ul>
Lack of mandate for road safety in TOD areas	<ul style="list-style-type: none"> <li>Create a larger city vision and mandate for road safety in TOD areas. <i>Having a larger vision will ensure that it is included in future plans, policies and guidelines across various agencies and ensure necessary steps are taken towards it.</i></li> </ul>
Lack of Coordination	<ul style="list-style-type: none"> <li>Set up a TOD Organization / Task Force</li> </ul> <p><i>*For greater detail, Refer to <b>EN-H01</b> How to build a TOD Institution</i></p>



##### LEADERSHIP

TYPES OF SHORTAGE	POTENTIAL TYPE OF RESPONSES
No knowledge of TOD or safe systems approach to ensure road safety	<ul style="list-style-type: none"> <li>Meeting/Workshops with international experts/leading think tanks, such as WBCoP, ITDP and WRI</li> <li>Leadership training including site visits</li> </ul>
No political support	<ul style="list-style-type: none"> <li>Gather political support to include road safety as a priority by generating public support around road safety in high density and TOD areas.</li> </ul>



##### KNOWLEDGE

TYPES OF SHORTAGE	POTENTIAL TYPE OF RESPONSES
Insufficient skilled resources	<ul style="list-style-type: none"> <li>Internally hire resources with TOD skill sets, experience in land use planning and street design, and knowledge of safe systems approach.</li> <li>Hire a consultancy for a TOD-specific project who have prior experience in road safety and street design.</li> <li>Set up a TOD Knowledge Centre *</li> </ul>
Insufficient TOD and road safety understanding	<ul style="list-style-type: none"> <li>Conduct Monthly Training Workshops for the staff in collaboration with NGOs, institutions, or Think Tanks</li> <li>Set up a TOD Knowledge Centre *</li> </ul>



##### ACCOUNTABILITY

TYPES OF SHORTAGE	POTENTIAL TYPE OF RESPONSES
No systematic mechanism to identify liable/ responsible personnel	<ul style="list-style-type: none"> <li>Set up horizontal and vertical mechanisms to evaluate progress on TOD</li> </ul> <p><i>*For greater detail, Refer to <b>IM-A01</b> Monitoring and Evaluation Framework</i></p>
Lack of Enforcement	<ul style="list-style-type: none"> <li>Conduct sensitization program with enforcement agencies</li> </ul>

\* TOD Knowledge Center: An in-house expert pool of practitioners, researchers and consultants including road safety experts, along with existing technical staff, to collectively build the capacity of the agency for a TOD project.

# IM-H02

## HOW TO DEVELOP A TOD PHASING STRATEGY



Methodology to help develop phasing strategies  
for a TOD project or program

*Type: Step-by-Step Guide*



# ABOUT THE IMPLEMENTATION TOOL

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Implementing TOD is both a time and resource-intensive undertaking. As such, a phased approach to transit-oriented development is key to success over the long-term. Phasing allows for development to be scheduled based on factors such as overall time frame, resource availability, priority to the city, possible risks and the required stakeholder responsibilities. 'Quick Wins' are generally the first activities to take place in a TOD, as they bring about positive changes for a city with little risk or financial/time constraints. This allows the transit-oriented development to enhance public buy-in and reputation. Consequently, activities that are higher risk and financially or resource intensive are scheduled for the long-term, providing a buffer for contingencies, potential resource delays and budgetary constraints.

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## PURPOSE

This tool aims to assist with the creation of a phasing strategy for TOD that accurately represents city priorities, the resource considerations at play and the possible risks during each stage of activity. Establishing 'quick wins' in the short-term and achieving overall goals and visions in the long-term will become possible through the scheduling resources available with this tool. An overall phasing strategy, guided by the underlying resource, budgetary and time constraints, should be determined through the step-by-step process provided. An effective phasing strategy for the implementation of TOD must include risk management strategies that can avoid common pitfalls. (Carlton and Fleissig 2014).

## References

Carlton, I., and Fleissig, W. (April 2014). *Steps to Avoid Stalled Equitable TOD Projects*. Living Cities.

# TIME FRAME AND RESOURCE IMPLICATIONS

## TIME FRAME

The total time required to complete each activity must be estimated as shown below:

TIME REQUIREMENT FOR EACH ACTIVITY			
Stage No.	Time estimation	Required time buffer	Total time required
	(Define the number of hours/days required to complete each stage)	(Estimate buffer time to be prepared for any contingencies)	(Sum of the previous two columns)
S1			
S2			
S3			

## RESOURCE IMPLICATIONS

The human resource and financial requirements for every stage of the activity must be taken into account while scheduling the activity.

RESOURCE REQUIREMENTS AND RISK MANAGEMENT FOR EACH ACTIVITY			
Stage No.	Resources	Budget Responsible	Risk Management**
	(Define the financial resources and/or number of hours/days required per annum to sustain this stage)	(Specify which organization will provide the required human and/or financial resources)	(Describe the risks for each stage and list out measures that are set in place, in order to proactively manage them)
S1			
S2			
S3			

**\*\* Risk Management:** Some common risks associated with TOD implementation (Carlton and Fleissig 2014) include:

1. Components of affordable housing and placemaking investments increase the cost and resource ambiguities associated with implementation.
2. Redevelopment or land amalgamation projects tend to overstep timelines because of complexities related to a large number of stakeholders.
3. Higher level planning decisions are not always responsive to market trends and demands, which may increase the time taken for projects to be adopted for development. This may also cause miscalculations of finance needs.
4. Market conditions may change during the process of TOD implementation. News of TOD planning can cause market speculation that can change market conditions also.
5. Feasibility studies may miscalculate the viability of TOD projects. This may not bring in the returns envisioned in the initial assessment and lead to derailment of the financing order.
6. Other parallel activities such as infrastructure investments can influence the implementation of dependent TOD activities.
7. It is important to know where gap funding may be needed, so as to keep the project on track.

## 01 DEFINE THE ACTIVITIES TO BE CONDUCTED

Many smaller activities need to be identified and listed, specifically related to addressing the desired outcomes of the TOD Plan. For example, improving pedestrian mobility requires activities such as widening of sidewalks, improving crossings, building pedestrian facilities, etc. As such, each activity should be listed against the TOD desired outcome.

**'Quick Win' Activities** should be identified at this stage. These are projects that have minimal risks associated with them and are capable of assured success. These projects help to set the stage for the rest of the project, enabling greater public acceptance.

## 02 DEFINE THE STAGES FOR EACH ACTIVITY

Define the stages that each activity has to go through from inception to completion, such as pre-planning, planning and design, implementation and monitoring. For each stage, resource requirements vary and these need to be considered in Step 4.

## 03 DEFINE THE TIME FRAME AND RESOURCE NEEDS FOR EACH STAGE

For each stage within each activity, define the amount of time required and the resource and budgetary needs. Ensure that a buffer is considered for contingencies, to avoid delay or cash flow issues during subsequent stages of the activity.

## 04 DEFINE SCHEDULING AND PHASING OF ACTIVITIES

Scheduling and phasing of activities should be defined based on the following:

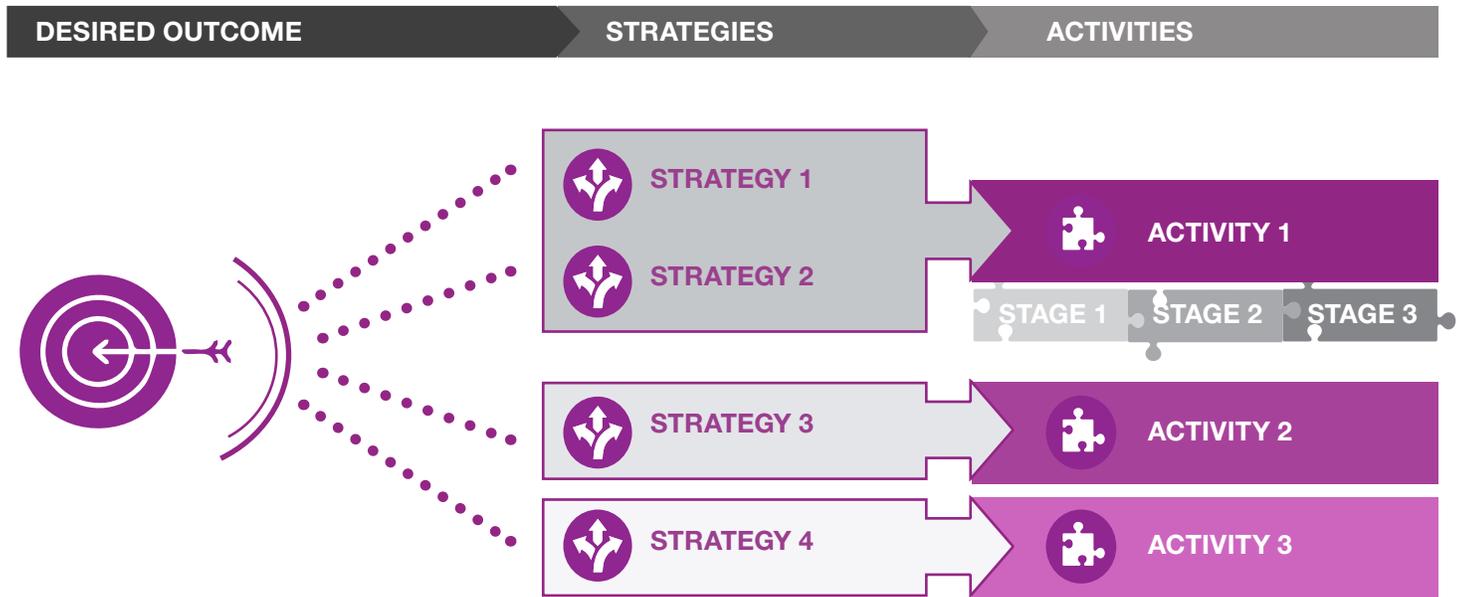
- **Prioritization** depending on immediate needs, ease of implementation or definition of 'Quick Win' projects.
- **Resource considerations** such as availability of equipment or staff. The Critical Path Method or similar should be used to appropriately plan resource distribution
- **Possibility of risks** during each stage of the activities. Risks should be minimized through scheduling in the appropriate season or similar.

## 05 IDENTIFY STAKEHOLDERS WHO WILL MANAGE EACH ACTIVITY

Define roles and responsibilities clearly for each activity, including planning, implementation and post-implementation responsibilities. Identify regular accountability mechanisms to ensure the timely delivery of the project.

# SUMMARY OF ACTIVITIES AND PHASING

## SUMMARY OF ACTIVITIES



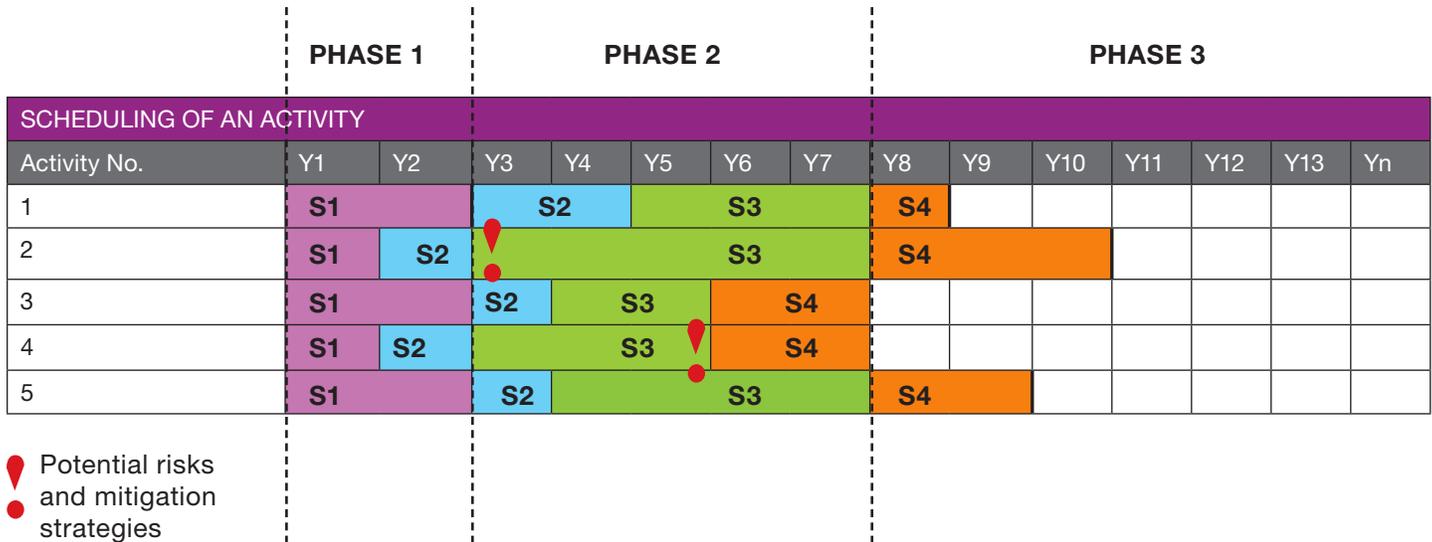
Create a detailed list of activities required to complete the project and specify the following for each of them:

SUMMARY OF ACTIVITIES						
Outcomes	Strategies	Activity	Time frame for each activity	Budget Requirement	Resource Requirement	Agency/ Organization Responsible
(Input the overall outcome required)	(Define the broad strategies required to achieve the desired outcome)	(Describe the activity type. For eg. Project Program Policies)	(Total time duration to complete each activity including all stages)	(Financial requirement to sustain each activity)	(Resource requirement for each activity)	(Organization responsible for planning and implementation of this activity)

# SCHEDULING AND PHASING OF ACTIVITIES

## SCHEDULING AND PHASING

Taking into consideration the time frame for each activity, financial and human resource availability and the risks involved in each activity, the project must be scheduled and phased as shown below. It must take into account activities that have the possibility to be implemented in parallel and the activities that require the completion of a previous task before augmentation.



# IM-P01

## CAPACITY DEVELOPMENT STRATEGY TERMS OF REFERENCE



Template to outsource capacity building and training exercises for spreading awareness about TOD

*Type: TOR Template*



## BACKGROUND

The Terms of Reference for Capacity Development for TOD should provide the following background material:

- A. Existing Institutional Structure:** The Background section should provide a snapshot of the existing institutional set-up for which the capacity development strategy is being formulated.
- B. City Profile:** The Background section should also provide information on the city for which the institutional structure exists. This includes details such as city population, economy, municipal jurisdictions, transit system and other municipal services.
- C. Bibliography of Reference Laws and Acts**
- D. List of Project Stakeholders**

## OBJECTIVE OF THE ASSIGNMENT

The objective of this assignment is to conduct a technical capacity gap and needs assessment of relevant organizations involved in transportation and land use planning and related subjects in the City. This assignment will lead to the preparation of a technical capacity development strategy and action plan for building technical capacities in the respective organizations with respect to TOD planning, road safety, and supplementary activities.

## SCOPE OF ACTIVITIES

The scope of activities for the Capacity Development Strategy Study primarily consists of the tasks described below. The proposer is encouraged to provide suggested refinements to the work plan and schedule based upon experience with similar economic and market studies, and in compliance with national and state policies, where applicable.

- 1. Project Initiation:** The selected Consultant will first and foremost review relevant background material provided by the client on the existing institutional framework in the city, before scheduling a kick-off meeting. At the meeting, the Consultant will present their understanding of the consultancy, as well as the proposed methodology and guiding framework. The preliminary identification of key stakeholders should be conducted at this meeting. Based on the discussion, the Consultant will produce an Inception Report, comprising of the proposed approach including specific method(s) and guiding principles; the final proposed work plan; and identification of issues crucial to the viability of the consultancy. The Inception Report must propose guiding values for technical capacity, for eg. Number of urban planners per 1000 population, against which technical capacity shall be assessed in Task 2.
  - **Deliverables:** Inception Report including proposed approach, methods and guiding principles, work plan and identified issues and limitations.
- 2. Technical Capacity Assessment:** The Consultant will review relevant past assessments undertaken in the City, if any, to gain insight on technical capacity trends in the city or organization. The Consultant will then, as per the proposed methodology, conduct surveys, meetings or workshops to summarize the current strengths and capacity gaps of organizations under consideration, with respect to institutional arrangement, leadership, knowledge and accountability. The assessment parameters will include number of staff, operational procedures related to their mandates, technical expertise against the departments' respective mandates, and measures of accountability. In particular, the Consultant must assess the familiarity and understanding of TOD, urban street design and concepts of road safety including safe system approach among the leaders and technical staff in the organization. The Consultant must also assess the channels of communication to determine multi-stakeholder coordination challenges, if any. The Consultant will develop a baseline assessment, against which the success of the capacity building strategy will be measured at the end of the project.
  - **Deliverables:** Technical Capacity Assessment Report including identification of capacity gaps and baseline assessment.

- 3. Technical Capacity Development Strategy and Action Plan:** Based on any technical capacity gaps identified in the final Technical Capacity Assessment Report, the Consultant will prepare specific and practical strategies and associated activities to address such gaps within the expected time-frame (i.e. in-country training delivered by a think-tank, formulating a TOD hand-holding unit led by a TOD expert, workshops to disseminate knowledge about safe systems approach and safe access to mass transit led by relevant road safety experts and urban designers, sending staff members to an international conference, hiring a private consulting firm to undertake project-specific planning, transfer of employees to a technical agency to obtain relevant skills on-the-job, a short course at a regional university, etc). The Consultant will be expected to study the feasibility of the strategies proposed with respect to cost and availability, before adding them to the Action Plan. The Consultant will prepare a Capacity Development Strategy and Action Plan Report including the conclusions of the capacity needs assessment and the proposed capacity development approach for each concerned government organization and department. Building on the baseline assessment, a monitoring framework should be identified with proposed indicators, timelines and targets.
- **Deliverables:** Capacity Development Strategy and Action Plan including proposed capacity development responses to existing gaps, and time-frame for implementation.

## DELIVERABLES

TASK	DELIVERABLE	TIMELINE
1	Inception Report	M + 2 weeks
2	Technical Capacity Assessment Report	M + 2 months
3	Capacity Development Strategy and Action Plan	M + 3 months

## QUALIFICATION OF CONSULTANTS

The Consultant Team must have experience in at least:

- A. One similar Capacity Development Study
- OR
- B. At least two studies or project reports which included at least two of the following components: Technical Capacity Assessment, Planning Framework formulation, TOD Planning, complete street design (including road safety aspects).

The Consultant Team must include the following key expertise:

	KEY EXPERTS	YEARS OF EXPERIENCE
1	Project Manager and Senior Capacity Building Expert	15 years
2	Human Resource Specialist	10 years
3	TOD Specialist	10 years
4	Road Safety Expert/ Complete Street Designer	8-10 years

**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.*



San Pedro Sula, Honduras