

# Bringing the TOD Corridors Modules Together:

## A supplementary exercise

The purpose of this exercise is to bring together the concepts and ideas laid out in the modules and provide a structure for practitioners to contextualize and apply these concepts to their own cities. Through a series of questions, organized by six overarching themes that feature the ten thematic building blocks presented in module three, the exercise will guide the user to contemplate the universe of questions and inquiries that must be explored to enable TOD corridor development. The questions outlined in this exercise are not intended to be exhaustive, but comprehensive enough for the user to understand the application of these themes, potential barriers, and solutions for the short and long-term.

### 1. Government Regulation

This section explores the political, institutional, regulatory and stakeholder environments that must be considered to enable and gain support for a TOD corridor. Identifying who must be involved (from public, private, and civil sectors) and who shares a common vision which fosters TOD can help build strong coalitions of support that can overcome opposition and other obstacles. TOD projects often fail due to current regulations prohibit many of the core components of a TOD project, such as mixed use zoning. Furthermore, these projects can move slowly through approval processes as they can be more complex and unfamiliar than non-TOD projects, serving as a disincentive to developers. Understanding institutional structure and regulations provides a foundation from which to charter a path to move a TOD project forward. It can also bring to light where future adjustments to current regulation and institutional structure can be improved and chart a path for updating laws, policies and procedures that are more conducive to and can even fast-track TOD projects.

#### Political Leadership and Vision

High ranking leaders that are champions of TOD have often served as the catalyst for successful TOD initiatives. Consider who will make good allies and who will need convincing keeping in mind the long-term implementation process of TOD project and the need to withstand changes in political administrations. Map these actors and develop a long-term plan to unify across a common vision for TOD and insulate against political cycles. Questions to consider include:

- Is there existing political will for TOD?
- Who are the main public actors (national, state/provincial, municipal, local) who must be involved and what are their positions on TOD? Consider jurisdictional boundaries within the corridor.
- How can changes in political leadership and vision affect progress of the project?

#### Institutional Structure

Implementing TOD projects at a corridor level requires the coordination of multiple public sector entities across different levels of government. However, too often, these sectors work in silos and fail to align efforts to achieve common goals. At the minimum, TOD projects demand the harmonization of

transportation and land use planning. Map relevant public sector actors and their powers along with the existence of any institutional arrangements that bring together multiple sectors across a common project. Ideally these institutional arrangements will convene representatives from the private sector and civil society – harnessing wider support and a common vision. This process will help determine whether existing institutional structures are conducive to cross-sectoral coordination and inclusion of private sector and civil society, and if not, it can help clarify any needed interventions to establish more coordinated institutional structures going forward. Questions to consider include:

- Who are the main institutional public sector actors (including national, provincial, metropolitan and local level) that must be or should be involved (e.g. transportation, land use planning, housing, water, environment, public works, and economic development)?
- Does/will the corridor stretch across multiple jurisdictions? What are the potential jurisdictional barriers?
- Are there existing institutions, such as line agencies or special purpose vehicles, which are used to convene multiple sectors around a development project?
  - What is the capacity of these institutions and their staff?
  - What powers are entrusted within these entities?
  - Do these entities engage private sector and civil society groups (e.g. Public Private Partnerships)?

### Regulatory Environment

At their best, policy and regulatory tools, such as zoning and building codes, can create compact vibrant cities that exemplify the positive social, economic and environmental benefits of TOD. But at their worst, they can serve as barriers which undermine the principles of TOD and instead create sprawling, inefficient and lifeless urban areas. Failure of the regulatory environment to promote TOD is often the result of a disconnect between sectors, most notably transportation and land use. Reflect on the current regulatory environment in your city and determine whether there are any inconsistencies between the principles of TOD and existing building codes, zoning and land use plans. Are long-term transportation and land use plans integrated across a common vision? Identifying these inconsistencies early on is worthwhile as it allows for preemptive action to overcome obstacles and move toward a more integrated and TOD conducive regulatory environment. Questions to consider include:

- Are long-term transportation and land use plans integrated?
  - If not, are they consistent with each other? How can they be made consistent?
  - Do long-term plans express a vision that supports TOD?
  - Are local and corridor plans consistent with the broader city-wide and regional plans?

- How well do current policy and regulatory tools (e.g. zoning and building codes) foster and incentivize TOD? Reflect on the design components (module four) featured later in this exercise.
  - What can be done to update outdated regulatory tools that disincentives or prohibits TOD in the short-term? In the long-term?
  - Is there a way to ensure that stakeholder concerns (addressed below) are taken into account to update or revise regulations and policies?

### Stakeholder Engagement

TOD projects that genuinely engage the private sector and civil society are more successful in garnering enduring support. This is essential in overcoming the uncertainty that can arise due to political cycles that often bring new administrations and priorities. While it can be tempting to focus the greatest attention on those private sector and civil society groups that support TOD projects, stakeholder engagement requires the involvement of all parties, regardless of their position on TOD. Furthermore, there must be a meaningful engagement strategy and processes that allow for active participation by stakeholders which is transparent, inclusive and which incorporates stakeholder feedback into project goals and implementation. Map the relevant stakeholders and assess the effectiveness of existing stakeholder strategies to develop an inclusive stakeholder engagement process. Questions to consider include:

- Who are the relevant stakeholders from the private sector and civil society?
- Are there established stakeholder engagement processes that are transparent, inclusive and that incorporate feedback from stakeholders?
  - What engagement techniques have been used to successfully achieve good representation from the community and private sector as well as ongoing communication in both directions?
  - Does the city have a grievance redressal mechanism for complaints about the project?

## 2. Physical

This section explores the impact of TOD on the built environment through the lenses of design and infrastructure. With its cornerstone principles of increasing density, most intensely around transit; promoting mixed-use development that is serviced by high-quality public and non-motorized transportation; prioritizing public space for people and transit over personal vehicle; and creating networks of green and public spaces, TOD developments shape both the public and private realm to be more compact, connected, and coordinated. However, ensuring that TOD projects are successful means careful consideration of infrastructure requirements needed to sustain increased densities.

### Design

TOD directly shapes urban form to create compact, connected and coordinated cities. However, these projects also strive to create livable, vibrant and inviting communities that are in high demand. Striking the right balance to achieve well-planned TOD requires careful attention to design. The design components of TOD include densification of urban areas, high-quality and connected networks of public

transit and non-motorized transport, mixed-use development, creation of public and green spaces, preservation of community identity, and resilience. Evaluate current conditions within the TOD corridor to determine how well it characterizes each of these design principles. This will help focus efforts to better facilitate TOD design and allow for a more strategic plan of action. Questions to consider include:

- Do areas around public transportation contain or allow for higher densities? If not, is there a plan to increase the capacity of the existing systems to absorb the higher density?
- Does the public transit corridor connect to residential and employment hubs within the urban core?
- Is the public transit corridor well-connected with other major and secondary transit corridors?
- Does the corridor contain complete networks of sidewalks and bike paths that are connected to transit stations?
- Are sidewalks of ample size to properly accommodate the service, pedestrian and front-of-building zones? Are these zones properly utilized?
- Are vehicle demand management strategies in place? Do they promote improve road safety? Reduce parking requirements?
- Do buildings along the corridor and at station areas contain a mix of uses? Does the TOD corridor contain and connect a variety of regional and neighborhood facilities?
- Are design principles such as active ground floors and public-private transitions adequately implemented?
- Are networks of public and green space well-distributed across a corridor?
- Is place identity and cultural heritage preserved?
- Are streets made available for community events?
- Is the TOD corridor placed in an area of low risk for natural disasters?
  - Are corridors designed to handle some degree of risk?
  - Are stakeholders aware of appropriate behavior in response to a disaster?
  - Are redundancies incorporated into corridor design?

### Infrastructure (Transit + Other)

When thinking about TOD infrastructure, public transit is most commonly addressed. While this is an important component of TOD it is only one of several infrastructure requirements that are needed to support TOD. Non-motorized transport infrastructure (walking and cycling networks), for example, is critical in providing last mile connectivity and promoting local trips through more sustainable means. With increased density comes increased pressure on drinking water, wastewater, stormwater, electricity, gas and host of other infrastructure. Furthermore, cost considerations for brownfield versus greenfield development must be weighed. Identify existing infrastructure and determine whether it is complete and able to handle increased demand. Questions to consider include:

- What type of transportation will current and future ridership support?
- Are principles of complete streets – roads that safely accommodate all users – applied across the corridor?
- What is current capacity for non-transport related infrastructure (e.g. water, sewage, stormwater management)?
  - Will current infrastructure be able to handle increased demand?
- What are the costs of development in greenfields compared with brownfields?
- What additional social services (e.g. health, education, and daycare facilities) must be provided with increased density?

### 3. Financing

One of the greatest barriers to TOD projects is financing. Because these projects, especially at a corridor level, require coordination between multiple stakeholders and over long periods of time, projects can quickly lose momentum or never get off the ground. Therefore, it is necessary to understand the challenges and devise a business model for TOD investments. Questions to consider include<sup>1</sup>:

- What investment components make up the TOD investment?
- What funding sources can be unlocked over the course of the investment?
- What financial products exist to mobilize third party capital?
- What arrangements, contracts and legal basis, distribute risks and responsibilities?

### 4. Land

Land is often the most valuable asset a city possess to leverage TOD. It can be used strategically, and as a tool to place the different players on the same table. Many funding and financing tools covered in this course can be used to harness land assets. Finally, given the variety of land-ownership regimes, diverse tools and cooperation between different entities is key to assemble land for TOD corridor projects.

- Where are the city's landholdings?
- What is the market value of the land?
- Is there a cadaster in place?
- Which voluntary and involuntary tools can the city use for land acquisition?
- Will the TOD station areas require land amalgamation to be attractive for private sector investment?

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<sup>1</sup> Questions directly sourced from: Maassen, Anne, Masullo, Indira and Julián Sosa (forthcoming 2017) A business model framework to accelerate transit-oriented development (TOD) investments in emerging cities. Working paper, World Resources Institute.

## 5. Social, Economic & Environmental Assessment to Support Social Inclusion, Local Economic Development, and Resilience Goals

The concept of Inclusive Transit-Oriented Development (TOD) can be defined as a TOD with an explicit intention to provide equitable access to housing and opportunities through offering affordable housing and mixed-use. Inclusive TOD is concerned with not only the implemented outcome of an inclusive physical development but also an inclusive process of design and development of the TOD. Understanding the socio-economic context is important for achieving social inclusion goals to assure that the corridor provides housing and associated services for all income levels, as well as mixed-use to generate jobs and help create a vibrant economy and spaces. An understanding of the environmental context helps ensure climate-resilient development and growth as well the risks to address them.

- What are the demographics of the corridor? Does this data exist?
  - Household income?
  - What are the travel modes and behavior at household level?
- Are growth dynamics likely to displace existing residents and businesses?
  - Are there policies in place to assist the displaced (both residents and businesses)?
  - What are policies and incentives to ensure that affordable housing is available along the corridor?
- What are the economic conditions for TOD?
  - Where is employment and housing growth projected?
  - How is the current residential and commercial real estate market functioning? How is this likely to change with the development of the corridor?
  - Are current regional and neighborhood facilities sufficient to meet current and future local demand? Are these considered in the broader planning and budget processes to ensure well serviced areas that will attract investment around the corridor?
- What are the environmental considerations for a TOD project?
  - Is the land to be developed protected?
  - Does an environmental impact assessment need to be completed? Does the area need to be remediated (e.g. brownfield development)?
  - What are the positive environmental impacts of the TOD corridor project?
  - Are stakeholders aware of the risks and how to respond should a disaster occur (government, private sector, and citizens)?

While the questions addressed here are often not considered, as they viewed as “soft,” the success of the corridor development project depends heavily upon them, and thus should not be overlooked.