TOD K P

ENABLE

INTRODUCTION

Highlights policy, barriers and mechanisms that can enable the TOD planning process.

TOD

Global Platform for Sustainable Cities

WORLD BANK GROUP

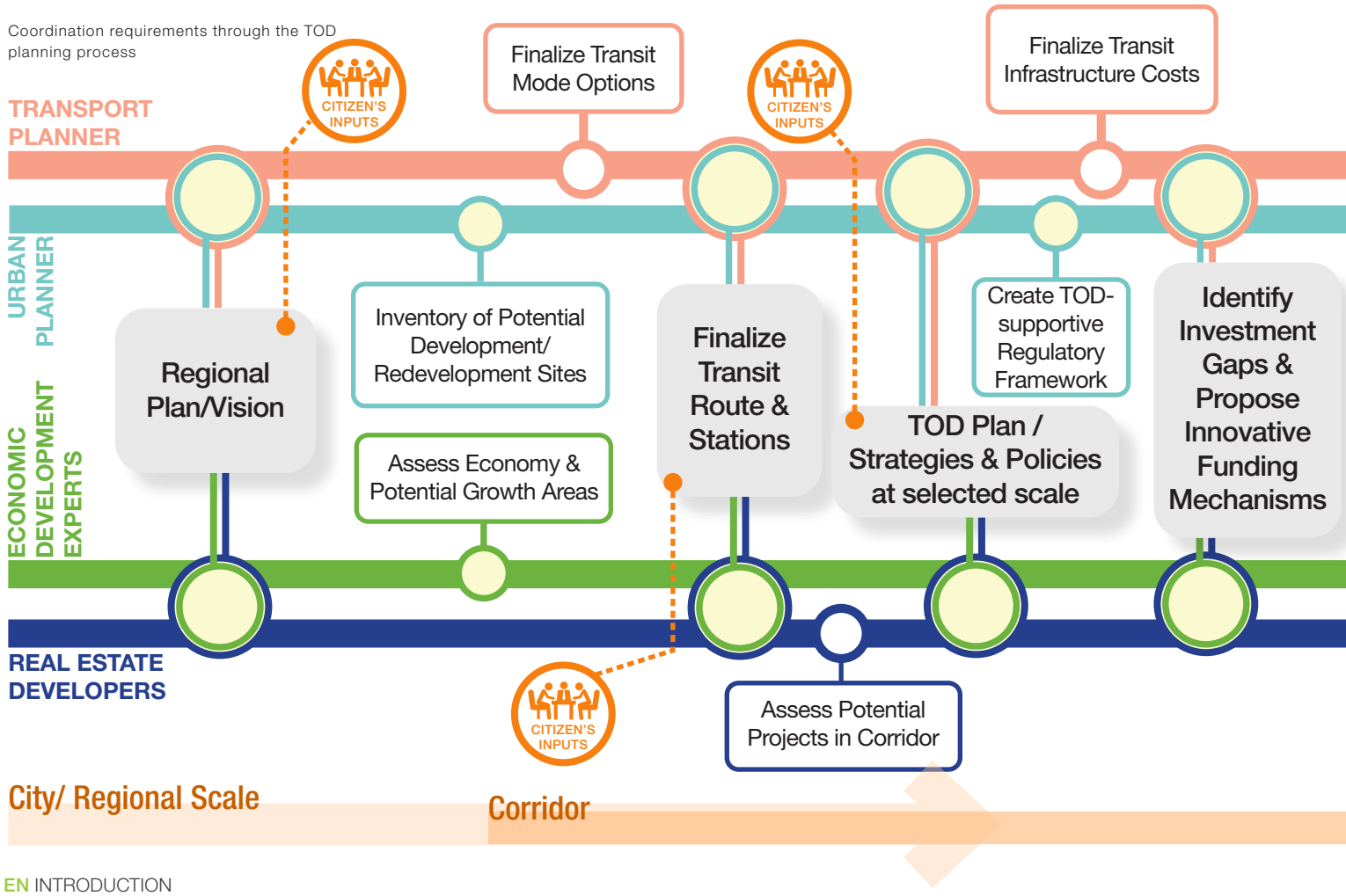
IBI

ABOUT ENABLE

The 'Enable' step of the TOD Framework is developed to focus on setting up an enabling environment that allows successful implementation of TOD projects. The two most commonly held TOD hurdles in World Bank client cities are (1) the lack of an empowered institution that is able to work across various scales, levels of government, and planning sectors towards a TOD solution; and (2) the lack of a TOD-supportive policy framework, including pedestrian-friendly laws, efficient and inclusive regulations and market-friendly financial tools. Some of the key barriers for successful TOD in World Bank client cities are identified in the Transforming Cities with Transit –World Bank publication (Suzuki, Cervero and Iuchi 2013). Primarily these include factors related to Governance, Regulatory support and Coordination across sectors and jurisdictions.

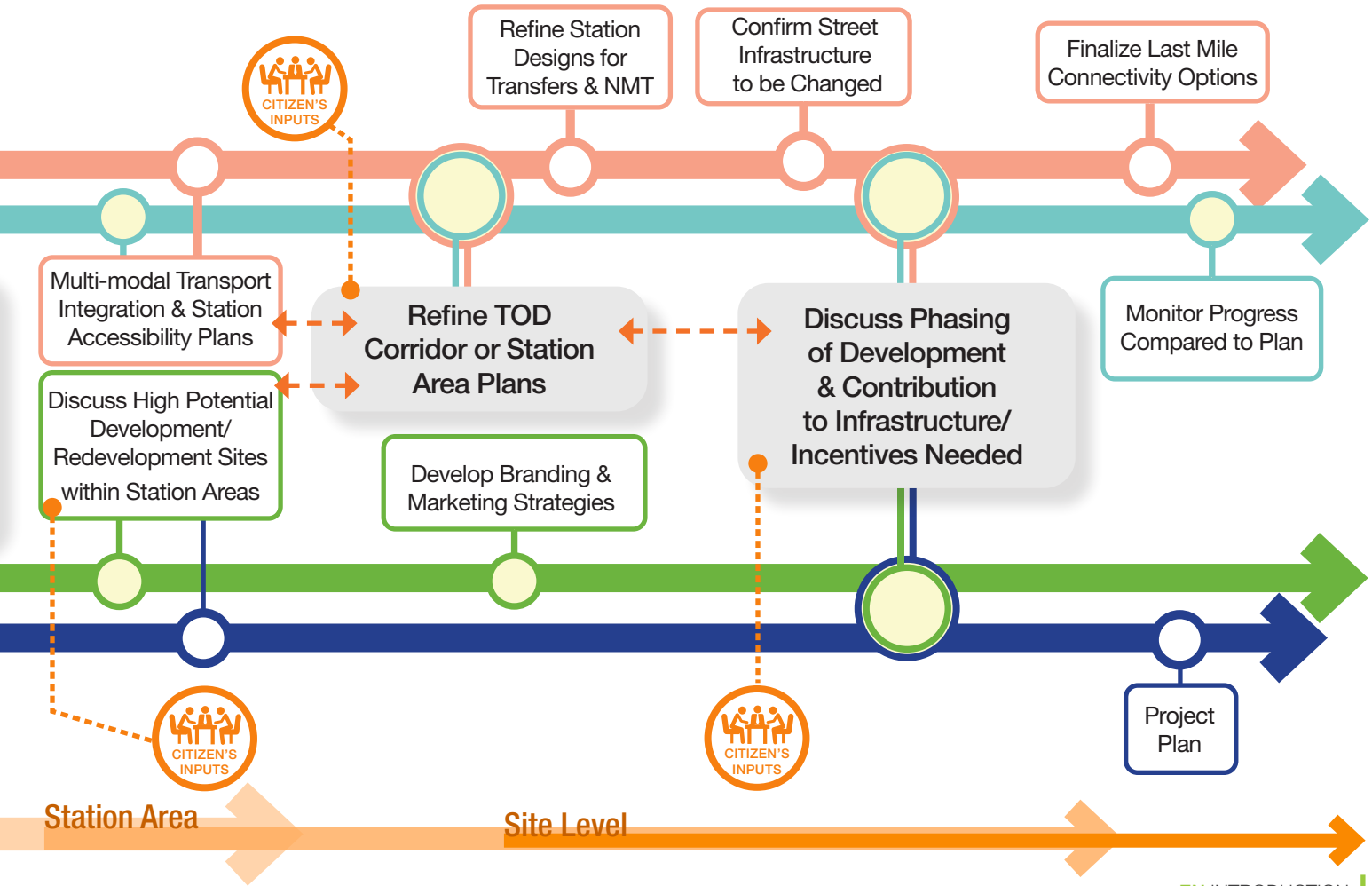
Most of these challenges deal with coordinated and institutionalized planning behavior. The Enable step largely focuses on addressing these challenges. The ultimate goal of this step is to build local capacity (human resources and processes) to plan, finance, and implement sustainable and inclusive TOD. This capacity can be institutional (public officials, civil servants, etc.), within the private sector, or at the civil society level. The knowledge resources within this step, will provide techniques and tools to decision makers at various levels to better engage. These tools can to be used throughout the course of the project but must be ideally considered for use during project initiation itself.

The sustainability of a TOD strategy, as for any other long-term planning strategy, is contingent upon the institutionalization of



the process and objectives. The WB/WRI TOD Corridor Course (World Bank; WRI (World Resource Institute) 2015) suggests key building blocks to set up and institutionalize an enabling environment for TOD. These building blocks are introduced here along with key barriers faced by World Bank client countries:

1. **Leadership and Vision:** Since TOD is a long-term, transformative process, one of the most essential enabling factors is a strong leadership and vision. Leadership involves developing a strong-long term vision, creating empowered, inclusive, and transparent institutions and planning processes, setting priorities in allocating resources, and promoting the vision to the public. However, many cities in World Bank client countries depending on their governance framework, suffer from challenges related to temporal continuity of leadership and lack of a consistent vision across scales because of jurisdictional priorities. Singapore, with its advantage of being a city-nation, offers one of the most successful examples of leadership and vision-setting. Their transformation into a transit-friendly city over the last decade is evidence of such successful leadership. Other similar transformations in cities such as Bogota and Curitiba were experienced during the period when TOD-supportive mayors were in office, but have suffered periodically from a change in city leadership. In Indian cities on the other hand, where power is largely concentrated at the federal and state levels, TOD is difficult to implement by city governments.



2. **Robust Institutional Structure:** In addition to a strong leadership, successful TOD needs a robust institutional structure that has representation from all the essential sectors, and has the required powers to influence a transformation. A robust institutional structure ensures that an enabling environment for TOD is maintained even through leadership changes. The institutional structure should be contextually relevant to the socio-political and legal setting. Some of the most widely used TOD implementation institutions include collaborations between Development and Transport Authorities, or TOD Steering Committees formed with public sector and civil society organizations, or Public-Private Partnerships (PPP). Who should be involved within the institutional structure depends on the level of influence of the public, private and civil society organizations in terms of political structure, land ownership structure, financial capabilities and legal mandates that can influence large-scale land amalgamation and redevelopment projects. Defining the appropriate institutional structure that complements a strong leadership and allows for high levels of coordination and investing it with the appropriate degree of powers, is the biggest challenge witnessed in many cities in World Bank client countries.
3. **Effective Coordination between Governmental and Participating Agencies:** The Transforming Cities with Transit publication (Suzuki, Cervero and Iuchi 2013) notes lack of coordination as one of the foremost challenges to TOD implementation. Vertical coordination between different levels of government is a key challenge in large countries such as India, Brazil, and China, where regulatory and financial power is largely concentrated at the top of the jurisdictional hierarchy. At the same time challenges in horizontal coordination between the different sectors of planning and city building is common across all cities. Development and transportation decisions are taken in isolation, often in retrospect as a measure to address specific challenges such as lack of affordable housing or severe traffic congestion. Such decisions are rarely informed by plans created for other sectors and rarely made in compliance with a long-term vision. The tool EN-H01 provides guidance on influencing leaders, identifying the appropriate institutional structure, bringing agencies from all sectors together, developing coordination mechanisms and aligning the vision across different scales and planning sectors. EN-R01 provides the typical roles and the responsibilities of different stakeholders in the TOD planning process.
4. **Inclusive and Effective Community Engagement:** Finally the most important enabling factor is an inclusive and effective community engagement process. Community engagement should not only aim to inform, but also educate the community about the benefits of a TOD-based vision. It should be able to build human capacity needs to promote the goals of TOD. The example of the failure of the TOD Plan in Mumbai in 2016 after a massive backlash from residents who felt slighted and excluded from the planning process, demonstrates the importance of an effective engagement exercise in building successful TOD. The tools EN-C01 and EN-C02 provide tools that will aid the community engagement process.

KNOWLEDGE PRODUCTS

COMMUNICATION

EN-C01 **Making a Case for TOD to the Public-Communication Strategy** *(Ref Doc.)*

EN-C02 **The TOD Role-Out - A Stakeholder Engagement Game** *(Ref Doc.)*

'HOW-TO' GUIDES

EN-H01 **"How-to" Build Institutions and Enable Intergovernmental Coordination** *(Step-by-Step Guide)*

RESOURCES

EN-R01 **Roles & Responsibilities Of Stakeholders** *(Ref Doc.)*

PROCUREMENT

EN-P01 **Communications Strategy Terms Of Reference** *(TOR Template)*

REFERENCES

Carlton, Ian, and William Fleissig. April 2014. Steps to Avoid Stalled Equitable TOD Projects. Living Cities.

MOUD (Ministry of Urban Development, India). 2016. Transit Oriented Development Guidance Document. Consultant Report, IBI Group, New Delhi: Global Environment Facility, UNDP and World Bank.

Suzuki, Hiroaki; Cervero, Robert; and Iuchi, Kanako. 2013. Transforming Cities with Transit: Transit and Land Use Integration for Sustainable Urban Development. Washington DC:World Bank.

World Bank; WRI (World Resource Institute). 2015. Transit-Oriented Development at a Corridor Scale Course. Washington, DC.

TOD KP

EN-C01

MAKING A CASE FOR TOD TO THE PUBLIC– COMMUNICATION STRATEGY

A creative guide to disseminate information to public and regional bodies and express the importance and benefits of TOD

Type: Reference Document

WORLD BANK GROUP TOD Global Platform for Sustainable Cities gef UKaid from the British people GRSF Global Road Safety Facility IBI WRI INDIA

ABOUT THE ENABLE TOOL

One key enabling issue around TOD is the difficulty of cross-sectoral integration; without it, transport, housing and land-use policies are developed in isolation and when aggregated in an attempt at TOD, the nuances of the trade-offs between sectors are lost. As TOD happens at different scales under many jurisdictions, it is essential that practitioners understand the motives of each stakeholder, possible trade-offs, and how interests can be better aligned for successful implementation.

In addition, much of TOD planning and implementation relies on public and private institutions with little public participation, beyond the election of public officials in developing countries. In practice, building ownership and developing buy-in from the general public, with a strong sense of commitment from the political leadership, makes the difference between the success and failure of TOD initiatives. Before embarking upon the public participation process, it is important to identify project champions who can influence public opinion. Ineffective and untimely engagement of influencers can lead to the breakdown of the TOD planning process, as was seen in Mumbai during the public review and consultation of the TOD-based Development Plan.

Participatory planning mechanisms offer opportunities to citizens (such as voting, public hearings, etc.) to have a role in the governing and decision-making processes in their neighborhood, their city and beyond. The improvement of the quality of life of current and future residents is a core value of Inclusive TOD. However, there is a need for public participation and stakeholder engagement to increase the inclusiveness of TOD and ensure that the beneficiaries' concerns are addressed and they are convinced of the personal and city-wide benefits TOD brings. (WB/WRI 2015)

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.*

FINDING PROJECT CHAMPIONS

Project champions can be found not just in local politics, but also in the local community. Finding champions helps to ensure that your TOD project is perceived as a civic project that is aligned with community interests, rather than being imposed from the top-down. It also encourages a project's longevity, particularly in light of the inevitable changes in political leadership or project management over the life of a project. Project champions can be local civic workers, landowners, leaders of community groups, academic institutions, media representatives or other well-known public figures in a particular community. Project champions should be someone that:

- Is known for bringing people together, rather than dividing a community
- Has strong relationships within the community that, ideally, span socio-economic classes, professions, and political beliefs
- Is able to speak articulately about the issues that have inspired the project and that may arise during the TOD process

To be successful advocates, project champions must be personally convinced of the benefits of TOD initiatives before they can speak on behalf of the project. Project champions should be involved throughout the entirety of the planning process to ensure complete ownership and commitment to the TOD outcomes.

Project champions play an important role in the TOD process by bringing community members together in support of TOD through participation in community events, social networking and partnership creation. As highly involved and connected members of the community, they can address public grievances early on and rally support and community buy-in. For example, if a project champion observes that community members are very concerned about project-induced traffic, they can relay this information to your TOD team and simultaneously provide concerned citizens with one-on-one attention and dialogue, before the issue impedes with the project. Empower your project champion with the project understanding, facts and figures that support the plan, and provide them with the support required to successfully communicate with the public. Strong project champions can drive the success of a TOD project and ensure the inevitable concerns of the public are managed throughout. Making strategic use of these valuable stakeholders is, therefore, essential to a successful project.

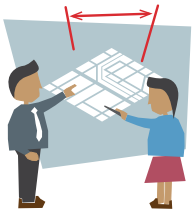
METHODOLOGIES

“Good TOD plans are 50% professional best practices and 50% local knowledge.

You can only access local knowledge through concerted public outreach.”

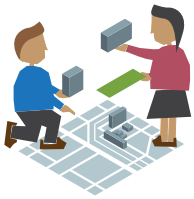
1. IDENTIFY THE STAKEHOLDERS

From internal to external, from directly related to merely interested, it’s key to know who’s who.



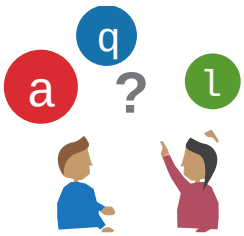
2. HAVE A PLAN TO ENGAGE THEM

Public engagement needs to be orchestrated carefully while allowing for flexibility. All stakeholders need not be engaged together. They can be divided into target groups to bring about better collaboration



3. USE THE BEST COMMUNICATIONS TOOLS

Use the right tools at the right moment for the right target group.

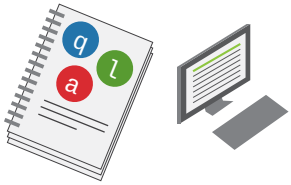


4. ASK THE RIGHT QUESTIONS

Different project stages – issues, ideas, concepts, solutions – need different feedback.

5. NOT EVERYBODY WANTS TO ENGAGE THE SAME WAY

Interest, time availability and issue relevancy varies from person to person.



6. MOST PEOPLE ONLY WANT TO BE INFORMED

A broad information campaign should reach people through different channels.

7. A FEW PEOPLE WANT TO ENGAGE DIRECTLY

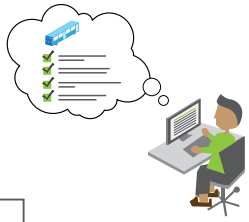
Curated direct participation events are necessary too, even in a digital world.

8. COMBINE PLANNING AND OUTREACH

Specially designed formats such as charrettes shorten timelines and increase buy-in.

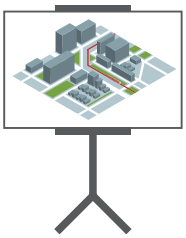
9. INCLUDE FUN EXERCISES

Custom-tailored activities and games make it fun and meaningful for stakeholders to interact.



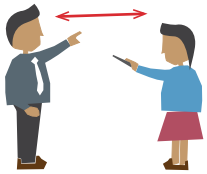
10. SOME PEOPLE DO NOT HAVE TIME TO ENGAGE

An online/social media engagement strategy can capture their (otherwise lost) input.



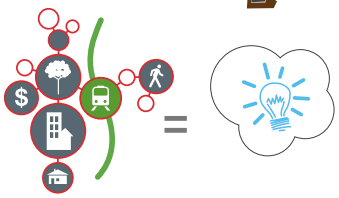
11. MAKE IT VISUAL

In a time-starved and attention-limited world, visually appealing, intuitive content is a must.



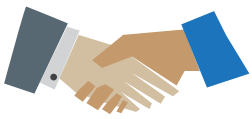
12. ENSURE TWO-WAY COMMUNICATION

Stakeholder outreach is as much about listening as it is about talking.



13. MAKE SENSE OF THE FEEDBACK

Stakeholder engagement is useless unless you connect the dots in a systematic way.



14. DON'T OVERDO IT – BE STRATEGIC

Outreach needs to be effective, cost-efficient and relevant for all participants.

TOOLS-CHARRETTE

A charrette is a creative burst of energy that builds momentum for a project and sets it on a course to meet project goals. It can transform a project from a static, complex problem into a successful, buildable plan. Usually, it is an intensely focused, multiple day session that uses a collaborative approach to create realistic and achievable designs that work."

(Source: Lindsay, G., J. A. Todd, S. J. Hayter, and P. G. Ellis. "Handbook for Planning and Conducting Charrettes for High-Performance Projects: Second Edition." National Renewable Energy Laboratory, 2009. doi:10.2172/965523.)

Planning / Design Charrette: A multiple-day, collaborative workshop lead by the core planning team that brings together residents, developers, and policymakers to create a feasible and "85% ready" TOD Community Concept Plan based on four feedback loops: VISIONING, IDEAS, CONCEPTS, AND SOLUTIONS.

TOD Board Game

"What we Heard" Playback & Voting

(Source: © IBI Group)

FIRST DAY

- Team introductions; "Gains & Pains" word exercise (a more up-to-date and participatory take on "SWOT" analysis);

SECOND DAY

- Fundamentals of TOD (both design and economic); playing of the "TOD Board Game", a hands-on exercise in which community residents layout a series of land use icons – streetscape improvements, lanes, transit service, etc. (the "T" of TOD); parks and plaza, public art, etc., and other "Open Space" attributes (the "O" in TOD; and townhouses, apartment buildings, retail shops, and schools (the "D" of TOD), into a series of competing alternative plans.

THIRD DAY

- A playback of "What We Heard" at the TOD board game, complete with real-time electronic voting for preferred options of the TOD component plans.

FOURTH DAY

- The unveiling of the TOD Community Concept Plan, the result of a marathon production run of 36 hours, normally culminating in a 100-slide presentation, shored up by twenty-to-thirty full size presentation boards and, always a community favorite, a time-lapse photo visualization of a select street/area within the TOD plan that illustrates the evolution of the "now" to the "next".

(Source: © IBI Group)

TOOLS-
INTERACTIVE ACTIVITIES

How do you liven up discussions around TOD, get participants thinking outside the box & get people to take a holistic & inclusive approach to community planning around stations?

Why not try a game?

TOD projects frequently involve the cooperation of multiple stakeholders with varying objectives and preferences for an optimized solution. Finding a mutually agreeable solution is of paramount importance in order to assure the successful completion of these projects; particularly when different stakeholders are splitting the costs because none can afford to finance the transit/land use development projects on their own.

Games are emerging as a useful platform for fostering meaningful dialogue on today's most pressing urban development issues. Through simulations, role-playing and even the use of LEGO blocks, interactive urban development and planning games can provide a fun and engaging way of bringing disparate groups of stakeholders to the table. These games remove the threatening atmosphere often felt in more formal meetings, and allow participants to casually communicate with one another while collectively evaluating different paths of development.

Games can help simplify complex and seemingly insurmountable problems by detangling components and breaking them down into smaller, more comprehensible pieces. Furthermore, games that require role-playing can force participants out of their comfort zone helping them to begin to understand and view problems from a different perspective, such as through the eyes and experiences of a bicyclist, thus bringing light to issues they may normally overlook.

Interactive Board Games, Station Area Planning, City of Calgary, Canada

(Source: © IBI Group)

Some of the examples of Interactive games that force public and private sector stakeholders (including public) in planning and implementing TOD, role-playing, priority setting and balancing trade-offs, develop solutions and align interests in a non-threatening environment are outlined below. These games are used as Global best practices and have been used by the project team for TOD projects developed and developing countries alike.

Most of these games are organized as sessions/downtime activities as a part of TOD Charrettes (typically organized as a one/two-day activity). An overview of the TOD charrette process is also presented at the end to identify where these gaming sessions can be accommodated in the charrette agenda.

Activity 1: Card Game - Play your best Hand

Activity 2: Ideas/Projects cost Money

Activity 3: Speed Networking – Hear & Share your stakeholders/your Issue under 5 minutes, & jointly devise a solution

Activity 4: Issues & Ideas Wall

Activity 5: Preference Boards

Activity 6: TOD Interactive Board-game

Activity 7: Road Safety Workshop

Other Virtual Games

ACTIVITY 1: CARD GAME - PLAY YOUR BEST HAND

INTENT:

Identification of key priorities/issues.

WHO ARE THE PLAYERS:

- Typically limited to Public Sector/Agency Stakeholders.
- Can be extended to select Private stakeholders such as NGO's/Developers/ Business Improvement Groups.
- Mayors and political decision-making stakeholders often participate in developing countries.

FORMAT:

Workshop/Charrette Setting. Stakeholders are sitting around a table in random groups of 6 to 8 people.

IDEAL ENGAGEMENT SIZE:

Maximum 50-75 Stakeholders. Gathering feedback and reporting becomes time-consuming beyond this size of stakeholders.

TYPICAL TIME:

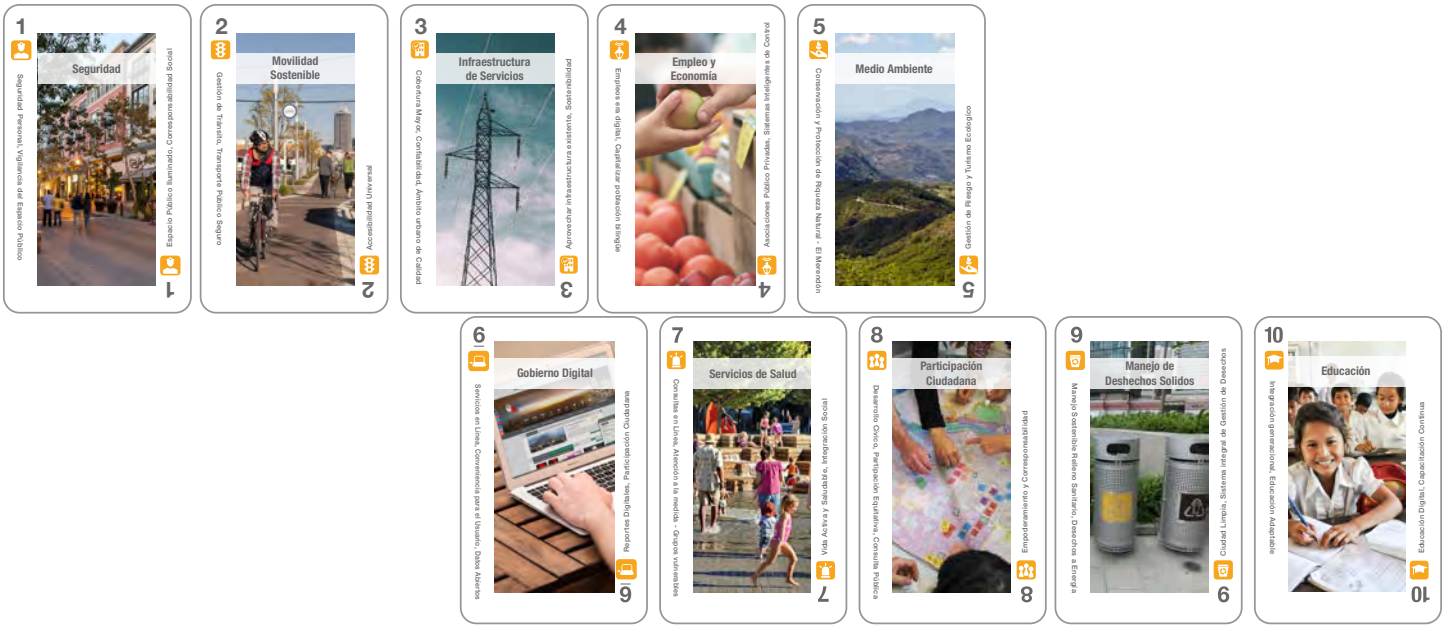
30 minutes (10 minutes to play the game and 20minutes to discuss reporting).

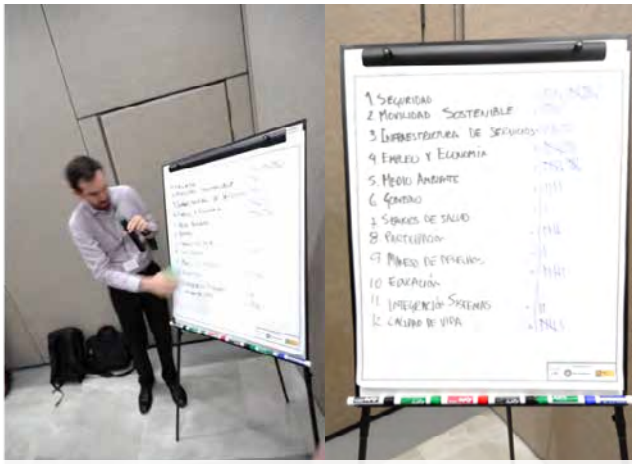
DESCRIPTION:

- A suit of cards (similar to a suit from a deck of cards) 12 cards with an additional Wild Card (similar to the Joker from a deck of cards) is pre-prepared with each card representing one key issue facing the community.
- The list of priorities/issues is pre-curated with the assistance of the Client prior to the workshop.
- Each stakeholder is asked to "play their best hand" i.e. lay 3 cards on the table which represent their three priority issues.
- The stakeholders also have the option of writing their own issue on the wild card in case the 12 cards don't represent priority issues.
- The cards form each stakeholder are collected and the scores are tallied (while other components of the workshop/ charrette are in process) by the Project team.
- A member of the project team then reports back on the ranking of the priorities.

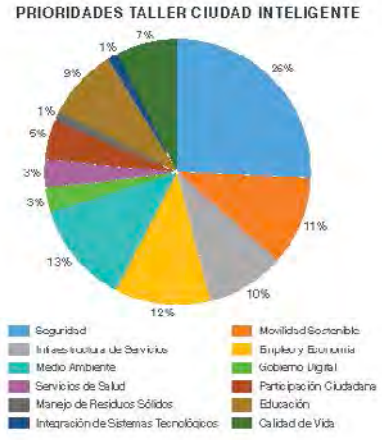
OTHER SUGGESTIONS

- The Wild Card may carry the photo of the Project Champion/Political leader of the Community/City.
- The rest of the 9 cards are carried back by the Stakeholders as workshop souvenirs. Information related to the project, key contacts etc. can be provided on the back of the card.





Workshop Reporting on Priorities identified by Stakeholders



Ranking of Priorities

(Source: © IBI Group)

ACTIVITY 2: IDEAS/PROJECTS COST MONEY

INTENT:

Prioritizing projects based on the availability of municipal funds. Prioritizing Projects/Ideas

WHO ARE THE PLAYERS:

- Typically limited to Public Sector/Agency Stakeholders.
- Can be extended to select Private stakeholders such as NGO's/Developers/Business Improvement Groups.
- Mayors and political decision-making stakeholders often participate in developing countries.

FORMAT:

Workshop/Charrette Setting. Stakeholders engage in this activity during break/downtime of a charrette.

IDEAL ENGAGEMENT SIZE:

Maximum 50-75 Stakeholders. Gathering feedback and reporting becomes time-consuming beyond this size of stakeholders.

TYPICAL TIME:

30 minutes (10 minutes to play the game and 20 minutes to discuss reporting).

DESCRIPTION:

- Multiple Boxes or jars representing Capital projects/ projects ideas are provided on a table as a part of the workshop. Short description in the form of a sentence or two of each idea/Capital projects is also written on the box/ jar.
- Cost of each project/idea is also written on the jar. Costs for projects may vary depending on the nature of projects. Cost figures are kept arbitrary but relative to each other. E.g. LRT Transit Project Value may be assigned 3$ while BRT Transit Value may be assigned 2$ while existing bus fleet upgrade may be assigned 1$ only.
- Each Stakeholder is handed mock money (say 10 coins/ paper currency/ 10$) representing limited municipal funds available to spend on capital projects.
- Each stakeholder is asked to spend the funds (say 10$) on the projects that they see fit and how they see fit.
- The amounts are tallied in each box (while other components of the workshop/charrette are in process) by the Project team.
- A member of the project team then reports back on the ranking of projects/ideas.

Coin Game Activity for Transportation Master Plan project, York Region, Ontario, Canada focusing on identifying project priorities *(Source: © IBI Group)*

OTHER SUGGESTIONS:

- List of projects/ideas should not be overwhelming and represent relevant solutions for the community. Generally, this game is played well into the project process when a basic idea of the solutions/projects/ideas are known.
- The list of projects/ideas is pre-curated with the assistance of the Client prior to the workshop.
- The game can also be employed to set project goals/ priorities.

ACTIVITY 3: SPEED NETWORKING | HEAR & SHAPE YOUR STAKEHOLDER'S / YOUR ISSUE UNDER 5 MINUTES, & JOINTLY DEVISE A SOLUTION

INTENT:

Break the ice. Meet multiple Stakeholders attending a charrette in a one on one setting. Hear and share concerns jointly devise solutions for issues.

WHO ARE THE PLAYERS:

- Typically limited to Public Sector/Agency Stakeholders.
- Can be extended to select Private stakeholders such as NGO's/Developers/Business Improvement Groups.
- Mayors and political decision-making stakeholders often participate in developing countries.

FORMAT:

Workshop/Charrette Setting. Stakeholders engage in this activity in a one on one setting.

IDEAL ENGAGEMENT SIZE:

Maximum 50-75 Stakeholders. Gathering feedback and reporting becomes time-consuming beyond this size of stakeholders.

TYPICAL TIME:

45 minutes.

DESCRIPTION:

- Rather than/in addition to each stakeholder introducing themselves at the start of the charrette, Speed networking is an ice-breaking activity between various stakeholders.
- In addition, this also ensures that charrette is dominated by a few individuals, preventing the 'softer' voices to be heard.
- This timed game is played much similar to a speed dating format, where during a seven-minute period, stakeholders have the chance to meet a fellow stakeholder/charrette attendee and exchange information on who they are, what work they do, and their key issues they face (related to the project). The intent is also to jointly devise a solution to the issues.
- After the seven-minute period, a bell will ring to signal the start of a new round. Stakeholders then move seats and begin again, for a total of say six rounds (45 minutes).

Speed Networking at Cité Internationale Universitaire de Paris, France

ACTIVITY 4: ISSUES & IDEAS WALL

INTENT:

To understand the values, concerns and aspirations of the public/ stakeholders related to the specific project.

WHO ARE THE PLAYERS:

- Open to Public/ Public Sector/ Agency Stakeholders.
- Mayors and political decision-making stakeholders often participate in developing countries.

FORMAT:

Open house Setting.

IDEAL ENGAGEMENT SIZE:

Open to public activities generates broad interest. Generally, 100 to 150 people atypically attend these.

TYPICAL TIME:

45 minutes.

DESCRIPTION:

- Members of the public/stakeholders use post-it notes on the walls/boards in the room.
- The public/stakeholders can use any number of post-its to identify multiple issues and solutions.
- The input is then reported as a part of workshop documentation “what we heard” report as a part of the project.
- Reoccurring key issues/ideas are taken forward as input to the project.

Issues & Ideas Activity for Green Line Transit-Oriented Development planning project, Calgary, Canada
(Source: © IBI Group)

ACTIVITY 5: PREFERENCE BOARDS

INTENT:

An interactive preference selection exercise of the different concepts for key sectors within the station area using precedent images.

WHO ARE THE PLAYERS:

- Open to Public/ Public Sector/Agency Stakeholders.
- Mayors and political decision-making stakeholders often participate in developing countries.

FORMAT:

Open house Setting. Public/Stakeholders engage in this activity during break/downtime of the charrette.

IDEAL ENGAGEMENT SIZE:

Open to public activities generates broad interest. Generally, 100 to 150 people atypically attend these.

TYPICAL TIME:

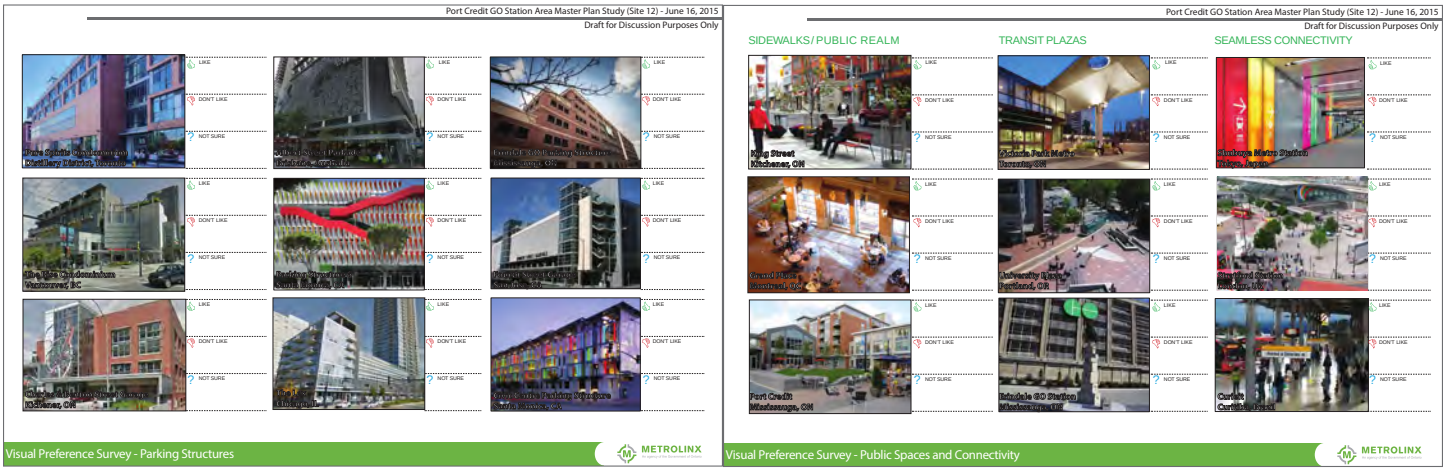
30 minutes.

DESCRIPTION:

- Members of the public/stakeholders use red (not preferred)/ green (highly-preferred)/yellow (somewhat preferred) dot stickers on boards with precedent images grouped under various categories.
- Categories could range from types of open spaces, furniture preferences, types of streetscape treatments, building facades, types of parking solutions etc.
- Highly preferred precedent images then set the tone for Station Area Concepts/Plans and are used as preferred precedent images to explain ideas for the project.
- The boards with stickers are included as a part of workshop documentation “what we heard” report as a part of the project.

OTHER SUGGESTIONS:

- This game is played well into the project process when a basic idea of the solutions/projects/ideas is known.
- The precedent images are pre-curated with the assistance of the Client prior to the workshop.
- The game can also be employed to set project goals/ priorities.



Visual Preference Survey, Port Credit TOD Study, Ontario
(Source: © IBI Group)

ACTIVITY 6: TOD INTERACTIVE BOARD-GAME

INTENT:

Use Lego/Foam boards to develop a concept for the Station Area/TOD.

WHO ARE THE PLAYERS:

- Typically limited to Public Sector/Agency Stakeholders.
- Can be extended to select Private stakeholders such as NGO's/Developers/Business Improvement Groups.
- Mayors and political decision-making stakeholders often participate in developing countries.

FORMAT:

Workshop/Charrette Setting. Stakeholders engage in this activity in a one on one setting.

IDEAL ENGAGEMENT SIZE:

Maximum 50-75 Stakeholders. Gathering feedback and reporting becomes time-consuming beyond this size of stakeholders.

TYPICAL TIME:

90 minutes.

DESCRIPTION:

- One potential risk of a charrette is that the process is dominated by a few individuals, preventing the 'softer' voices to be heard. To overcome this constraint, the exercises of each of the charrette rounds were designed so that this was minimized.
- The board game uses pieces of foamboard representing land uses over a base map to overcome the effect of one individual taking over the verbal conversation and the effect of only the people who can draw being able to contribute to the design ideas.
- Stakeholders are divided into groups of 8 - 10 ensuring that all disciplines are represented at each table and are provided with the foam board and the base maps as building blocks of the concepts.
- Station Area concepts developed are then presented at the end by each group to the rest of the audience.
- These concepts become the basis for preliminary concepts that are refined and presented back to the community.

TOD Interactive Board Game Activity for Green Line Transit-Oriented Development planning project, Calgary, Canada

(Source: © IBI Group)

LEGO AND LEGO-BASED INTERACTIVE BOARD GAMES

Lego sets, a set of interlocking plastic blocks, are a staple of children's toys around the world. They are extremely minimal, flexible, and non-sequential, allowing them to represent the shape or form as desired by its user. They have been found to be effective tools to encourage creative thinking, freeform expression, and logical problem-solving. The blocks are found in vivid ranges of primary colors, with a range of function-specific symbolic blocks (street lamps, a patch of lawn, etc.) and extensions. While they have been primarily used to help children build shapes and forms (established and freeform), they have also been adapted to foster creativity through product lines such as Lego Mindstorms (with hardware and software to create programmable units). Increasingly, these qualities have been sought by planners and architects, as well. CTS-EMBARQ Mexico has developed a DOTS Kit to use these qualities, in conjunction with its TOD manuals, in capacity building. More broadly, the Massachusetts Institute of Technology (MIT) and its partners are exploring how Legos can be used to create a collaborative planning platform. Planning processes, set up to bring in an active participation from its various stakeholders, benefit from bringing in Lego blocks to the table. Blocks are indicative, and might not provide representative models built to scale. However, visualized spaces (buildings or neighborhoods) might initiate conversations among stakeholders. In a participatory planning activity, this outcome is desired. As Lego blocks are small and adaptable, they allow for a number of people to use them at once. This feature makes them useful to designers of a participatory planning activity. They also allow planners to immediately test their many proposals real time in space and gauge stakeholder reactions to them. Such simple scenario visualizations tools can be used to simulate design problems pertaining to several aspects of creating a TOD neighborhood such as the makeup of a street with respect to pedestrians or vendors, built-up area around a transit node, access to transit nodes and other services, or use patterns of a neighborhood.

Lego-based Workshop - Fantasize your City
(Source: © Lamiot. Reproduced under Creative Commons Attribution 4.0 International license BY 4.0)

ACTIVITY 7: ROAD SAFETY WORKSHOPS

INTENT:

To sensitize participants about road safety challenges faced by the vulnerable road users, and create awareness on both the risk factors as well as the solutions, covering infrastructure, traffic management and urban planning.

WHO ARE THE PLAYERS:

- Typically limited to Public Sector/Agency Stakeholders
- Can be extended to select Private stakeholders such as NGO's/Developers/Business Improvement Groups/ Community members

FORMAT:

Workshop/ Charrette Setting. Stakeholders participate in random groups of 6 to 8 people.

IDEAL ENGAGEMENT SIZE:

Maximum 40-60 Stakeholders.

TYPICAL TIME:

4-5 hours (including site visit).

Road Safety Training under the "Mobilize Your City" program with Nagpur Smart & Sustainable City Development Corporation Ltd. and UMTC in India (17th February 2020)
(Source: © WRI India)

DESCRIPTION:

- Select a busy street or intersection within the TOD area. It is important that this location has a variety of road users and a complex set of road safety challenges
- Randomly divide participants into groups of 6-8 individuals and visit the area selected
- The participants make an inventory of all the street elements and make a note of inadequate infrastructure from the perspective of pedestrians and non-motorized transport users, that they feel is missing or under-provided
- The participants are also asked to observe road user behavior and identify potential conflict points and situations
- Participants return to the workshop hall and discuss their findings. Each group is asked to list down their observations on road safety conflicts and discuss solutions to mitigate these risks
- Participants then draw out their solutions on a large base drawing outline of the street/intersection in question
- Each team then presents their solutions to the larger audience. Commonalities and variations across the groups are noted down

LIMITATIONS

- The experience of participants may vary depending on the time and day of the site visit. For example, challenges observed during peak hours on a weekday will be different from off-peak hours or a weekend. Similarly, activities on the street will also be different during daytime and night time. However, depending on the target audiences and considering it is predominantly a capacity building exercise the workshops, the visits will most likely happen during a typical weekday working hours. The site visits usually take 1-2 hours and is supported by information collected in a pre-workshop visit done by moderator/ presenter.
- Detailed multi-scenario visits and robust data collection should be conducted by the implementation agency prior to the design development phase for actual implementation.

Road Safety Training under the “Mobilize Your City” program with Ahmedabad Municipal Corporation and UMTC in India (12th February 2020)
(Source: © WRI India)

OTHER VIRTUAL GAMES

Virtual techniques increasingly are being applied both in traditional and lifelong learning environments. Using virtual gameplay allows participants to explore new ideas and solutions in different situations. These video-based city planning games can be general, like SimCity—considered the first video game in this area—or explore a specific aspect, such as the Lincoln Institute's Exploring Density. This section gathers some of these games and explores how they can be used in capacity-building and the exploration of the application of TOD concepts.

MIT CITY SCOPE

http://cp.media.mit.edu/city-simulation

MIT City Scope defines its scope of work as developing "... augmented reality decision support systems (ARDSS) that facilitate non-expert stakeholder collaboration within complex urban environments." They have been able to create a range of decision-making tools used to simulate, prototype, and abstract real-time data, spatial data, and user feedback to provide observable results for alternative scenarios of design problems. Their approach uses a combination of data visualization, analysis, and scenario building to inform stakeholders' possible consequences of their particular decisions. An example of the decision-making potential of such simulation models can be found below. The larger goal of such an exercise was to make the planning process less "technocratic," and introduce an element of participation, and "co-creation." Researchers at MIT, in collaboration with the Barr Foundation, created a model replica of Dudley Square, a neighborhood in the greater Boston area, with Lego blocks. The blocks were used to build the physical components of the neighborhood as well as to represent its inhabitants. It was created to understand the impacts of introducing bus rapid transit (BRT) services in the area. It was accompanied by a Lego-built 3-D model of a Boston street, and a touchscreen interface to present the possible impacts of specific planning decisions made by stakeholders. These simulations, in the form of an exhibition, were open to the public. The touchscreen interface offered various parameters, such as access to transit routes, cost of provision, access to jobs in the city, or the mode of public transit. These parameters were gathered together from publicly available data. By changing a specific parameter, any user could understand how those decisions could impact their specific commuting routes and habits for any given location. They were also able to influence the quality of the service by interacting with specific Lego blocks representing bus stops for said services and observe the impacts to the cost and quality of the service provided to them.

CITY GAME

http://fieldsofview.in/projects/city-game/

In planning environments where data is not readily available, it becomes difficult to use simulation models to initiate a conversation about broader planning policies or their consequences. In such conditions, it is crucial to devise a method to simulate a proximate representation of scenarios under consideration. The city game, originally developed by Dr. Juval Portugali of Tel Aviv University, was later adapted at the Next Generation Infrastructure Laboratory in Bangalore. It was designed to explore urban form and gather either an individual's or a community of people's response to design decisions and preferences for the direction of the city's growth. This active game asks its participants to take turns and provide the city with a service/amenity, often as a reaction to another player's decision. This game, while simple and devoid of complex analytical prowess, introduces an element of interactivity and dynamic growth that is often found missing in orthodox means of participatory planning methods. The game provides different frameworks to teams to create their realities of preferred development alternatives. The game also accommodates the introduction of policies and development regulations, and help organizers observe and compare the effects of such policies on different development patterns.

Similarly, there are many games that help stakeholders visualize and consider the trade-offs between different elements of TOD. Some of these are recommended here:

URBAN LAND INSTITUTE'S URBAN PLAN BUILDING BLOCKS: A DENSITY GAME

Source: www.lincolninst.edu/subcenters/visualizing-density/blockgame/index.aspx

EXTREME EVENT GAME

Source: https://toolkit.climate.gov/tool/extreme-event-game

WHAT IS ZONING?

Source: http://welcometocup.org/Store?product_id=62

WHAT IS AFFORDABLE HOUSING?

Source: http://welcometocup.org/Store?product_id=20

MINI METRO

Source: http://dinopoloclub.com/minimetro/

NEW TECHNOLOGIES IN THE OUTREACH PROCESS

In addition to traditional methods of outreach, including workshops, community meetings, and hearings, utilizing emerging and digital technologies, such as mobile apps, virtual open-houses, live chat sessions, and community comment forums should be strongly considered in your project engagement strategy. Technological methods can help to extend the reach of the transit-oriented engagement, connecting with people that are traditionally overlooked in the consultation process, for reasons varying from an inability to attend public meetings to being uncomfortable providing their opinion in large engagement sessions. Online and virtual mediums of outreach allow for information to be disseminated more broadly and ultimately improves the reach of public information and consultation opportunities. This section contains references to applications and websites that serve as examples of the many technology-based engagement mediums available today. A variety of examples are included to provide the ability to explore the many engagement options currently available and find an option that best suits your community and consultation strategy.

Browsing websites like **NextDoor (https://nextdoor.com/)**, allow neighbors to connect and share ideas, monitoring the satisfaction around transit project areas. Websites like **Neighborly (https://neighborly.com) and Citizen Investor (http://www.citizinvestor.com),** simplify the often daunting task of budgeting and investing for transit-oriented projects and provide citizens with the opportunity to have a say in financial choices. Some of these engagement options consult with constituencies during the decision-making process, while others gauge the overall values of the community related to budgeting and apply those priorities afterward. Several map-based tools make it possible for people to leave comments on a map, for example, **CrowdMap (https://crowdmap.com/welcome) or Community Remarks (http://www.communityremarks.com).** The mapping component of these platforms is especially useful for a transit area-level planning project to provide citizens with a visual understanding of TOD-related changes. Applications like T**extizen (https://www.textizen.com)** allow you to send, receive, and analyze citizen questions through SMS text messages. Moreover, web-oriented platforms like **Crowdbrite (http://www.crowdbrite.com, Neighborland (https://neighborland.com), and MindMixer (http://app.mysidewalk.com)** help your community craft websites and portals for community engagement, including online surveys, forums and feedback, while also providing detailed project information in one online location. **Poll Everywhere (https://www.polleverywhere.com)**, allows you to create polls on mobile devices that encourage citizens to engage as they experience transit-oriented development firsthand (while riding transit, for example).

TOD KP

EN-C02

STAKEHOLDER ENGAGEMENT GAMES

Interactive games for cross-agency coordination and visioning of TOD and safe access to mass-transit stations within a TOD

Type: Reference Document

WORLD BANK GROUP
TOD
Global Platform for Sustainable Cities
gef
UKaid from the British people
GRSF Global Road Safety Facility
IBI
WRI INDIA

INTRODUCTION
TOD ROLE-OUT

OBJECTIVE:

The TOD 'Role-Out' is a stakeholder engagement tool, to be conducted in the form of a game. The game allows for collaborative decision-making with various stakeholders to make them understand each other's motives, possible trade-offs and how individual interests can be better aligned for successful implementation.

FORMAT: WORKSHOP

TYPICAL TIME: Two hours for a quick process or a half-day session for a thorough discussion.

SESSIONS:

The game includes two sessions:

» Conduct SWOT Analysis

» Develop Station Area Programming Alternatives and Concept Plan

AUDIENCE(S):

Invite participants from across the project's organizational spectrum to ensure thorough stakeholder mapping.

» Primarily involves public sector/ agency stakeholders

» Can be extended to select private stakeholders such as NGO's and developers, as well as mayors and political decision-making stakeholders

IDEAL ENGAGEMENT SIZE:

Maximum 40-50 stakeholders. Participants are sitting around a table in groups of 8-10 people. Groups can be created by randomly picking up participants, however, a diverse team is recommended to broaden the view and understand the tradeoffs more accurately. Provide 1 facilitator to guide the discussion.

MATERIAL REQUIRED

1

Print the pre-prepared suit of cards on 4.1 x 5.8 in

The cards are organized similarly to a suit from a deck of cards)– **9 cards,** with each card presenting a stakeholder responsible in a coordinated TOD implementation programme.

Each card includes a list of **priorities** (differing motives of various stakeholders), **trade-offs** (to understand the motives of each stakeholder) and **incentives** (how interests can better be aligned for successful implementation).

DOWNLOAD HERE

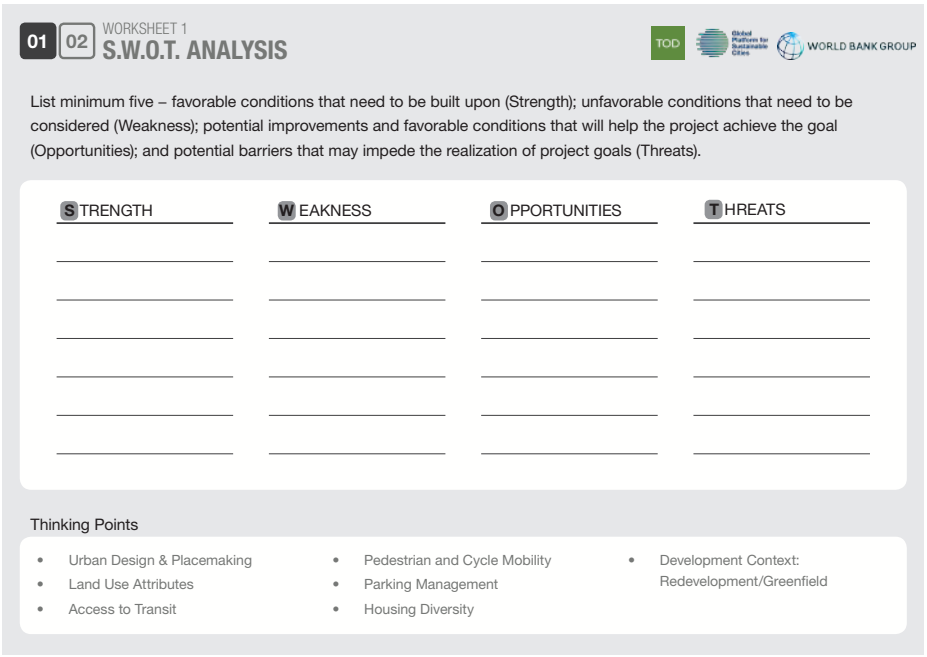
MATERIAL REQUIRED

2

Print the pre-prepared worksheets preferably on 8.5x11 inches or 11x17 inches

The game includes two worksheets in a standardized format. The first worksheet summarizes the Strengths, Weaknesses, Opportunities and Threats (SWOT) from the perspective of all the stakeholder roles being played out. The second worksheet is to be used to develop the programming for the Station Area.

DOWNLOAD HERE



01 02 WORKSHEET 1
S.W.O.T. ANALYSIS

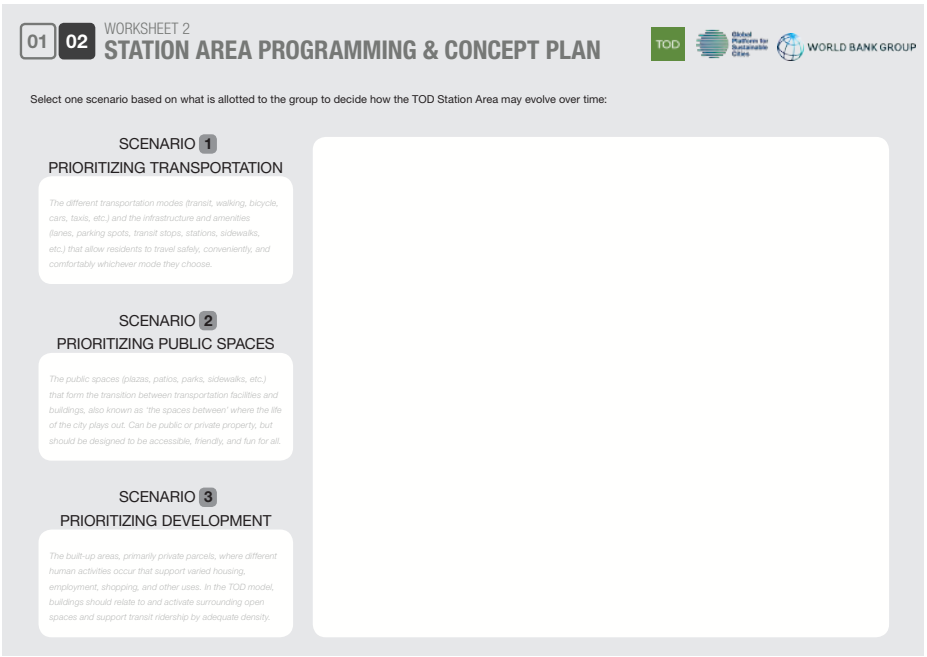
TOD · Global Platform for Sustainable Cities · WORLD BANK GROUP

List minimum five – favorable conditions that need to be built upon (Strength); unfavorable conditions that need to be considered (Weakness); potential improvements and favorable conditions that will help the project achieve the goal (Opportunities); and potential barriers that may impede the realization of project goals (Threats).

STRENGTH	WEAKNESS	OPPORTUNITIES	THREATS

Thinking Points

- Urban Design & Placemaking
- Land Use Attributes
- Access to Transit
- Pedestrian and Cycle Mobility
- Parking Management
- Housing Diversity
- Development Context: Redevelopment/Greenfield



01 02 WORKSHEET 2
STATION AREA PROGRAMMING & CONCEPT PLAN

TOD · Global Platform for Sustainable Cities · WORLD BANK GROUP

Select one scenario based on what is allotted to the group to decide how the TOD Station Area may evolve over time:

SCENARIO 1
PRIORITIZING TRANSPORTATION

The different transportation modes (transit, walking, bicycle, cars, taxis, etc.) and the infrastructure and amenities (lanes, parking spots, transit stops, stations, sidewalks, etc.) that allow residents to travel safely, conveniently, and comfortably whichever mode they choose.

SCENARIO 2
PRIORITIZING PUBLIC SPACES

The public spaces (plazas, patios, parks, sidewalks, etc.) that form the transition between transportation facilities and buildings, also known as "the spaces between" where the life of the city plays out. Can be public or private property, but should be designed to be accessible, friendly, and fun for all.

SCENARIO 3
PRIORITIZING DEVELOPMENT

The built-up areas, primarily private parcels, where different human activities occur that support varied housing, employment, shopping, and other uses. In the TOD model, buildings should relate to and activate surrounding open spaces and support transit ridership by adequate density.

MATERIAL REQUIRED

3

A large base map (preferably 33.1x46.8 inches or 23.4 x 33.1 inches) that includes:

- » Transit station location with 400m (5min walk) and 800m (10min walk) radial circle centered on the station
- » Existing road network
- » Natural environment systems including greenways, waterways and open spaces
- » Existing building footprints, including developments and destinations

Reference Base Map

MATERIAL REQUIRED

MATERIAL REQUIRED:

4

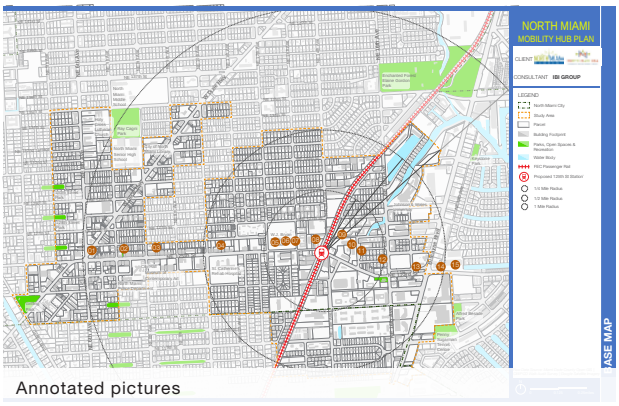
Visual Aids:

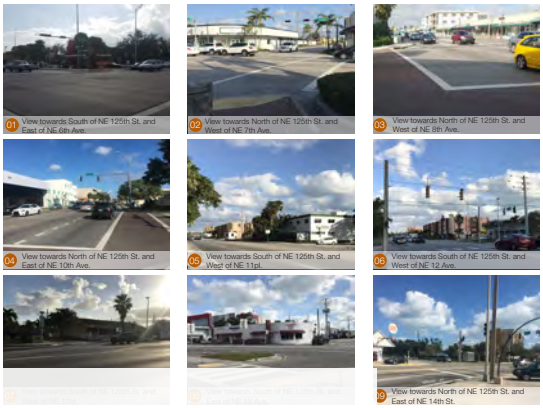
A visual library of examples to describe TOD scenarios to be considered during the game:

- Presentations
- Annotated pictures to orient people to the TOD area
- Videos
- Printouts

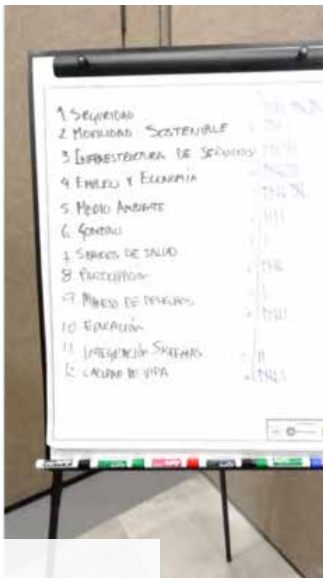
Documentation:

- Flip-chart paper for listing audience's priorities
- Sticky notes of different colors, markers and pens for working on the base map
- Camera to capture the results





Annotated pictures



Workshop reporting on priorities identified by stakeholders

HOW TO PLAY

Begin the game with a clear definition of the study area. Write both the tasks boldly on the flip-chart, making it easy for the audience to time themselves and orient with the agenda.

Start team introductions and ask each participant to draw a pre-prepared card from the deck, with each card presenting a different role. The participant from then till the final discussion needs to play the role on the card and act according to the unique requirements and rules mentioned. For example, an environmental activist and a real real estate investor can make different decisions, due to their different roles in the game.

Participants are then divided into groups of 8-10, ensuring that all disciplines are represented at each table and are provided with the sticky notes, worksheets and base maps.

ACTIVITY 1: SWOT ANALYSIS

» Each group is given five minutes to describe and characterize the core elements or unique abilities of the station area. The players can use the working sheets to write their ideas and sticky notes to mark the ideas spatially on the map. Repeat the process for all four headings (SWOT).

» After 20 minutes, initiate a group discussion with the goal to **create a summary of SWOT and identify top 10 under each heading.**

ACTIVITY 2: STATION AREA PROGRAMMING & CONCEPT PLAN

» With a strong understanding of the strengths and problems of the area, each group is handed over a scenario to decide how the TOD Station Area may evolve over time.

» Each group is given 1.5 hrs of time to come up with the programming and to sketch a concept plan on the base map.

» A member of the project team then reports back on the ranking of projects/ideas based on their scenarios.

» At the end of the activity, project goals and priorities are summarized for all three scenarios. **Reoccurring key issues/ideas are taken forward to guide the project.**

8 Ave SE
8 Ave SE
9
11 St SE
10 St SE
10 Ave SE
SHOPS
OFFICE
APARTMENT
HERITAGE
PUBLIC ART / LANDMARK
CORNER STORE
LIVE WORK
PARKING

TOD K P

THE TOD ROLE-OUT'

Supporting tools- Cards

TOD

Global Platform for Sustainable Cities

WORLD BANK GROUP

IBI

01

City Transportation Planner

TOD Brainstorming Game

TOD | Global Platform for Sustainable Cities | WORLD BANK GROUP

01

02

Chief Town Planner

TOD Brainstorming Game

TOD | Global Platform for Sustainable Cities | WORLD BANK GROUP

02

03

Real Estate Consultant (City)

TOD Brainstorming Game

TOD | Global Platform for Sustainable Cities | WORLD BANK GROUP

03

PRIORITIES

- Ensure highest and best use of city owned properties within the TOD area
- Economic benefits resulting from development through land value capture
- Land monetization through redevelopment of vacant/underdeveloped parcels in close proximity to transit station
- Destination creation and enhancing market value of the TOD area

TRADE-OFFS

- Higher property values vs. mixed-income housing
- Owner-occupied housing vs renter-occupied housing
- Short-term returns vs long-term market creation

INCENTIVES

- Increased opportunities in attracting development interests within TOD areas
- Access to a more robust market and upgraded building stock for future investments
- Opportunities to build long-term government contracts to realize TOD visions

03

PRIORITIES

- Enforce existing planning & development regulations
- Increase formal supply of mixed-income housing stock
- Promote enhanced accessibility
- Placemaking through urban design interventions
- Encourage mix of uses & equitable development

TRADE-OFFS

- Permitting development in greenfield vs. redevelopment of gov't sites in TOD area
- High-value market-rate housing vs. affordable housing
- Blanket FAR vs. differential FAR along the transit corridor
- Increased congestion at concentrated areas vs. balanced distribution of jobs and residents regionally
- High-rise building vs. context-specific design

INCENTIVES

- Discounted infrastructure charges by managing development growth
- Private sector contribution in improving access to public realm improvements
- Streamlined development approvals

02

PRIORITIES

- Minimize impacts of traffic congestion
- Boost transit ridership
- Promote walkability and cycling
- Create a seamless integration between transit modes

TRADE-OFFS

- Utilize the right-of-way for movement of traffic vs. movement of people
- Reduced parking vs. alternative transportation modes transportation
- Increase transit coverage vs. provide an efficient, coordinated transit service

INCENTIVES

- Funding for transit and street improvements
- Private sector investment in the public realm
- Preserve the environment

01

01

Private Developer

TOD Brainstorming Game

01

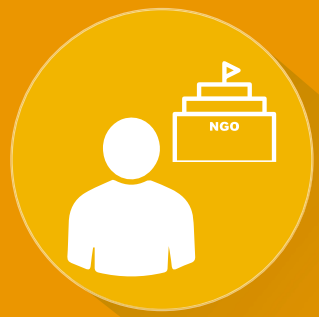
02

Resident

TOD Brainstorming Game

02

03



Non-Profit Activist

TOD Brainstorming Game

03

PRIORITIES

- Ensure social equity in neighborhoods
- Preserve the environment
- Minimize impacts of traffic congestion
- Promote walkability and cycling
- Limit sprawl & related costs of infra.
- Ensure mixed-income housing

TRADE-OFFS

- Preserve environment vs. economic growth
- Income equality vs. increased investment
- Integrate marginalized sections vs. improve investment image
- Maintain affordability near transit vs. higher land values

INCENTIVES

- Community participation in decision-making
- Integration of social infrastructure and services in TOD projects
- Mandatory affordable housing provisions in market-rate housing
- Provision of open space

03

PRIORITIES

- Preserve neighborhood character & identity
- Improve the overall quality of life with environmental, social and cultural investments
- Reduce resident commuting times
- Maintain affordability in the area
- Ensure safety and security in the neighborhood

TRADE-OFFS

- Remove blight and deterioration vs. resistance to change through redevelopment
- Invest in public realm infrastructure upgrades vs. resistance to increased user costs for better services

INCENTIVES

- Community participation in decision-making
- Integration of community facilities
- Inclusion of public spaces
- Promotion of local businesses

02

PRIORITIES

- Receive financial return on investment
- Availability of land in close proximity to transit
- Public realm infrastructure in place

TRADE-OFFS

- Long-term investment in TOD projects vs. short-term returns on automobile-oriented uses
- High-value market-rate housing vs. affordable housing
- Open Space

INCENTIVES

- Increased FARs allowed by right
- Site assemblage and land banking
- Impact fees and tax waivers and long-term tax subsidies
- Expedited development approval in TOD areas
- Discounted infrastructure charges
- Relaxation of development controls

01

01

Representative: National/ State-level Transport Agency

TOD Brainstorming Game

TOD | Global Platform for Sustainable Cities | WORLD BANK GROUP

01

02

Engineer: State-level Public Works/Infrastructure

TOD Brainstorming Game

TOD | Global Platform for Sustainable Cities | WORLD BANK GROUP

02

03

Elected Official (Mayor)

TOD Brainstorming Game

TOD | Global Platform for Sustainable Cities | WORLD BANK GROUP

03

PRIORITIES

- Create more jobs
- Reduce transportation costs for constituents
- Increase municipality's tax base and property values
- Distribution of benefits across society
- Improvements to public realm
- Ease of doing business

TRADE-OFFS

- High-density development vs. infrastructure capacity
- Attractive development vs. affordable housing
- Environment quality vs. intense development
- Displacement of informal settlements vs. in-situ redevelopment

INCENTIVES

- Land monetization tools
- Increased private sector investment
- Private sector contribution in improving access to public realm improvements
- Streamlined development approval

03

PRIORITIES

- Reduce peak period traffic congestion
- Encourage transit and non-motorized travel
- Reduce per capita vehicle travel
- Improve access & reduce need for travel
- Upgrade aging infrastructure, especially in urban infill/redevelopment areas

TRADE-OFFS

- Right-of-way dedicated for additional lanes vs. public transit
- Reduction in regional vehicle miles traveled (long-term) vs. traffic congestion in areas with concentrated densities (short-term)
- Investment in aging infrastructure vs. new infrastructure in greenfield/semi-urban TOD areas

INCENTIVES

- Impact fees or value capture mechanisms to fund infrastructure improvements
- Cross-sector coordination to avoid duplication of projects

02

PRIORITIES

- Increase transit ridership
- Maximize land value capture opportunities
- Maintain flexibility in station standards and multi-modal integration
- Increase revenues from non-fare box sources

TRADE-OFFS

- Maximize coverage vs. high ridership
- Reduced parking vs. park-and-ride
- Fare-box revenues vs. affordable transit

INCENTIVES

- Joint Development with private sector
- Permissible development above stations (air rights)
- Increased densities allowed based on transit ridership

01

01 02 WORKSHEET 1

SWOT ANALYSIS

List a minimum of five– favorable conditions that need to be built upon (Strengths); unfavorable conditions that need to be considered (Weaknesses); potential improvements and favorable conditions that will help achieve project goals (Opportunities); and potential barriers that may impede the realization of project goals (Threats).

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS

Thinking Points

- Urban Design & Placemaking
- Land Use Attributes
- Access to Transit
- Pedestrian and Cycle Mobility
- Parking Management
- Housing Diversity
- Development Context: Redevelopment/Greenfield

01 02

WORKSHEET 2

STATION AREA PROGRAMMING & CONCEPT PLAN

Select one scenario, based on what is allotted to the group, to decide how the TOD station area may evolve over time:

SCENARIO 1
PRIORITIZING TRANSPORTATION

The different transportation modes (transit, walking, cycling, cars, taxis, etc.) and the infrastructure and amenities (lanes, parking spots, transit stops, stations, sidewalks, etc.) that allow residents to travel safely, conveniently and comfortably, whichever mode they choose.

SCENARIO 2
PRIORITIZING PUBLIC SPACES

The public spaces (plazas, patios, parks, sidewalks, etc.) that form the transition between transportation facilities and buildings, also known as 'the spaces between,' where the life of the city plays out. Can be public or private property, but should be designed to be accessible, friendly and fun for all.

SCENARIO 3
PRIORITIZING DEVELOPMENT

The built-up areas, primarily private parcels, where different human activities occur that support varied housing, employment, shopping and other uses. In the TOD model, buildings should relate to and activate surrounding open spaces and support transit ridership by adequate density.

INTRODUCTION
SAFE ACCESS ROLE-PLAY

OBJECTIVE:

The Safe Access role-play activity provides awareness about the importance of safe and equitable access for all street/public space users and helps derive implementable solutions for the station area that have been prioritized through a collaborative and interactive decision-making process.

SAFE ACCESS TO MASS TRANSIT

The Safe Access Role-play activity is based on the **"Safe Access Manual – safe access to mass transit stations in Indian Cities"** with the aim of identifying and addressing issues of safe access to mass-transit stations in a participatory manner. The manual offers strategies, case studies, and guidelines for enabling safe access to mass transit stations in Indian cities. It aims to serve as a guide to planners and authorities while building mass transit infrastructure to make cities safer by design.

The manual provides guidance on providing seamless, safe and affordable commuting options to mass transit station areas by all modes, and thus creating vibrant public spaces to serve the communities' needs – typically in developing countries such as India.

The manual has four objectives:

1. Use of participatory process to integrate the planning, implementation, maintenance and evaluation of station areas.
2. Promote use of streets as public spaces, NMT safety and infrastructure, women's security and universal accessibility.
3. Develop institutional structures and financing mechanisms to facilitate timely implementation of station accessibility plans.
4. Develop performance indicators and evaluate station area for accessibility planning, implementation and maintenance.

The Safe Access approach is based on five principles. These principles are chosen such that people of all genders and physical abilities are given the highest priorities and are able to make the most of the public services provided to them.

1.
Pedestrian and Cyclist Priority

Providing the necessary infrastructure for pedestrians and cyclists to move safely and conveniently around the city. This includes continuous, safe and comfortable pedestrian and cycling networks connecting the station to other areas in the city.

2.
The Public Realm

Enhancing public spaces by making streets safer, comfortable and imageable. This includes accessible design in the public realm around the station, and convenient and easy signage that highlights different types of street activity and its uses.

3.
Feeder Services

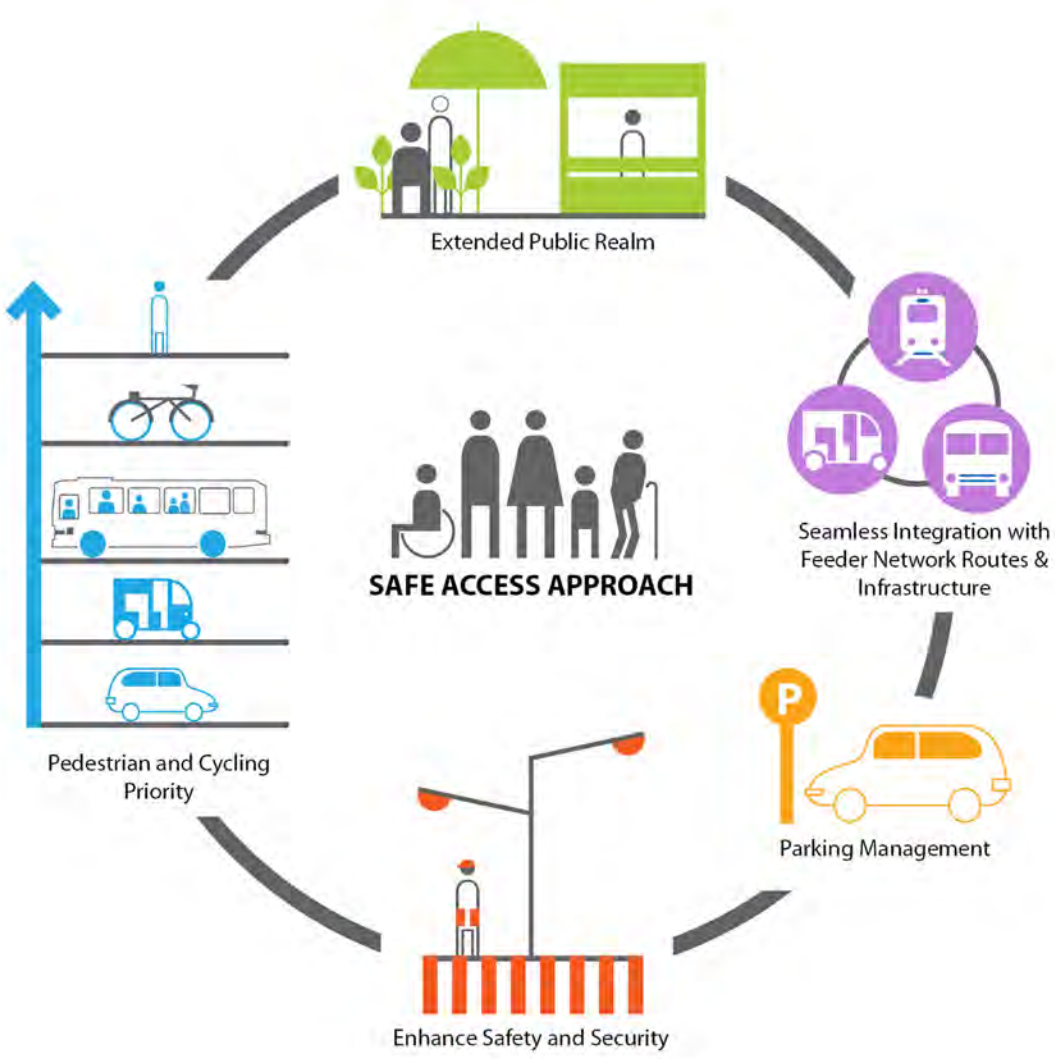
Increasing the connectivity of the system as a whole, by enhancing coordination between feeder buses and other public transport at the station. This includes minimizing waiting times and demarcating access to last mile connectivity modes like auto-rickshaws, cycle rickshaws and taxis.

4.
Parking Management

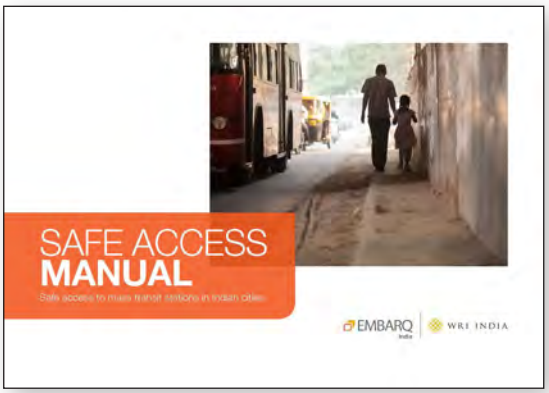
Creating a parking management plan to increase the supply of parking spaces, in addition to managing the existing parking load.

5.
Safety and Security

Creating safer, comfortable and convenient station areas for commuters through traffic calming measures, safe crossings, and reducing conflict points between pedestrians and cyclists.



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.wrirosscities.org/research/publication/safe-access-mass-transit-manual

TOD K P

FORMAT: Workshop

TYPICAL TIME: 3 hours including 45 minutes for presenting concepts of Safe Access and its five principles.

SESSIONS:

The game includes two sessions:

» Presentation of Safe-Access principles

» Participants play different roles in the role playing activity to make a case for each role. This gives a fresh perspective to participants and makes them aware of the needs of other road users.

AUDIENCE(S):

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

» Residents and users of the station area

» Representatives of Associations – RWA (Residence Welfare Association), shop associations, market associations, business owners and others

» Institutional representatives, i.e. schools, colleges, hospitals and others

» Traffic and transport representatives, e.g. traffic police, wardens, etc.

» Elected representatives, decision makers and experts in the area

» Government officials

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.

IDEAL ENGAGEMENT SIZE:

30-40 participants. Minimum 12.

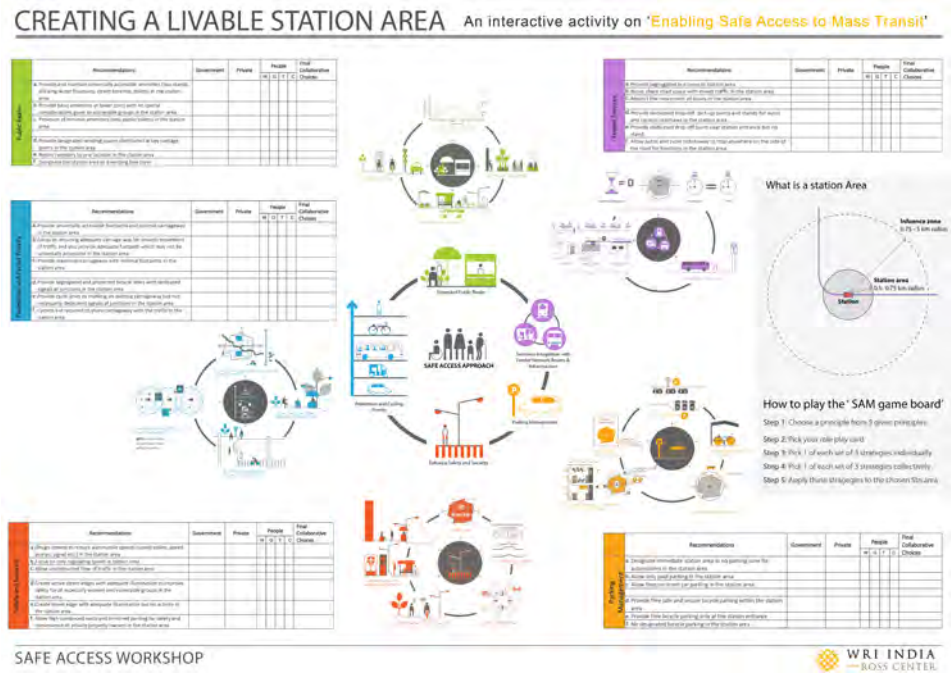
MATERIAL REQUIRED

1

Print the pre-prepared interactive board (A1 or 24”x36”)

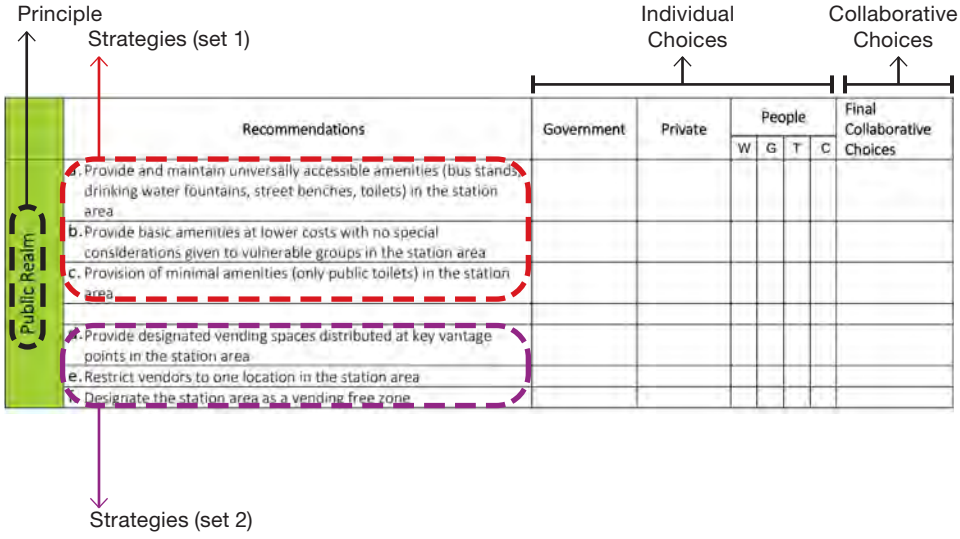
The interactive board contains the 5 principles of safe access and options for choosing strategies for respective principles under assigned roles.

Strategies for each principle are mentioned in a separate color against each principle.



Each principle on the board has 2 sets of recommendations with 3 options for each. The different columns indicate the roles that are assigned to each participant. Every group member will mark the recommendation that is relevant to the role assigned to them.

Each participant shall mark their choices for the strategies as per their assigned roles, and then discuss within the group to arrive at a final choice.

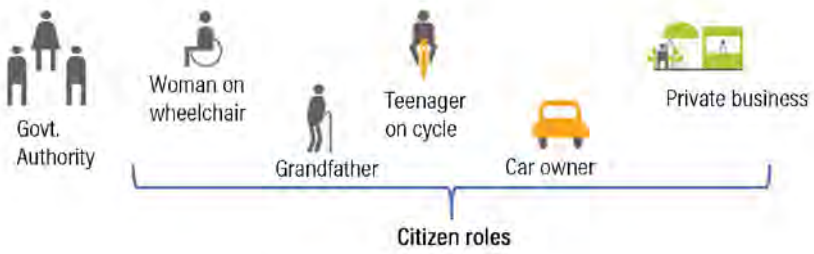


MATERIAL REQUIRED

2

Print the Role-play cards

Each team (with minimum of 6 participants) gets 6 role play cards for the participants. The participant is not only playing the assigned role but also representing that category of people in a real world scenario. Hence, he or she should remain biased towards the concerns of the role assigned.



HOW TO PLAY

01 '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.

02 DIVIDE INTO GROUPS

Coordinators divide the participants into groups of six and assigns a moderator to each group. Maximum number of groups that can be there is five.

03 CHOOSE A PRINCIPLE

Each team is provided with the interactive board. They are then asked to choose one out of the five principles as stated on the board.

04 PICK A CARD

Each team moderator now randomly distributes the role-playing cards amongst the team members. The team members stick to the roles assigned till the end of activity.

05 SELECT STRATEGIES INDIVIDUALLY

The participants then choose a set of strategies from the 2 subsets i.e. one strategy from each set INDIVIDUALLY.

Moderators facilitate the discussions and ensure that participants are taking decisions based on the roles chosen.

06 SELECT STRATEGIES COLLECTIVELY

The participants now choose a set of strategies from the 2 subsets COLLECTIVELY.

Moderators facilitate interactions between the participants and help 'Government' take the final decision for strategies.

07 PRESENTATION OF STRATEGIES

At the end of the session, the participant with a government role in each group presents the collective choices and the justification for the strategies chosen, followed by any Q and A session.

8 Ave SE
8 Ave SE
9
11 St SE
10 St SE
10 Ave SE
SHOPS
OFFICE
APARTMENT
HERITAGE
PUBLIC ART / LANDMARK
CORNER STORE
LIVE WORK
PARKING

TOD K P

SAFE ACCESS ROLE-PLAY

Supporting tools - Interactive Board and Cards

WORLD BANK GROUP
TOD
Global Platform for Sustainable Cities
gef
UKaid from the British people
GRSF Global Road Safety Facility
IBI
WRI INDIA

Woman using a wheelchair

- Travel safely and quickly in the city
- Be able to move independently in all parts of the city
- Be able to access public spaces such as parks, transit stations etc.
- Be able to avail economical modes of travel

Public at Large

You are a part of the citizenry

By living & working in the city you generate economic activity

You demand adequate infrastructure & mobility options for your needs

You demand clean air & a safe environment to live a healthy and prosperous life

Day to day activities take up your time & you can only focus on your needs

You are not able to spend time studying or solving the needs of other city dwellers

Unless specified public at large does not have access to a car

A Grandfather

- Travel safely and in a self-reliant manner in the city
- Have safe public spaces to gather in
- Have access to adequate amenities such as drinking water, seating spaces, toilets in public spaces

Public at Large

You are a part of the citizenry

By living & working in the city you generate economic activity

You demand adequate infrastructure & mobility options for your needs

You demand clean air & a safe environment to live a healthy and prosperous life

Day to day activities take up your time & you can only focus on your needs

You are not able to spend time studying or solving the needs of other city dwellers

Unless specified public at large does not have access to a car

Teenager with a cycle

- Be able to cycle safely in the city
- Have safe and secure spots to park cycle
- Have safe cycle-friendly spaces to gather in

Public at Large

You are a part of the citizenry

By living & working in the city you generate economic activity

You demand adequate infrastructure & mobility options for your needs

You demand clean air & a safe environment to live a healthy and prosperous life

Day to day activities take up your time & you can only focus on your needs

You are not able to spend time studying or solving the needs of other city dwellers

Unless specified public at large does not have access to a car

Car-owner

- Travel safely and quickly on roads in the city
- Find adequate parking spaces at destination
- Have shortest possible walk from parking space to destination

Public at Large

You are a part of the citizenry

By living & working in the city you generate economic activity

You demand adequate infrastructure & mobility options for your needs

You demand clean air & a safe environment to live a healthy and prosperous life

Day to day activities take up your time & you can only focus on your needs

You are not able to spend time studying or solving the needs of other city dwellers

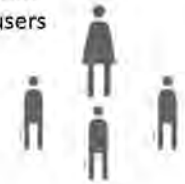
Unless specified public at large does not have access to a car

Private Business

- You are a private business such as
  - auto drivers association
  - bank
  - contractor
  - hotel owner
  - private bus corporation
  - real estate developer
  - taxi aggregator
  - taxi cab service
  - telecom service provider
- You provide a service or product to the city or to private citizens at a fee
- Profit is your primary motive
- You also want to sustain yourself financially over a long term

Government Authority

- You are a government authority like the urban development body, Municipal Corporation or traffic police.
- Your charge is to provide services and infrastructure in the city which are usable and accessible to all citizens
- You engage with the public at large to understand the needs and requirements of the people
- You engage with private businesses to negotiate benefits for the city and its citizens
- You must balance the demands of smaller yet powerful groups with the needs of the majority of users



CREATING A LIVABLE STATION AREA

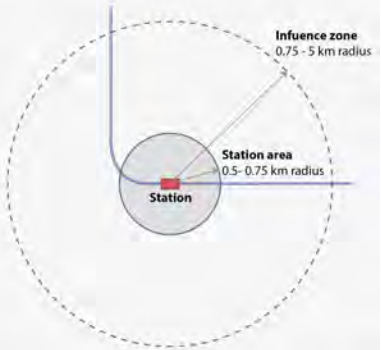
An interactive activity on 'Enabling Safe Access to Mass Transit'

	Recommendations	Government	Private	People W	People G	People T	People C	Final Collaborative Choices
Public Realm	a. Provide and maintain universally accessible amenities (bus stands, drinking water fountains, street benches, toilets) in the station area							
	b. Provide basic amenities at lower costs with no special considerations given to vulnerable groups in the station area							
	c. Provision of minimal amenities (only public toilets) in the station area							
	d. Provide designated vending spaces distributed at key vantage points in the station area							
	e. Restrict vendors to one location in the station area							
	f. Designate the station area as a vending free zone							

	Recommendations	Government	Private	People W	People G	People T	People C	Final Collaborative Choices
Feeder Services	a. Provide segregated bus lanes in station area							
	b. Buses share road space with mixed traffic in the station area							
	c. Restrict the movement of buses in the station area							
	d. Provide dedicated drop-off, pick up points and stands for autos and cycle/e rickshaws in the station area							
	e. Provide dedicated drop off point near station entrance but no stand							
	f. Allow autos and cycle rickshawas to stop anywhere on the side of the road for flexibility in the station area							

	Recommendations	Government	Private	People W	People G	People T	People C	Final Collaborative Choices
Pedestrian and Cyclist Priority	a. Provide universally accessible footpaths and optimal carriageway in the station area							
	b. Focus on ensuring adequate carriage way for smooth movement of traffic and also provide adequate footpath which may not be universally accessible in the station area							
	c. Provide maximum carriageway with minimal footpaths in the station area							
	d. Provide segregated and protected bicycle lanes with dedicated signals at junctions in the station area							
	e. Provide cycle lanes by marking on existing carriageway but not necessarily dedicated signals at junctions in the station area							
	f. Cyclists are required to share carriageway with the traffic in the station area							

What is a station Area



How to play the ' SAM game board'

Step 1: Choose a principle from 5 given principles

Step 2: Pick your role play card

Step 3: Pick 1 of each set of 3 strategies individually

Step 4: Pick 1 of each set of 3 strategies collectively

Step 5: Apply these stragegies to the chosen Stn.area

	Recommendations	Government	Private	People W	People G	People T	People C	Final Collaborative Choices
Safety and Security	a. Design streets to reduce automobile speeds (speed tables, speed bumps, signal etc.) in the station area							
	b. Focus on only regulating speed in station area							
	c. Allow unobstructed flow of traffic in the station area							
	d. Create active street edges with adequate illumination to improve safety for all especially women and vulnerable groups in the station area							
	e. Create street edge with adequate illumination but no activity in the station area							
	f. Allow high compound walls and on-street parking for safety and convenience of private property owners in the station area							

	Recommendations	Government	Private	People W	People G	People T	People C	Final Collaborative Choices
Parking Management	a. Designate immediate station area as no parking zone for automobiles in the station area							
	b. Allow only paid parking in the station area							
	c. Allow free on-street car parking in the station area							
	d. Provide free safe and secure bicycle parking within the station area							
	e. Provide free bicycle parking only at the station entrance							
	f. No designated bicycle parking in the station area							

SAFE ACCESS WORKSHOP

WRI INDIA — ROSS CENTER

	Recommendations	Government	Private	People				Final Collaborative Choices
				W	G	T	C	
Pedestrian and Cyclist Priority	a. Provide universally accessible footpaths and optimal carriageway in the station area							
	b. Focus on ensuring adequate carriage way for smooth movement of traffic and also provide adequate footpath which may not be universally accessible in the station area							
	c. Provide maximum carriageway with minimal footpaths in the station area							
	d. Provide segregated and protected bicycle lanes with dedicated signals at junctions in the station area							
	e. Provide cycle lanes by marking on existing carriageway but not necessarily dedicated signals at junctions in the station area							
	f. Cyclists are required to share carriageway with the traffic in the station area							

	Recommendations	Government	Private	People				Final Collaborative Choices
				W	G	T	C	
Parking Management	a. Designate immediate station area as no parking zone for automobiles in the station area							
	b. Allow only paid parking in the station area							
	c. Allow free on-street car parking in the station area							
	d. Provide free safe and secure bicycle parking within the station area							
	e. Provide free bicycle parking only at the station entrance							
	f. No designated bicycle parking in the station area							

	Recommendations	Government	Private	People				Final Collaborative Choices
				W	G	T	C	
Public Realm	a. Provide and maintain universally accessible amenities (bus stands, drinking water fountains, street benches, toilets) in the station area							
	b. Provide basic amenities at lower costs with no special considerations given to vulnerable groups in the station area							
	c. Provision of minimal amenities (only public toilets) in the station area							
	d. Provide designated vending spaces distributed at key vantage points in the station area							
	e. Restrict vendors to one location in the station area							
	f. Designate the station area as a vending free zone							

	Recommendations	Government	Private	People				Final Collaborative Choices
				W	G	T	C	
Safety and Security	a. Design streets to reduce automobile speeds (speed tables, speed bumps, signal etc.) in the station area							
	b. Focus on only regulating speed in station area							
	c. Allow unobstructed flow of traffic in the station area							
	d. Create active street edges with adequate illumination to improve safety for all especially women and vulnerable groups in the station area							
	e. Create street edge with adequate illumination but no activity in the station area							
	f. Allow high compound walls and on-street parking for safety and convenience of private property owners in the station area							

	Recommendations	Government	Private	People				Final Collaborative Choices
				W	G	T	C	
Feeder Services	a. Provide segregated bus lanes in station area							
	b. Buses share road space with mixed traffic in the station area							
	c. Restrict the movement of buses in the station area							
	d. Provide dedicated drop-off, pick up points and stands for autos and cycle/e rickshaws in the station area							
	e. Provide dedicated drop off point near station entrance but no stand							
	f. Allow autos and cycle rickshawas to stop anywhere on the side of the road for flexibility in the station area							

Pune, India

TOD KP

EN-H01

HOW TO BUILD INSTITUTIONS AND ENABLE INTERGOVERNMENTAL COORDINATION

A step-by-step guide to identify project champions that can make TOD happen and ensure road safety within existing planning and development framework.

Type: Step-by-Step Guide

WORLD BANK GROUP TOD Global Platform for Sustainable Cities gef UKaid from the British people GRSF Global Road Safety Facility IBI WRI INDIA

INTRODUCTION

The success of TOD depends entirely on the abilities of the agency involved to create change. To enable these agencies to work towards TOD goals, it is imperative to consider defining a complete framework that will support their work and enable greater coordination and more effective TOD interventions. This tool will help define the key requirements for an enabling framework, largely from the point of view on institutions and how they can work together for better results. The TOD Corridor Course (WB/WRI 2015) and Transforming Cities with Transit (Suzuki, Cervero, Iuchi 2013) formed the basis for identification of the key enabling factors that are covered in the tool:

- Influencing Leaders - This involves educating leaders about the benefits of TOD to ensure political support
- Build an Effective TOD Organization - This may be at the scale of a city or a station area. An organization with a well-defined structure will allow better coordination and buy-in for TOD goals across all city departments and the public.
- Aligning the Vision across scales - This is needed to ensure that TOD plans at one scale are not hindered by policy barriers at other scales. The planning process must allow for TOD to be possible at any scale.

REFERENCES:

MOUD (Ministry of Urban Development, India). 2016. Transit Oriented Development Guidance Document. Consultant Report, IBI Group, New Delhi: Global Environment Facility, UNDP and World Bank.

Suzuki, Hiroaki; Cervero, Robert; and Iuchi, Kanako. 2013. Transforming Cities with Transit: Transit and Land Use Integration for Sustainable Urban Development. Washington DC:World Bank.

World Bank; WRI (World Resource Institute). 2015. Transit-Oriented Development at a Corridor Scale Course. Washington, DC.

INFLUENCING LEADERS WITH THE BENEFITS OF TOD

Successful TOD relies heavily on the political capital of the city or jurisdiction's leadership. Irrespective of the type of leadership structure within a city, it is evident now that a well-informed and committed leader can help push the concept of TOD in order to improve the everyday lives and experiences of citizens, while also building resilience. For a TOD planner, the very first step to building an enabling environment is to convince the leadership of the benefits TOD can bring to the citizenry, environment, and public sector finances.

Ultimately, TOD can be contextualized to focus more on the specific needs of a city. For example, for a city with a flooding problem, TOD benefits may be focused more towards creating climate resilience through the strategic distribution of density and transport investments, such that least possible number of people are at risk during flood events. As a starting point, some benefits are listed here, adapted from the TOD Guidance Document (MOUD, India 2016).

SOCIAL BENEFITS

Increased mobility choices for all: Compact, walkable communities linked by transit. TOD provides much-needed mobility options, including options for young people, the elderly, the poor, and people who do not own cars or prefer not to use a car;

Improved economic accessibility: Increasing the reach of transit systems through TOD will enable more people to access economic opportunities that were inaccessible before;

Increased disposable household income: TOD can effectively increase disposable income by reducing the need for one or more car and reducing commuting costs;

Increased health benefits: TOD promotes a healthy lifestyle by making it convenient to walk and by providing the infrastructure that supports walking and bicycling;

Increased road safety for all: TOD promotes walking and bicycling; hence road safety measures are essential for a safe and secure user experience;

Increased public safety and security: TOD encourages "24-hour" activity in a mixed-use environment and provides "eyes-on-the-street" that increases one's overall sense of security and safety in an area; and

Increased housing choices for all: Encouraging high-quality diverse housing products (mixed income, owner-occupied, rental and workforce housing) within TODs is an important goal. TOD can contribute to the affordable housing supply by offering incentives to the private sector such as density bonuses and location efficient loans in transit-served sites in exchange for lower cost housing products.

ECONOMIC AND FISCAL BENEFITS

Improve economic efficiency: A city developed based on TOD principles enhances interactions between people and firms leading to agglomeration benefits.

Increased land values and property tax revenues: Access to transit results in a significant increase in the property values of nearby properties, provided the transit system has good regional connectivity and frequency of service;

Increased transit ridership: Placement of more people close to transit and providing mixed-use amenities and safe access to transit justifies higher service frequencies and promotes high ridership levels (including attracting new riders that may otherwise choose to drive), enabling transit to be more competitive with the automobile;

Increased opportunities to cross-subsidize transit: Monetization of land parcels in close proximity to transit for income-earning activities such as real estate development, retail lease, and/or paid parking, can create an additional revenue stream for transit operators;

Reduced costs on road infrastructure: TOD can effectively reduce the need for major road projects such as flyovers and expressways, which have low person/road km usage but very high construction and maintenance costs; and

Reduced costs on municipal infrastructure: TOD can help reduce the need for new infrastructure costs (such as water, sanitary, sewer and roads) for local governments and property owners by limiting the extent of sprawl that needs to be serviced. While initial infrastructure improvements may be necessary to support additional density and ensure road safety in resource-constrained locations, utilizing decentralized infrastructure services in higher density areas will lead to self-sufficiency in the long term.

ENVIRONMENTAL BENEFITS

Conservation of resource lands and reduced urban sprawl: Provision of more compact patterns of growth at urban infill sites conserves agricultural and natural lands that would otherwise be consumed by sprawling development;

Climate Resilience: Compact development patterns will allow the city to avoid developments in climate-affected areas and enable the city to concentrate on climate mitigation measures within a smaller area;

Reduced rates of vehicle kilometers traveled (VKT): Savings in travel times and unit vehicular operating and maintenance costs;

Space efficiency: Less land is required to move a small number of transit vehicles relative to a large number of automobiles carrying the same number of people;

Energy efficiency: Less energy is needed to move one person by transit than by automobile, assuming normal transit vehicle loading conditions; and

Better air quality: Since less energy is required to move people, fossil fuel-based transit vehicles emit smaller amounts of smog-forming and climate change-inducing pollutants, thereby reducing air pollution rates.

Safe urban environments: TOD projects encourage implementation of complete streets and universally accessible public spaces leading to creation of green networks and safe spaces for all users.

HOW TO STRUCTURE A TOD ORGANIZATION

Cities that decide to commit to large TOD projects should enact, through law or other appropriate official decision, the creation of a special body (task force, committee or agency) that, from inception, has deep ties to the TOD Plan. This organization must be held accountable to the public and operate with a very clear transparency and mission. The organization will promote the development of planning research, design master plans and regulations, oversee implementation and continued adaption of systems and coordinate with planning guidelines and professionals from different levels of government and the private sector. It is crucial that this agency exists outside of the political sphere to ensure long-term ownership, management, and security of singular vision. To further ensure legitimacy, the organization should receive its budget from a percentage of the revenue garnered from the TOD. This motivates continued dedication to creating and maintaining the effectiveness of the system. A funding mechanism built into the TOD revenue streams will also ensure its exemption from political budgetary issues and protect the government from further economic stress.

PURPOSE

Establish clear roles and responsibilities for the TOD Organization to facilitate partnerships and coordinate implementation activities in a structured manner. This tool provides a step-by-step guide for identifying project champions at the individual and organizational levels, preferably city staff, representatives from NGOs or local advocacy groups, that will remain engaged throughout the planning process.

01 IDENTIFY MANDATE OF TOD ORGANIZATION DEPENDING ON SCALE

MANDATE AT DIFFERENT SCALES

CITY/ REGIONAL SCALE TOD

POLICY AND REGULATORY ORGANIZATIONS

- Engage with political leaders and other decision-makers in goal setting and vision building for establishing transit supportive development policies
- Collaborate with other agencies to take an active role in addressing policy-level barriers to TOD

CORRIDOR/ STATION AREA SCALE

TECHNICAL PROJECT-SPECIFIC ORGANIZATION

- Define project-specific planning processes and mechanisms that can make TOD happen within the existing planning and development framework
- Provide both technical and financial assistance, as well as oversee implementation to evaluate progress and quality of work

02 IDENTIFY KEY PARTICIPANTS

CITY/ REGIONAL SCALE TOD

PRIMARY PUBLIC SECTOR PARTICIPANTS

- ☐ *Who owns and operates city/regional transit services?* Include ALL agencies

AND

- ☐ *Who creates regional growth/economic strategy?* Include ALL agencies/departments

AND

- ☐ *Who creates and enforces development control regulations?* Include ALL agencies from all local jurisdictions

AND

- ☐ Government organization(s) involved in affordable housing/ heritage preservation/ environmental protection/ road safety.

SUPPORTING PARTICIPANTS/ COMMITTEES

- ☐ Non-profits involved in affordable housing/ social safeguards/ heritage preservation/ environmental protection.

AND

- ☐ Private sector associations/ trusts involved in real-estate development/ business and commerce.

CORRIDOR/ STATION AREA SCALE

PRIMARY PARTICIPANTS

- ☐ *Who owns and operates transit services?* Include primary corridor transit agency

AND

- ☐ *Who owns majority land around stations?*

Private individual landowners → Include: Non-Profit representing landowners

Private large landowners → Private landowner

Public large landowners → Public landowner

AND

- ☐ *Who creates and enforces development control regulations?* Include specific agencies

AND

- ☐ *Who provides infrastructure services?* Include all agencies, including water, energy, drainage, road safety

SUPPORTING PARTICIPANTS/ COMMITTEES

- ☐ Real estate developers (3-4 may be invited through tendering)

AND

- ☐ Transit feeder service operators (including ride-sharing services if applicable)

AND

- ☐ Experts in affordable housing/ heritage preservation/ environmental protection as needed.

03 DEFINE TYPE OF INSTITUTIONAL STRUCTURE

TYPES OF STRUCTURES

CITY/ REGIONAL SCALE TOD	CORRIDOR/ STATION AREA SCALE
• Regional/Metropolitan Policy Committee - to review and formulate policy changes • Metropolitan/City Regulations Formulation Committee - to formulate transit-supportive regulations • Public + Non-Profit Coalition - to lobby for TOD supportive policies in legal framework	• Technical TOD Task Force - to conceptualize TOD Plan with road safety provisions, seek funds, and implement the proposals • Public + Non-Profit Coalition - to oversee TOD planning and implementation against goals and targets • Public-Private Partnership - to finance and implement TOD projects

04 DEFINE COORDINATION MECHANISM

- Decide frequency of meetings with primary participants and with supporting participants and committees.
- Define mode of documenting and recording meeting minutes and medium of communicating them to the public
- Decide timelines/ frequency of public meetings or workshops to ensure continuous communication with the public
- Define coordination needs with other agencies not participating in the TOD organization at federal or other jurisdictional scales or from other planning sectors

05 NOTIFY THE APPOINTMENT OF THE ORGANIZATION

- Follow the city's existing protocol for notifying the organization.
- Notify the mandate of the organization and the TOD-specific goals for the city or project as relevant.
- Notify the yearly budget needs of the organization and source of funding. As far as possible the source of funding should be continuous and reliable and not dependent on political factors.
- Notify the inter-agency coordination and assistance requirements from various inter-government agencies to achieve the specific goals of the organization.

ALIGNING THE TOD VISION

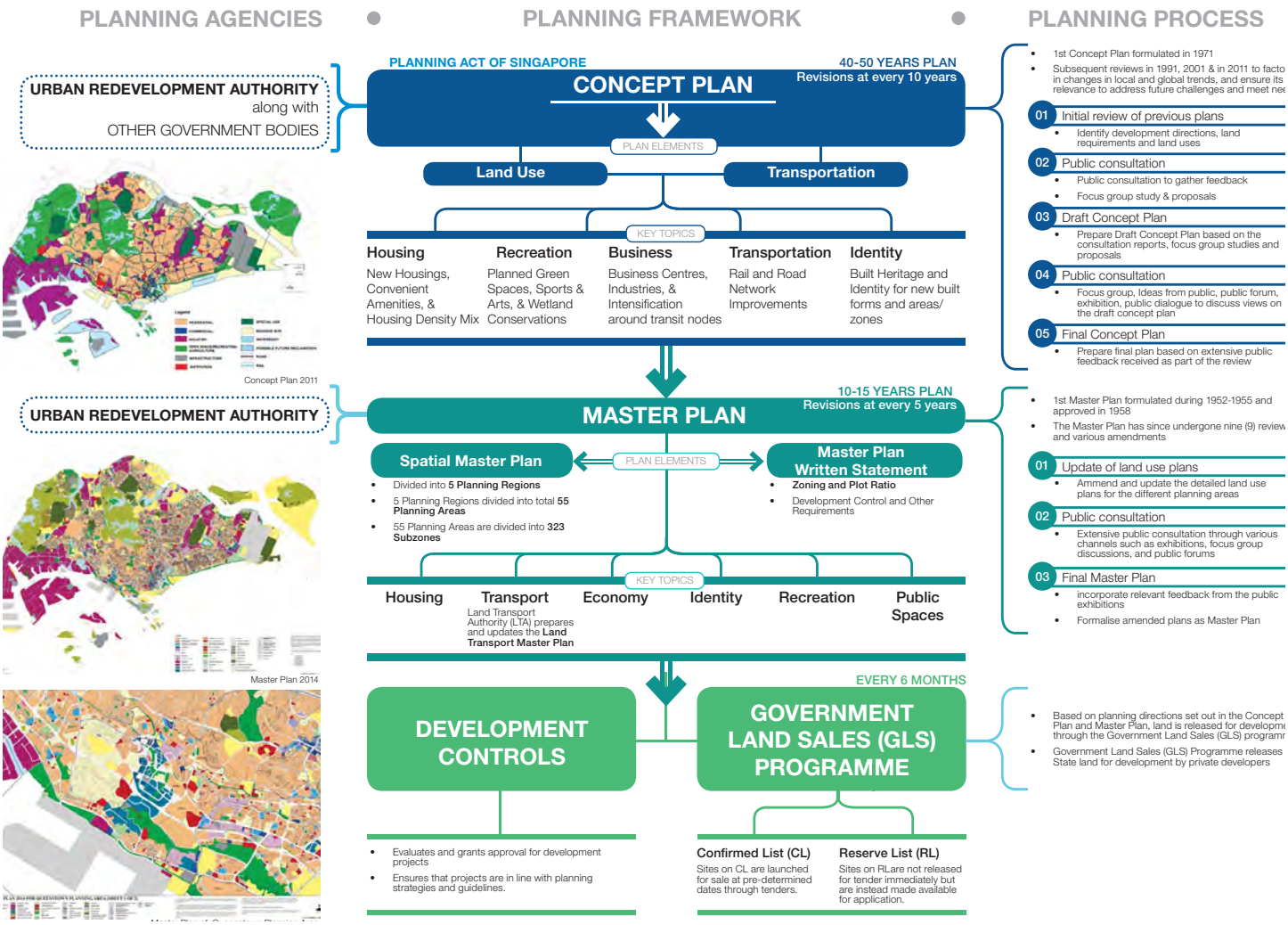
A strong long-term vision must allow the flexibility of accommodating short-term goals, without compromising the values for a long-term transformation. As cities across the globe continue to grow and encounter new challenges, they are faced with the challenge of addressing local concerns within the legal and policy framework set by federal or state authorities. TOD, a new and innovative concept in many parts of the world, challenges the traditional planning paradigm of car-oriented cities, cemented during the early 70s and 80s. To enable a TOD-supportive environment, then one must identify and target larger legal and policy barriers that impede successful TOD.

Some of the typical legal and policy barriers that should be tackled include:

- **Policy encouraging car ownership** - This is true of countries on the high-income scale such as the US to low-income countries such as India. Car manufacturing and sales is a huge industry and many countries incentivize car sales for the sake of national profits. Fuel is also subsidized so that car ownership and driving in incentivized over public transport. There is a need for more awareness about the ill-effects of private automobiles and non-renewable fuel at the national level and local level lobbying must aim to contribute to such awareness campaigns. While this is a long-term process, many cities such as London and Singapore levy a congestion charge, to discourage car movement in dense city areas.
- **Parking is considered a free right** - Parking in many countries is considered a basic right and is also supported by legal precedents. In such cities, prohibiting parking or charging a price for parking generates public conflict. This, in turn, makes it difficult to get public buy-in for TOD projects. Parking prohibition must, therefore, be tackled in a context-sensitive and phased manner, so as to maintain public interest in TOD goals.
- **Land ownership and development rights are absolute** - In countries such as Brazil, India, Mexico, land ownership and development rights are absolute. This makes it very difficult for public agencies to acquire land for transit or TOD investments. Such rights would need to be looked at within the legal context to identify ways of making TOD
- **Public transport is not considered a public service** - In many cities the high cost of fuel and tolls, along with no provision of public subsidy, make it very difficult to maintain public transport operations. There is a need to educate leaders about the social and economic benefits of subsidizing public transport.
- **Road safety is not considered crucial in the planning and implementation process:** It is often believed that road safety is more a matter of human behavior than a matter of infrastructure. There is a need to encourage and consider road safety as an important component of TOD to ensure safe road environments are created for safe behaviors from all types of road users.
- **Urban Planning Standards at federal and state levels promote single-use sprawled planning conventions**- Many regional, state or federal planning guidelines promote sprawling planning standards in terms of minimum road widths and block sizes that discourage compact development plans. There is a need to improve standards to allow for high density, compact development patterns.
- **Rent Control or Land Ceiling Acts** - such acts, if not revised periodically based on city-specific conditions unfairly tweak the real estate market, causing major speculation and an unaffordable real estate market. Many dense cities such as Hong Kong SAR, China and Mumbai were not able to leverage real estate opportunities at the right time due to rent-control measures.
- **Planning Acts are not flexible** - This is one the biggest challenge in many cities. The process followed for statutory planning must adhere to the relevant acts, which in many cases does not allow for an integrated land use and transport planning approach. This discourages the probability of land use and transit planners working together and deriving the combined benefits of TOD.

The example of the Singapore Planning Model below illustrates a well-structured Planning Framework that allows for collaboration between different planning sectors and enables flexibility between long-term and short-term goals.

- The Concept Plan is a strategic land use and transportation plan that guides Singapore's development over the next 40-50 years. Reviewed every ten years, the Concept Plan outlines the strategies to provide the physical capacity to sustain a high-quality living environment
- The Master Plan is a statutory plan that guides the development over 10 to 15 years. It translates the broad, long-term strategies of the Concept Plan into detailed plans for implementation by specifying the permissible land uses and densities. It is reviewed once every five years. The planning strategies to achieve the vision for Master Plan are presented through six key focuses: Housing, Transport, Economy, Recreation, Identity, and Public Spaces. The Land Transport Authority prepares and updates the Land Transport Master Plan, which informs the Master Plan.
- The release of State land for development is carried out through the Government Land Sales (GLS) programme which releases State land for development by private developers. To facilitate timely development of new, selected large-scale areas, Urban Redevelopment Authority (URA) also works with other government agencies to ensure that basic infrastructure and utilities are provided.



Sao Paulo, Brazil

TOD KP

EN-R01

ROLES AND RESPONSIBILITIES OF STAKEHOLDERS

Standardized analysis of stakeholders involved in planning and implementing TOD

Type: Reference Document

WORLD BANK GROUP · TOD · Global Platform for Sustainable Cities · gef · UKaid from the British people · GRSF Global Road Safety Facility · IBI · WRI INDIA

INTRODUCTION

Experiences show that collaboration is a key ingredient to creating an environment that enables the promotion of TOD. Identifying partnerships early-on between different levels of government, multiple transportation and planning agencies, security agencies, agencies involved in infrastructure works, private developers and citizen groups are essential to overcoming political and economic hurdles in creating successful and safe TODs.

As TOD is a new concept, lower and middle income countries typically do not have the regulatory frameworks in place that allow for flexibility in zoning regulations and enabling road safety measures, incentives in exchange for infrastructure improvements, or use of financing tools such as land pooling. Ensuring an enabling environment for transit-oriented development is an attractive proposition for developers and users, requiring public-sector contributions and political will.

PURPOSE

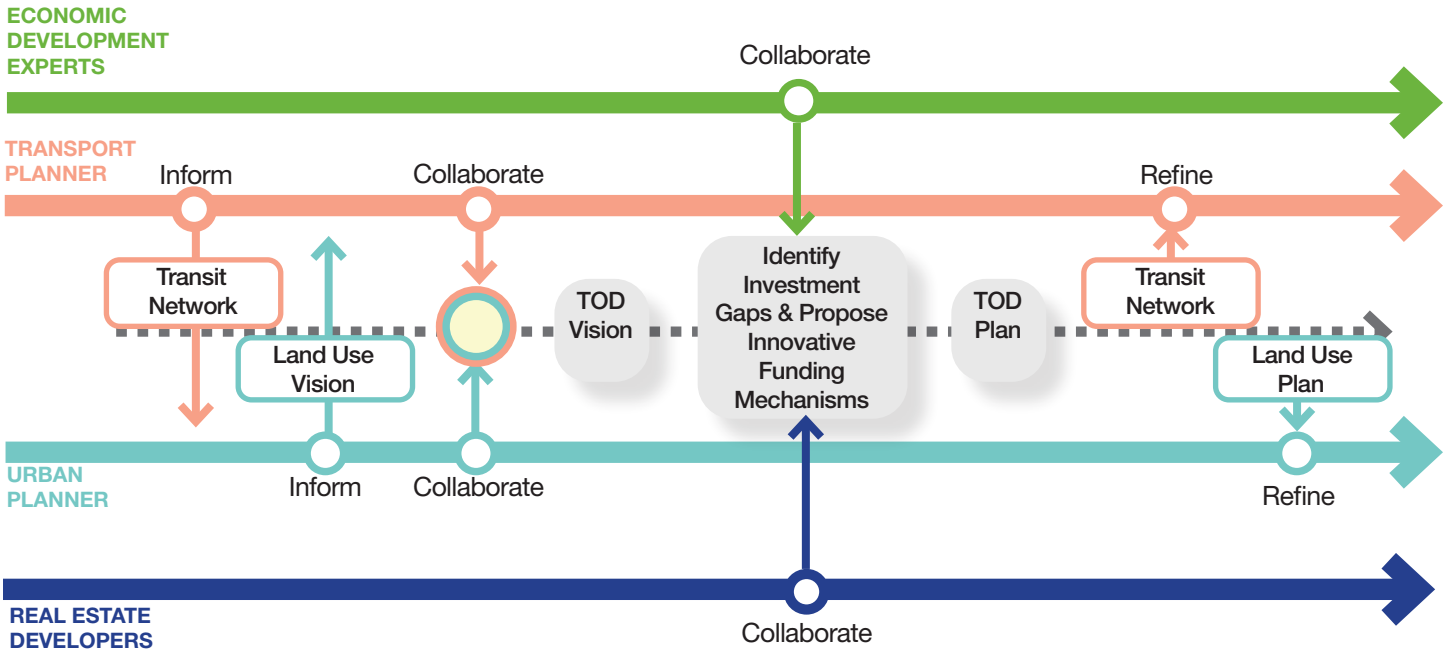
During the assessment stage, it is crucial that factors that enable local governments to initiate, plan and implement successful TOD projects be identified from the beginning. Strong leadership and support may include actions such as issuing policy directives to require transit systems to maximize land development potential, advocating for a community-driven neighborhood planning process in TODs, ensuring safety for all road users – especially vulnerable users (pedestrians and bicyclists) or bringing private sector players to undertake TOD projects in a city. This tool identifies the roles and responsibilities of the various stakeholders included in a coordinated TOD implementation programme.

RESPONSIBILITIES FOR VARIOUS STAKEHOLDERS

STAKEHOLDER	ROLES AND RESPONSIBILITIES
LOCAL GOVERNMENTS	Systems (transit and infrastructure) planning, master planning (city and corridor), local area planning (station area and neighborhood), development control regulations and building by-laws, site plan review and approvals, infrastructure upgrades, land assemblage, active marketing of TOD opportunities, developer incentives, secure financing, enforcement (traffic police) and public outreach
TRANSIT AGENCIES	Infrastructure investment, station design, systems planning, transit service, land assemblage, active marketing of TOD opportunities, secure financing and joint development of stations with the private sector
REGIONAL PLANNING AGENCIES OR METROPOLITAN AUTHORITIES	Long-range transportation planning, regional transit planning, regional growth management, technical assistance to local agencies and monitoring of urban transport funds
INFRASTRUCTURE AGENCIES/ PUBLIC WORKS	Support planning and transit agencies in formulating short-range and long-range goals, developing mechanisms for achieving these goals, provide technical assistance and expertise to support urban growth and safety, help develop infrastructure
POLICE & SECURITY AGENCIES	Prepare and maintain road crash data inventory, identify road safety and security concerns within the city and station areas, review design interventions and safety plans
PRIVATE SECTOR ENTITIES	Provide financial support for TOD implementation, joint development of infrastructure in public-private partnerships, construction, investment in real estate and funding transport system operations
CITIZENS, NGOs AND ADVOCACY GROUPS	Advocacy for NMT improvements, community participation in planning and design, get educated, attend planning meetings and advocate for high-quality design
ELECTED OFFICIALS	Developer and citizen awareness about the benefits of TOD, changing regulatory climate, advocate transportation demand management policies and local economic development incentives
BUSINESSES/REAL-ESTATE DEVELOPERS	Joint development with transit agencies, public-private partnerships, affordable housing construction, private sector investment in real estate and employee incentives
STATE GOVERNMENT	Policy changes, funding assistance, capacity building, technical assistance, Land and Market Reforms
CENTRAL GOVERNMENT	Policy changes, guidelines formulation, funding assistance, and capacity building

COMMUNICATION BETWEEN STAKEHOLDERS

The government needs to facilitate TOD proposals that are intrinsically based on the urban context of the city. The transit agencies within each level of government, aside from being managers and planners, need to be leaders in preparing and implementing TOD. They also need to adapt to a new organizational hierarchy that can handle the planning and implementation, as well as the long-term management of the TOD system. Typically, responsibilities for various stakeholders in a coordinated TOD implementation programme at the city scale, for example, would include a back and forth communication as shown below. Similar communication patterns will need to be defined at the corridor, station area, and site scales for efficient collaboration between stakeholders



TOD KP

EN-P01

COMMUNICATION STRATEGY TERMS OF REFERENCE

Template for hiring a PR agency to analyze potential risks, plan and implement a TOD communications strategy for the community

Type: TOR Template

TOD Global Platform for Sustainable Cities WORLD BANK GROUP IBI

BACKGROUND

It is believed that a good deal of the benefit of transit investment comes from effects beyond their already high value as mobility enhancements and is found in their ability to positively affect the communities in which we live. It is necessary to generate awareness among all the stakeholders about the key components of the project and how they would benefit from it.

A community outreach programme is a process by which all the stakeholders are informed of the project objectives and its utility. A comprehensive approach should be developed to engage relevant agencies, corridor neighborhoods and businesses, key stakeholders, and the general public throughout the process. The outreach program will include policy and technical advisory committees, public meetings, presentations at neighborhood and business associations, websites and social media, a variety of communication tools, and direct outreach to non-traditional populations and organizations. Stakeholder workshops and/or public open houses will be held at key points in the TOD Planning process including, at a minimum: (1) discussion of problems, goals, objectives, evaluation criteria and alternatives, and data gathering (2) evaluation of alternatives, and (3) selection of the locally preferred alternative. Project information should be translated, as appropriate, to allow for effective outreach.

OBJECTIVE OF THE ASSIGNMENT

A systematic and comprehensive community outreach programme highlighting the key components of a transit oriented development and benefits to the locals will help in disseminating the required information to people. The objectives for the Programme shall be as follows,

- To build a positive identity for the TOD project
- Create an awareness amongst the citizens about the project and it’s benefits
- Educate and attract new riders for benefits of shifting to public transport and guide on how to shift
- Educate and attract people to live in the proximity of a public mode of transportation
- Induce a shift to public mode of transportation
- Inform and prepare the public regarding the difference and any difficulties they are likely to face during the implementation of the project. Also seek their co-operation, and receive their feedback to improve the proposal specific to the context.
- Identify key stakeholders and build strong partnerships with media and the society for smooth implementation of the project

The coverage for the community outreach programme would be the entire city and suburban area, and wherever the existing transport services are being operated.

SCOPE OF ACTIVITIES

The urban local body intends to outsource both Consultancy and Implementation work to an agency such that the single agency is responsible for the most effective outreach plan. The scope of work will be in two stages. During the first stage, the consultant would be required to develop a Communication and Outreach Plan (hereinafter referred to as Plan) conforming to the objectives detailed above. Subsequently, in the second stage, once the Plan is approved by the client in consultation with the World Bank (WB), the consultant would be required to implement the Plan. All the related cost of conducting seminar/workshop, publicity material, advertisement in the newspaper, etc. to be published on behalf of the client but are to be borne by the consultant. Consultant would be required to station a team within two weeks from the date of final acceptance of the Plan and for a period of four months at the respective city. The consultant will also be required to attend meetings as and when required. The publicity material and advertisements length, size, words, etc. will depend on what has been finalized in Plan. The approximate requirement is provided under each heading for their reference. The client will help facilitate the Public involvement process.

Stage I:

1. Preparation of Plan

Develop an external analysis based on a planned study (to be conducted as part of this consultancy) to understand the perceptions of various identified stakeholders, including civil society, media, and potential users. Identify opportunities and risks, and suggest approaches to address them.

2. Communication Strategy

Prepare a customized communication strategy, including customized messaging for audiences, selection of media tools, etc. aimed at achieving the identified objectives.

3. Development of Plan

Develop a “Plan” based on the communication strategy that would broadly include the following elements:

a. Goals, desired outcomes and expected outcome of the communication strategy
b. Definition of audience
   Issues with specific focus on different user groups like elderly, woman, children, students, differently-abled etc. / theme linked audiences (these are indicative and will need to be defined as part of the Communication Strategy and Consultation Plan)
c. Assessment of current attitudes/beliefs/motivators
d. Analysis of audience’s capacity for change
e. Definition of medium to deliver the message(s) based on activity requirement including the needs of proper consultation as well as publicity at various level / target audience.
f. Consultation Plan: Formulate and discuss the consultation plan for disseminating information on the project to the civil society through focus group discussions, workshops, seminars etc. The plan should follow the following structure and reflect the needs of communication at each stage:

Table 1: Structure of the Consultation Plan

Stages of the Project/Actions	Objectives	Risks and Challenges	Audience/ Main Stakeholders	Messages (Information to be Communicated)	Means of Communication	Timeline/ Frequency	Responsibility	Resources	Indicator of achievement for respones
	1	2	3	4	5	6	7	8	9
Defining Goals and Objectives									
Planning and Design									
Evaluation of Alternatives									
Selection of Alternatives									
Implementation									

g. Branding:
A theme for land use and transportation integration and specific branding aimed at promoting TOD. The brand identity that is identifiable and popular for key segments of the population and catch phrase for population to link with the brand/ theme

h. Marketing Campaign:
Marketing campaign for transit oriented development to promote sustainable urban development. This would involve campaign through appropriate media such as:

- Print and posters
- Advertisements in the local newspapers
- Radio
- Television
- Web
- Mobile Communication SMS feeds etc.
- Knowledge management activities such as workshops/ seminars
- Exposure/ competitions etc.
- Campaigns like car free day, bike day, bus day etc.
- Street and Station Signage

i. Media and Civil Society Relationship Management
   - Close engagement with media (print and electronic) assigned to cover the sector / project with information and perspectives
   - Close engagement with relevant civil society organizations (CSOs) to keep

j. Events:
   - Planning for various public events, workshops, seminars, competitions and awareness programmes etc.
   - Participation in national / regional level events including national/ international study tours
   - Events should allow focus on engaging in TOD related discussions and learning from best practices as a way to educate decision makers and people, thereby creating awareness and buy-in to the TOD concept.

k. Communication System:
   Definition of communication system within all stakeholder agencies in terms of who communicates and structure of the communication cell.

l. Feedback Mechanism:
   The Plan should propose setting up of Public Information Centers and must formulate a suitable communication mechanism to facilitate receipt of feedback and grievances from the general public.

m. Impact / Outcome Monitoring:
   Mechanisms to measure Impact / Outcome monitoring including behavioral changes with regard to proposed actions. This would include methodologies and protocol to assess impact of various actions on the user in terms of relevance and satisfaction with regard to the interventions.

n. Documentation:
   Suggest a documentation process including recording for capturing important events, media reports etc.

o. Timeframe:
   Definition of timeframe of communication.

4. Process to be followed while finalizing the "Plan"

The consultant would prepare a draft Communications and Outreach Plan in consultation with the client. A workshop would be organized by the client to which the concerned stakeholders, etc. would be invited for deliberations. The consultant would be required to modify the "Plan" after the inputs received in the workshop.

Stage II

This stage would involve implementation of the components of the approved Plan. In consultation with the client, the team of consultants shall implement the Plan. The various activities to be carried out in the implementation stage are broadly discussed as under, but not limited to:

1. **Advertising and promotions campaign for TOD:**

A marketing campaign strategy and implementation plan, aimed at achieving the identified objectives needs to be devised. The consultant shall suggest the preferred mix of the various advertising and promotional components as part of the strategy, which should cover:

- Preparation of advertisements, slogans, hoardings and other
- Encourage use of sustainable transport modes among the commuters of the city
- Special outreach strategies to capture the attention and understand the needs of special groups such as health and emergency service providers, women & children, students, etc.

2. **Design of Tools / materials and launch of campaign in relation to the requirements of the consultation plan as well as publicity requirements.**

The consultant team shall design 'Tools of Communication' in relation to the priorities, communication focus and need of consultation as identified earlier. And based on the design guidelines as outlined below, the consultant would prepare the materials and initiate launch of various activities outlined in the strategy. The consultant will also launch the campaign, and build consensus through consultation. This would include information dissemination through the web and newsletters etc.

3. **Preparation of design guidelines, Graphics and Templates:**

This would involve design of the Brand, make graphic standards (such as logo) for various facilities, organize posters & painting competitions, etc. The consultant will have to create a brand identity for the project which would include but not limited to evolving:

- Tag line / slogan
- Posters showing nearest rapid transport station
- Organizing competition programmes leading to finalization of a brand logo for the project.

4. **Media and Civil Society Management:**

Production of press releases, blogs, brochures, and organization of press briefings, media visits, along with placement of media articles, daily media monitoring and monthly analysis.

- Organize meetings, launch events, awareness programs, and targeted outreach with key opinion leaders in the city. After each consultation, the team is expected to submit a report outlining the key recommendations, relevance of these recommendations and means and methods of converting recommendation into action points on the Communication Strategy.
- Digital Media – Facebook/ Instagram/ Twitter/ Whatsapp – Design and content management
- Improvement to website and sms facility

5. Advertising

- Develop the print campaign
- Design and production of Radio campaign
- Design SMS message campaign

6. Short presentations and videos (one 3-5 min video)

Videos for schools, offices, etc. to deliver identified messages

7. Public Events:

Planning various public events like car free day, bus day etc. in consultation with communication cell of the client. Planning and organizing focus group discussions to familiarize residents about TOD concept, brain storming sessions, etc.

8. Public Information Centres and Feedback Mechanism:

The consultant must help the client to set up Public Information Centers (PICs) and assisting in training of the staff. It must also help the client to set up mechanisms to receive user/ public feedback as recommended in the Plan.

9. Impact / Outcome Monitoring:

Measuring & Evaluating effectiveness of Outreach Program

10. Documentation of Processes and Events:

- Prepare documents and video clips to present the processes and activities involved in planning and design of TOD, including public views and perception at each stage of the project. After each stage of consultation, prepare a summary outcome report as well response to each of the comments / suggestions received from the stakeholders.
- Develop quarterly plans for information dissemination, perspective sharing and risk management. Prepare monthly newsletter to be published on the client's website and prepare quarterly report indicating various activities undertaken.

11. Measuring & Evaluating Effectiveness of Outreach Program

The public outreach efforts for promoting TOD must be continuously evaluated to find the most effective approaches. The task must include:

- Evaluation at the end of each outreach effort to gather information that can be used in future outreach efforts.
- The program must have a built-in component which provides a way of finding out what works and what does not.

The consultant must:

- Keep track of how stakeholders heard about TOD and their response for a sample size of 500 commuters / influencers / households; to better understand the effectiveness of various initiatives. This can be undertaken in two phases - one post the initial activities and close to end of the outreach programme.
- Track the number of people attending the outreach efforts and their suggestions and feedback.
- Record Minutes of Meetings / Programs by Audio Visual
- Track media response
- Create a Summary Report of Observations and Recommendations

DELIVERABLES AND TIMELINE FOR SUBMISSION

The consultant shall commence work within a week of signing of the contract and shall submit a Draft Plan within 4 weeks of commencement of work. All deliverables are due within 4 months of commencement of work. During the rollout stage, consultant shall submit monthly progress report. The firm should submit the PERT Chart for the Planning and implementation schedule proposed by them.

Stakeholder engagement plan; stakeholder engagement summary report; newsletters, website content, presentation materials, public meetings, advisory committee meetings, meeting notes, translation services, and other engagement tools identified in stakeholder engagement plan.

TASK	DELIVERABLE	TIMELINE (from date of signing the contract)
Stage I		
1	Memo #1: : Inception Report (including Understanding of priorities, key themes and proposed work plan)	P + 2 weeks
2	Memo #2: Preparation of Draft Communication and Outreach Plan	P + 4 weeks
3	Memo #3: Final Communication and Outreach Plan	P + 10 weeks
Stage II		From week 10
4	Memo #4: Documentation of processes, events, audio and video	Ongoing
5	Memo #5: Three News Letters	Monthly
6	Memo #6: Two Quarterly Reports	Quarterly

*where P is the date of award of the contract

QUALIFICATION OF CONSULTANTS

The Consultant Team must have experience in at least

A. One similar Communication and Outreach Program for TOD Projects

OR

B. At least two studies, which included communication and outreach for a transit project or a large mixed use high density development project

The Consultant Team must include the following key expertise:

	Key Experts	Years of Experience
1	Project Manager and Public Relations Expert	15 years
2	Branding and Wayfinding Specialist	5-10 years
3	Urban Planner / Designer	5-10 years
4	Graphic Designer	5-10 years
5	Public Relations Expert / Social Worker	5-10 years
6	Expert in Communicating Real Estate Development Opportunities	10-15 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.*

Bogota, Colombia