



## EXECUTIVE SUMMARY

# Guide to Joint Development for Public Transportation Agencies

### About This Guide

*TCRP Research Report 224: Guide to Joint Development for Public Transportation Agencies* (henceforth, referred to as the guide) was commissioned by TRB through TCRP. The guide's over-arching purpose is to expand the successful use of joint development (JD) in North American transit systems—in the volume and variety of projects undertaken, the diversity of transit agencies participating, and the quality of outcomes achieved.

This guide is primarily geared to the needs and interests of U.S. transit agencies. It is aimed particularly at agency leadership and at professional staff working as practitioners in JD and the more encompassing field of transit-oriented development (TOD). Transit agencies in Canada will also find the guide helpful and relevant, although its institutional elements are written from a U.S. perspective.

The guide is not written solely or primarily for large rail transit agencies with robust JD programs; on the contrary, while the research team gathered a treasure trove of insight, information, and lessons learned from such agencies, the intended beneficiaries include transit systems spanning the full range of geography, technology, and ridership, including those in the early stages of JD activity or contemplating it.

Important secondary audiences include local and regional governments and private developers, lenders, investors, foundations, community development corporations, and other entities, both for-profit and non-profit, that are involved in JD.

This guide consists of nine chapters, summarized as follows.

### Chapter 1—Introduction

#### Navigating the Guide

Chapter 1 describes the research effort underlying the guide, provides a roadmap to JD literature, and establishes best practices as a focal theme. Chapter 1 also describes how the guide is organized and introduces the reader to several user-friendly navigation features. These include recurring iconography, abundant hyperlink cross-references within the document, and a glossary of terms.

#### Definition and Purpose

The guide seeks to establish a descriptive, practice-based definition of JD that can be widely embraced by those involved in it or seeking to be.

**Joint development** is real estate development that occurs on transit agency property or through some other type of development transaction to which the transit agency is a party. Joint development is physically or functionally related to a transit facility, and it often involves the coordinated improvement of a transit facility and the affected real property. Transit agencies actively participate in joint development, generally by contributing property or funding; they benefit from joint development by deriving revenues, increased ridership, or transit improvements.

This broad, transaction-based approach recognizes that, while JD often occurs on transit agency property at or near stations, it is not definitionally limited to such properties. A variety of transaction models is emerging in real-world practice involving land owned by other public or private entities, transit agency properties not associated with stations, and transit improvements funded by off-site developers. Moreover, in street-running bus, bus rapid transit, and streetcar corridors, a transit agency may own little if any off-street real estate—but need not assume that it is precluded from JD.

Nor is the involvement of FTA a defining characteristic of JD. It is a goal of FTA policy and also of this guide to expand the opportunities of the FTA-Assisted Joint Development (FTA/JD) mechanism, described in detail in Chapter 6. But there is a great deal of JD in which FTA has no property or funding interest and is simply not involved.

Transit agencies indicate three broad reasons for undertaking JD: to raise revenue from the JD transaction itself, thus monetizing an agency real property asset to help fund capital improvements and on-going operations; to increase ridership and, consequently, farebox revenue; and to promote TOD as a strategy for placemaking, equity, sustainability, and smart growth.

## Research Effort

Detailed descriptions of the team's research and findings are available in a series of nine appendices, Appendices A to I. These are summarized at the end of this guide, and the full appendices are provided in *TCRP Web-Only Document 73*, downloadable from the TRB website.

The research team conducted three sets of surveys with JD stakeholders, including 32 transit agencies, 18 local or regional government entities, and 17 private sector companies. These pools were chosen to represent a broad diversity of geography, size, experience, and institutional type. Most of the government entities are in markets whose transit agencies were also surveyed as part of this effort. All the private companies have worked with at least one transit system represented in the survey. These overlaps allowed the research team to compare transit agency perspectives to those of their local government counterparts as well as private developers. The survey instruments and the full research reports on the three sets of surveys are available in Appendices A to D.

In addition to the surveys, the research team conducted an extensive review of the relevant literature. The goal was not only to gain information for use in preparing the guide but to provide readers—especially transit agency practitioners—with a roadmap for their own use. The team found that JD literature is loosely defined, overlapping the much broader and more inclusive body of work on TOD in general and more specialized research on value

capture, parking, and affordable housing. Useful literature on JD is found in academic, governmental, and popular forums.

The products of the literature review, available in Appendices E to H, include an annotated bibliography and survey discussion of 40 peer-reviewed works published since 2002; a detailed review of FTA's JD policy and its evolution; a review of the published JD policies of 10 U.S. transit agencies; and an index of on-line practitioner case studies.

**A note on the pandemic.** *The research was undertaken in 2019, before the advent of COVID-19. The guide was written in 2020, as the pandemic was decimating every aspect of life, including employment, real estate, and public transportation. While it is likely that JD activity will experience setbacks as real estate markets and transit ridership take time to recover, the research team and project panel believe that the findings and fundamental recommendations presented in the guide will transcend current health issues.*

## Best Practices

Throughout the guide, the reader will find an explicit focus on best practices, highlighted by the icon at the right. Best practices are those that have proven effective in real-world application, minimize risk to transit agency interests, advance widely accepted JD goals, and are consistent with good public policy.



The best practices identified in this guide reflect the research findings, the literature, the judgment of the authors, and the review of the project panel, many of whom are JD thought leaders and accomplished practitioners. Readers should recognize that:

- Individual practices are not universally applicable. One size never fits all, and an agency is not expected to change a successful policy or practice just because this guide identifies an approach used successfully by others.
- JD is an art as much as a science. This guide identifies best practices at a conceptual level; their details, nomenclature, and precise sequencing will be adapted by transit agencies to reflect local needs and customs.
- In some topical areas, the guide does not choose a single best practice but rather a range or menu of practices that have worked, in the authors' view, to advance the desired outcome.

The best practices identified in this guide are summarized in Figures ES-1 and ES-2. Taken together, they might be seen as a model best practice program—understanding, however, that not every practice will be applicable to the circumstances of every agency.

Figure ES-1 also serves as a high-level flow chart of the entire JD process. For agencies new to JD, it answers an obvious question: where do we start? For an agency seeking to create a JD program, or to evaluate, plan, and launch a single project, the foundational steps in Chapter 2 underlie everything that follows.

## Chapter 2—Creating a Joint Development Program

This is the first of four chapters on the sequential stages of the JD process. It focuses on the attributes, activities, and priorities of a successful JD program. For most agencies contemplating an on-going series of projects, such a program (tailored to the agency's size, scope, and portfolio) is foundational. Even if an agency contemplates only a single project





**Figure ES-1. Summary of best practices: stages of the joint development process.**

or two, the actions outlined in this chapter, at project rather than program scale, are the opening steps toward successful implementation. The chapter is organized around six best practices.

1. **Confirm that the enabling act is aligned with JD requirements; if not, seek an amendment.** For a transit agency to undertake JD, its enabling act (or equivalent charter document) must provide it with certain basic legal tools. These include the power to acquire and dispose of real property and broad, flexible power to contract with public and private entities. The enabling act must also confer the threshold authority to engage in or sponsor development—ideally as an explicit public purpose of the agency, but at least as an implicit application of its transit purpose.





#### CHAPTER 6: JOINT DEVELOPMENT AND FTA

- ❖ Pursue JD on property where FTA has an interest, including FTA-funded park & ride lots and construction staging areas.
- ❖ Where possible, use the financially favorable FTA-Assisted Joint Development method of approval and conveyance.
- ❖ Align the FTA process with the project's planning, solicitation, and implementation stages.
- ❖ Plan new FTA-funded corridors with an eye toward FTA-assisted JD as part of the project.

#### CHAPTER 7: ECONOMICS OF JOINT DEVELOPMENT STRATEGIES TO ENHANCE FEASIBILITY

- ❖ Define agency financial return based on residual land value, downstream participation, and enhanced farebox revenues.
- ❖ Make the pie bigger by working with the zoning jurisdiction to increase allowable density before initiating a project.
- ❖ Make the gap smaller by seeking state, regional, and local infrastructure or gap financing.
- ❖ Create a culture of predictability across all stages of the JD process.

#### PARKING AND JOINT DEVELOPMENT

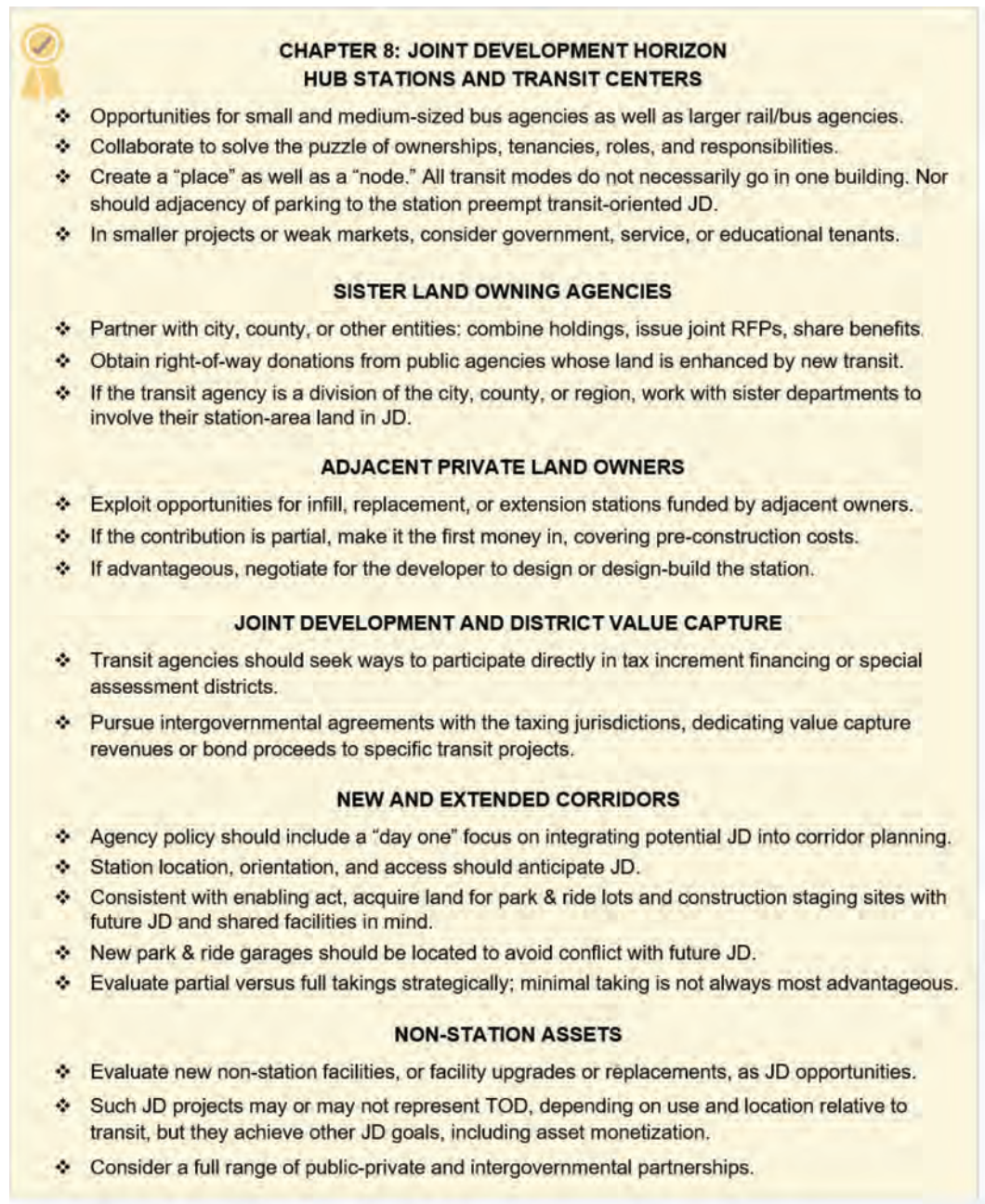
- ❖ Provide new transit passenger parking at appropriate stations only.
- ❖ Evaluate park & ride replacement on a case-by-case basis, allowing significant reduction or elimination where appropriate.
- ❖ Pursue reduced, TOD-friendly parking ratios for residential, commercial, and mixed-use JD.
- ❖ JD parking should be shared among uses, including park & ride where feasible.
- ❖ Parking should be located and designed so as to be compatible with TOD/JD.

#### AFFORDABLE HOUSING

- ❖ Promote affordable housing in JD projects. This may involve inclusionary requirements if the transit agency or zoning jurisdiction finds such measures appropriate.
- ❖ Reflect the economics of affordable housing in setting or negotiating the land value.
- ❖ Work with housing agencies to prioritize the site for applicable affordable housing subsidies.
- ❖ Work with local jurisdiction to secure density bonuses and reduced parking requirements.

**Figure ES-2. Summary of best practices: strategic crosscutting issues.**  
(continued on next page)

2. **Organize for success: build necessary skills and capacities through staff and consultants.** JD involves inter-disciplinary skills and capacities, many of them outside the traditional competencies of U.S. transit agencies. These include TOD planning, zoning, and community engagement; specialized legal, financial, and transactional knowledge; real estate market analysis; an expanded view of right-of-way management, design review, and construction oversight; and monitoring of long-term real estate contracts. The full range of these skills need not be developed in-house, especially at the depth required to manage multiple projects. Most agencies use a mix of core staff capabilities and specialized consultant support. It is essential that the staff be able to run the program (or project), solicit and manage consultants, and control decision-making.
3. **Organize for success: create an empowered TOD/JD office with strong reporting lines.** To be successful at a programmatic level, JD requires an office tasked with this mission,

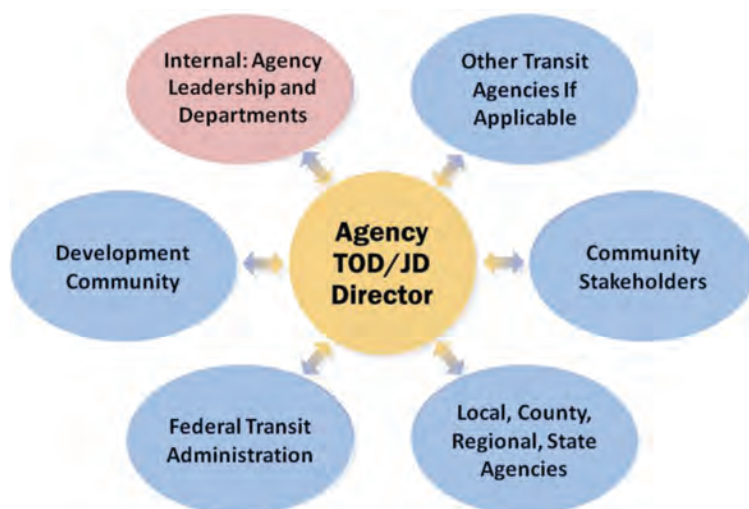


**Figure ES-2. (Continued).**

reporting to senior management and visible to the governing board. This office should also be responsible for the agency’s broader TOD agenda—not because JD and TOD are interchangeable terms, but because their skill sets, external relations, and policy issues overlap. (This guide uses the abbreviation TOD/JD to denote the combined agenda.) The TOD/JD office, and particularly its director, should combine knowledge of real estate development with the skills required to instigate projects; coordinate proactively among the numerous internal departments with a stake in JD outcomes; communicate with the agency board, FTA, local officials, and community leaders; and “translate” among actors with different perspectives and vocabularies (Figure ES-3).

4. **Create and maintain an inventory of potential JD sites.** To create a JD program, an agency must know what it owns. Which sites does it own outright, and where does it





**Figure ES-3. Director of transit-oriented development/joint development as coordinator, communicator, and translator.**

hold easement rights that could aid development? Which properties are encumbered by an FTA interest, by easements held by others, by environmental restrictions, or by limits on disposition under state law? Which properties, while vacant or underutilized today, should be reserved for future system improvements? An agency with numerous real property holdings does not need perfect information about every conceivable JD site on day one, but an updated inventory is a basic building block.

5. **Adopt an official TOD/JD policy, commensurate with the agency's program and portfolio.** The transit agency should adopt and publish an official policy that tells staff, developers, local officials, and other stakeholders, in a single agency voice, how it will approach and implement JD. This is a step most of the agencies surveyed for this guide have taken or are actively pursuing. To the extent applicable, the model table of contents includes: the philosophy, definition, and goals of the agency's TOD/JD program; the relationship between JD and the agency's broader TOD agenda; a step-by-step procedural guide to the agency's JD process; the developer selection process, including an explicit policy with respect to unsolicited proposals; an explicit preference for conveying development rights by long-term lease rather than sale; an affordable housing policy appropriate to local conditions; and TOD standards, described next.
6. **Include TOD use, density, urban form, and parking standards in the TOD/JD policy.** It is a foundational principle of this guide that JD, as well as station area development in general, should be truly transit-oriented and not merely transit-adjacent. But such outcomes result from intentional practices; they are not automatically delivered by the market or by zoning alone. Agency policy should address the basic elements of TOD:
  - Compactness and density, relative to its surroundings;
  - Mixed-use development at the corridor level and, where possible, at the station level;
  - A safe, welcoming, interconnected public realm seamlessly connected to transit and to the street floors of buildings; and
  - Parking that is reduced, shared, well-designed, and located not to compete with TOD.

These elements should be addressed through standards that are specific and normative but also flexible and adaptable. For JD, the standards should be reflected in the planning and design guidelines that the agency creates for each project. For station area development in general, the standards signal the kinds of planning, zoning, and project outcomes the agency will support as a key stakeholder.

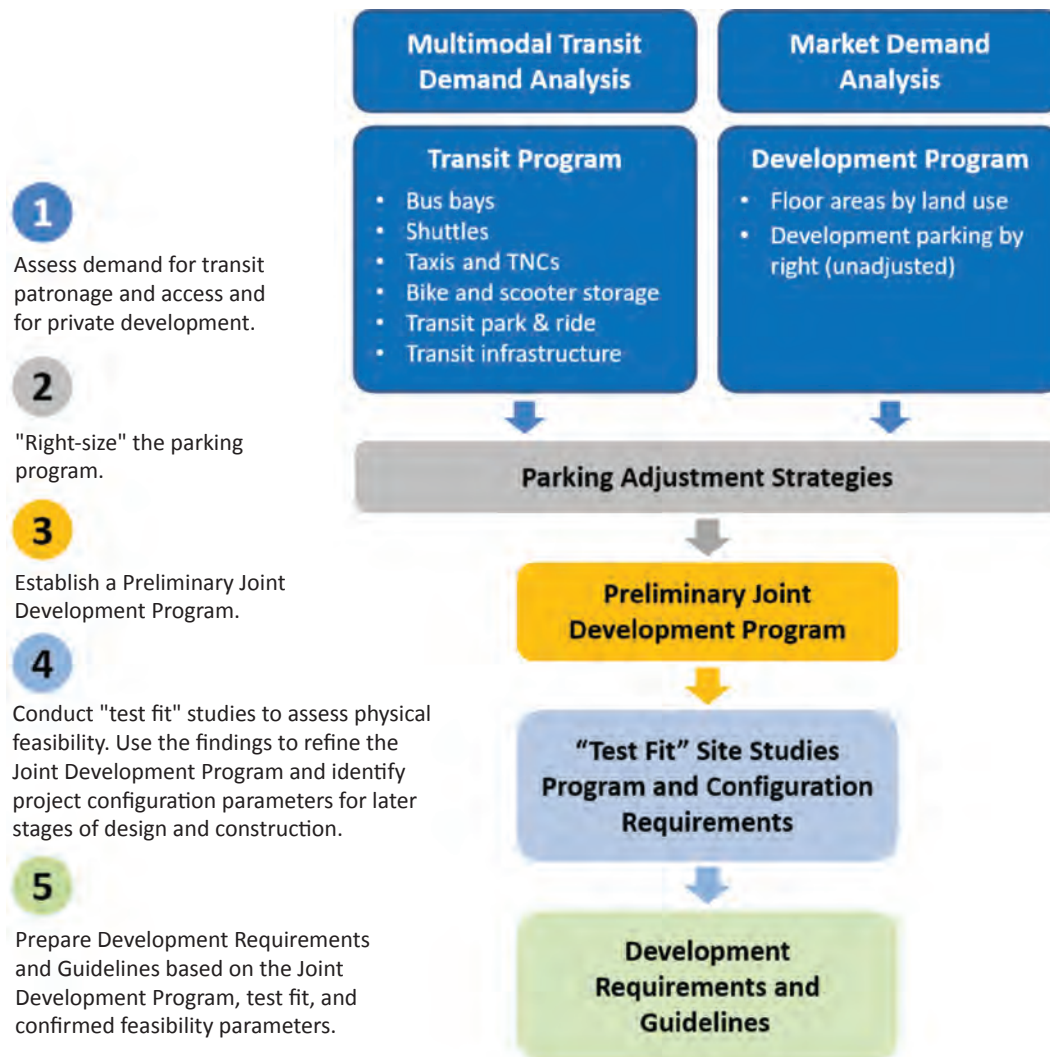


## Chapter 3—Planning a Joint Development Project

Chapter 3 addresses how a transit agency determines that a site under its control is ready for development and prepares to make it available through development requirements and guidelines (DRGs). This planning stage is a bridge between the TOD/JD program discussed in Chapter 2 and the solicitation of developers for site-specific projects discussed next in Chapter 4. The planning process consists, to the extent applicable, of five distinct steps, for which the recommended best practices are summarized below.

1. **Assess development readiness based on site suitability, market demand, transit connectivity, and jurisdictional support.** This is a high-level assessment, which may be undertaken on an ad hoc basis (because of specific internal or external interest in a site) or as part of an agency's periodic review and prioritization of its portfolio. Site suitability encompasses not only current availability and nominal land area, but topography, environmental constraints, legal encumbrances, and, critically, the degree to which some or all of the site might be needed for future transit improvements.  
The four criteria are interactive—for example, costly site conditions might be overcome by strong market demand. Marginal demand might be overcome by strong jurisdictional support in the form of rezoning or the commitment of development subsidies. Conversely, a suitable site with ample demand could be undermined by incompatible zoning.
2. **Perform predevelopment site planning to determine the transit requirements and conceptual development program.** This step, illustrated in Figure ES-4, is the heart of the planning process. Building on the development readiness determination in the previous step, the agency should examine transit demand and associated infrastructure requirements, market demand, parking requirements for both transit and development in a mixed-use transit context, and other means of station access. A test fit exercise can then demonstrate how these parameters can be combined into a preliminary program (or program alternatives) that the site and the zoning envelope can accommodate.
3. **Create DRGs to carry forward into developer selection.** The preliminary development plan can then be translated into DRGs to be included in the eventual developer solicitation. DRGs should not be excessively narrow; rather, they should reflect a balance of program elements that the agency considers must-haves (based on transit needs, site constraints, agency TOD standards, and zoning requirements) and those where development teams are invited to apply their judgment and creativity.
4. **Work with local officials and community stakeholders to vet the project and advance its entitlement.** Once the conceptual plan is in hand, the agency should work with local officials and community stakeholders to vet it, gain support, and, to the greatest degree possible, establish its conformity to local zoning. If the plan requires zoning revisions (such as greater density or reduced parking requirements) to be feasible, it is highly desirable that the actual changes, or at least a strong jurisdictional commitment to adopt them, be obtained before developer solicitation is launched.
5. **Establish the key parameters of the JD transaction.** Certain basic parameters of the anticipated JD transaction should also be determined prior to developer solicitation, because it is important for potential developers to be aware of them in preparing their submittals. These include the method by which the agency intends to convey the development rights (a long-term lease, an outright sale, or an alternative) and the intended roles and responsibilities of the parties. In particular, are there transit facilities, other public infrastructure, or common areas that the developer will be required to design and build, to operate and maintain, or to pay for?





**Figure ES-4. Joint development programming and site planning.**

## Chapter 4—Choosing a Developer

Once a JD project has been identified and planned, the pivotal step is to attract highly advantageous proposals from capable, trustworthy developers. In most cases, a transit agency is required (by law, by FTA regulations, or by its own governing board policies) to select developers through a competitive solicitation process that is fair, open, and transparent. Even if developer interest is first revealed through an unsolicited proposal, it is the policy of many agencies to then pursue such projects, if at all, through a competitive solicitation process. The discussion is organized around the best practices summarized below.



- 1. Determine the appropriate solicitation format.** The guide defines and explains the alternative methods of developer solicitation: Request for Qualifications (RFQ), Request for Proposals (RFP), Request for Expressions of Interest (RFEI), and simple Invitation to Bid (ITB). A transit agency may establish one of these as its preferred method or choose on a project-by-project basis. Either way, the choice should be made with the benefit of development community input. The three most common formats are a two-step RFQ/RFP process, which provides the most information but is normally the most

- costly and time-consuming; a one-step RFP; and a one-step RFQ. The pros and cons of each, and their impact on subsequent stages of the process, are illustrated in Figure ES-5.
2. **Define the selection process.** The solicitation document needs to spell out the procedural steps constituting the selection process and key process requirements associated with the selection. These include, among other things, the identity of the issuing and awarding authority (which is usually the transit agency but may also be a sister agency or the two acting jointly); the composition of the selection panel; the sequence and timetable of the evaluation and selection, including the intended role, if applicable, of short-listing, interviews, and a request for best and final offers; any team composition goals or requirements with respect to disadvantaged business enterprises; and a look-ahead to the process of negotiating a JD agreement and finalizing the development award once the selection has occurred.
  3. **Define the project, through DRGs reflecting prior predevelopment planning.** DRGs are explained in the summary of Chapter 3. Their inclusion in the solicitation package and the balance they strike between specificity and flexibility are critical to the quality of proposals received.
  4. **Avoid a price-only selection; using a multi-criterion best value approach, establish clear, project-specific evaluation criteria.** The need for evaluation criteria occurs at two stages. The first is the evaluation of the qualifications of the proponent teams to undertake the project in question. The key considerations are financial capacity (including commitments by investors and/or lenders), technical capacity and experience with projects of comparable type and scale (particularly on the part of the lead developer, lead design firm, and builder), the team's history of working together, compliance with any team composition requirements, and good standing in legal and ethical terms.

Unless an agency is required by law to select the highest responsible bid (which is not typically the case), the substantive merits of competing proposals should be evaluated on

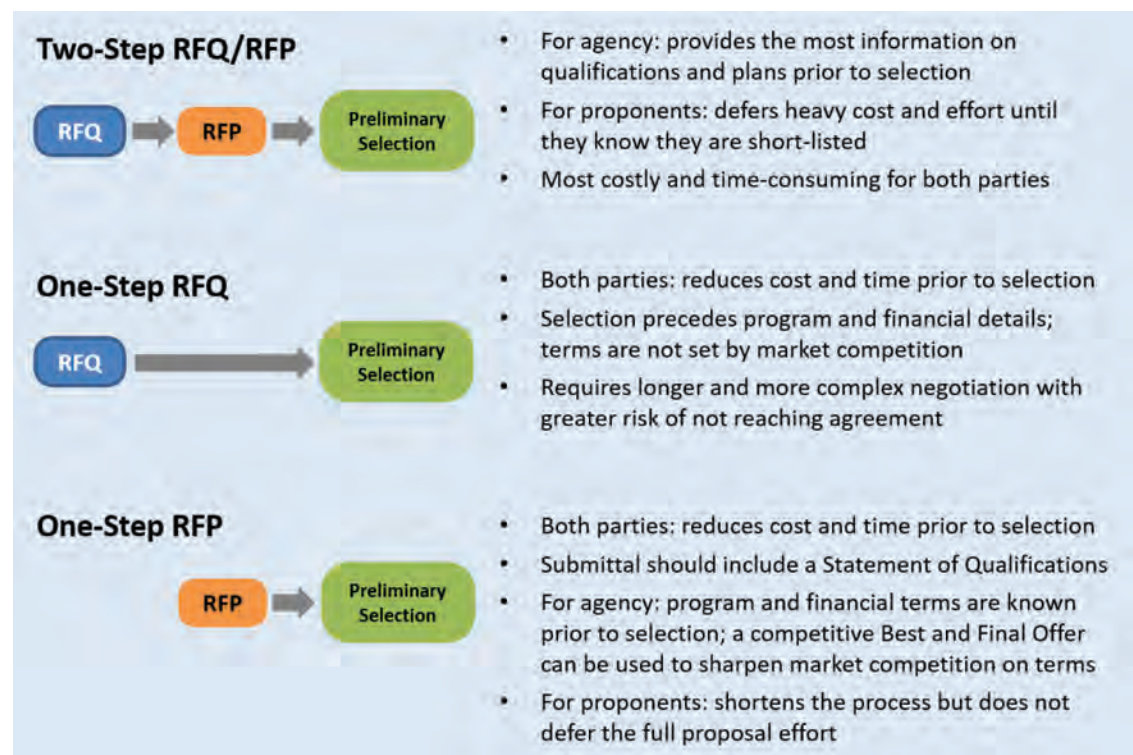


Figure ES-5. Comparison of principal developer solicitation formats.

a multi-criterion best value basis. These criteria should reflect the agency's JD goals, as specifically applied to the project in question, and should be stated in a clear, user-friendly way. If the financial offer is among the criteria, as it usually is, the RFP should make clear how it is to be calculated and whether there is a minimum acceptable level.

5. **Adopt a proactive policy for addressing unsolicited proposals.** A transit agency may welcome unsolicited proposals as indications of market demand or discourage them as disruptive of the JD work plan. Either way, they will occur, and it is essential to adopt and publish a policy that spells out standard procedures and avoids inappropriate expectations on the part of a proponent. Best practice begins with a threshold evaluation—at the agency's sole discretion—of whether the proposal is timely, potentially advantageous, and thus of potential interest to the agency:
  - If deemed not to be of interest, the unsolicited proposal is rejected up-front.
  - If deemed to be of interest, it is subjected to a competitive, advertised solicitation in which the original proponent is on roughly the same footing as any other bidder.
  - While some agencies retain the right to enter into direct negotiations (if legally permissible), this discretion is better limited to cases in which the unsolicited proponent is a sister public agency or a uniquely situated abutting owner.

## Chapter 5—Executing a Joint Development Project

While developer selection is a significant milestone, the project at that point has barely begun. Ahead lies a complex sequence of negotiating agreements; finalizing the developer award; advancing design, permitting, and financing; closing on the real property conveyance; overseeing construction of the project; monitoring the on-going, post-occupancy provisions to which the transit agency is a party; and, in the case of multi-phase projects, repeating these steps as applicable for each later phase. Throughout this process, it is critical to move as expeditiously as the facts allow—as agency practitioners and developers often say, “time kills deals.” The best practices for successfully navigating this process are summarized below.

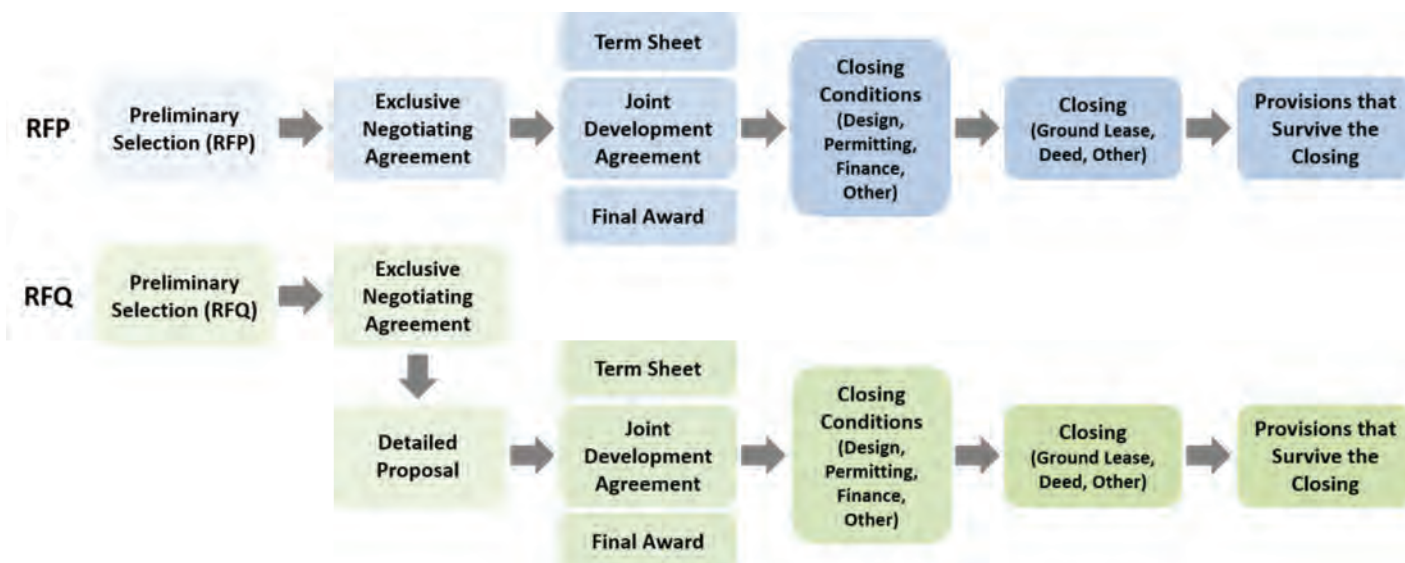


1. **Maintain inter-departmental coordination and review throughout the process, driven by the TOD/JD office.** Speaking with one voice and avoiding unwelcome surprises is essential in moving the process forward, maintaining developer confidence, and avoiding outcomes that unnecessarily compromise agency interests. This coordination, involving a range of operational and support departments, ideally began earlier during program development and site planning.
2. **Conduct an orderly sequence from exclusive negotiations to JD agreement to closing.** Preliminary developer selection (the decision that concludes the solicitation process described in Chapter 4) is typically confirmed by a board vote authorizing agency staff to enter into exclusive negotiations with the chosen developer. The ultimate objective is to arrive at a real estate closing—the conveyance of the development property and/or its development rights to the developer.

As shown in Figure ES-6, the closing, the substantive and legal conditions leading up to it, and the rights and obligations that survive it are governed by a master agreement, which in this guide is known as a JD agreement or JDA. Execution of the JDA is generally concurrent with the conversion of the preliminary developer selection into a final selection or award. (Some agencies break the JDA negotiation into two stages: a robust term sheet, in which the key issues are resolved, followed by the full agreement.)

The contents of a JDA vary among transit agencies and among projects of differing circumstances and complexity. Figure ES-7 presents a composite table of contents, encompassing items generally applicable to projects of moderate to high complexity.





Note: The blue sequence applies to selections based on a Request for Proposals. The green sequence applies to those based on a one-step Request for Qualifications, with the details to be developed after preliminary selection.

Figure ES-6. Sequence of events: negotiation, closing, and beyond.

<b>The Project: Substantive and Commercial Terms</b> <ul style="list-style-type: none"> <li>• The project's agreed-upon plan and program (text and exhibits)</li> <li>• The development schedule, with specific performance milestones</li> <li>• Agreed-upon phasing plan (if applicable)</li> <li>• Financial terms, including the amount, calculation, and schedule of payments to the transit agency for the development rights</li> <li>• Roles and responsibilities for design, construction, operation, maintenance, and funding of each project component</li> </ul>
<b>Procedural Provisions from the JDA to the Closing</b> <ul style="list-style-type: none"> <li>• Protocol for interaction with public officials and the press</li> <li>• Responsibility for concluding entitlements and approvals</li> <li>• Design review requirements and process</li> <li>• Relationship among the JDA, conveyance instrument (ground lease, deed of sale, or other), and surviving provisions</li> </ul>
<b>Closing Deadline and Closing Conditions</b>
<b>After the Closing: Building the Project</b> <ul style="list-style-type: none"> <li>• Construction period oversight, standards, and procedures</li> <li>• Maintenance of operations during construction</li> </ul>
<b>Durable Governance Framework</b> <ul style="list-style-type: none"> <li>• Measures for Satisfactory Continuing Control (if FTA is involved)</li> <li>• Limitations on subordination, change of use, sale, or assignment</li> <li>• Decision-making for transit, commercial, and common areas</li> <li>• Future financial or operational obligations and their enforcement</li> <li>• Defaults and remedies at each stage of execution</li> <li>• Risk protection and mitigation</li> </ul>

Figure ES-7. Joint development agreement: composite table of contents.

A pivotal component of the JDA is the closing conditions—the steps to be achieved before the closing can occur by each party. (The guide provides a sample listing.) Many of these conditions are the exclusive responsibility of the developer—for example, assembling the necessary financing and producing executed design and construction contracts. Others, like securing permits and entitlements and completing an approved final design, involve some degree of interaction between the developer and the transit agency.

Alongside the JDA, the parties typically negotiate the ground lease, deed of sale, or other instrument of conveyance to be executed at the closing. This conveyance instrument may supersede the JDA, incorporate it, or stand alongside it.

3. **Maintain an appropriate role in press and external stakeholder relations, entitlements, and permits.** From the start of exclusive negotiations, the transit agency should establish a protocol governing interactions with the press, community stakeholders, and other public agencies. This foreshadows the question of roles and responsibilities with respect to entitlements and permits. As discussed earlier, the transit agency should have vetted the project with local land use authorities and community stakeholders in the predevelopment planning stage. Ideally, these discussions will have settled zoning and other major regulatory issues before the developer solicitation process began.

Even if this has occurred in full or in part, there will almost always be entitlement and permitting work to be done once the developer has been selected. While this is typically a developer responsibility, transit agencies differ in the extent to which they remain involved. Best practice is to make the developer responsible for entitlements and approvals but not to hand them the keys. It should be clear that the transit agency will have input on strategy, will follow the process closely, and will be ready to step in as needed.

4. **Conduct design review and construction oversight based on the agency's published standards, the complexity and risk of the project, and its proximity to the station.** The JDA must provide for the transit agency's oversight of construction on its property, especially if it occurs in close proximity to operating transit facilities. The agency should maintain detailed design and engineering standards (an adjacent construction manual is recommended), providing engineering parameters for the design stage and on-site management, monitoring, and safety protocols for the construction stage.

For design review, there is a best practice hierarchy of priorities, with construction being the top design review priority, in immediate proximity to operating facilities, along with any facility the developer may be required to build on behalf of the transit agency. For residential and commercial buildings not immediately proximate to operating facilities, many agencies focus their review on conformity to the approved plan and any potential transit-related impacts.

5. **Establish a durable framework governing long-term project control.** The lease or deed executed at closing should include a framework ensuring that the agency retains certain key aspects of project control. These provisions may also be anticipated and summarized in the JDA. Described in detail in Chapter 5, they include appropriate limits on change of use, sale, or assignment; transit agency control of decision-making with respect to transit facilities and functions; for long-term lease projects, a non-subordinated lease structure; and for FTA-assisted projects, provisions for satisfactory continuing control. In projects with multiple phases, the JDA should include provisions that prevent the developer from sitting on the future parcels without advancing their development.
6. **Establish a durable framework to monitor and enforce long-term developer obligations.** Similarly, the agreements must ensure that the developer's future obligations, both financial and otherwise, are monitored and enforced. These include, most obviously, future payments, especially in a multi-tier ground lease where the base rent may be augmented by a percentage of future revenues and participation in any future capital event (such as

a sale or refinancing). Long-term developer obligations may also include the operation and maintenance of certain public infrastructure or common areas, as well as up-to-date safety and risk management provisions. All these obligations should be reflected in a practicable framework of defaults and remedies, commensurate with the transit agency's long-term capacity and commitment to monitor and enforce them.

## Chapter 6—Joint Development and FTA



The guide now pivots to three chapters addressing strategic topics that cut across the sequential stages of the JD process. The first deals with the federal side of JD. FTA policy broadly supports JD as a way of maximizing the impact of transit. That said, JD involving FTA land and jurisdiction is only a subset of JD across the country. Where FTA involvement does arise, their procedural requirements, the alternative ways of engaging them, and the costs and benefits of doing so are changing. This chapter is designed as a resource for transit agencies that have already worked with FTA on JD projects or have potential opportunities to do so. The discussion is organized around the best practices summarized below.

1. **Pursue JD on property where FTA has an interest, including FTA-funded park & ride lots and construction staging areas.** FTA jurisdiction, summarized in Figure ES-8, arises when either of two conditions is present: there is a pre-existing FTA real property interest in the site, by virtue of its having been acquired or improved with FTA funding assistance; or new FTA funding is being sought for a JD project or for the JD components of a new FTA-assisted transit project.

The conversion of FTA-funded park & ride lots into JD sites is a strategy encouraged by FTA and increasingly common among agencies with off-street rail or bus rapid transit stations. There is no threshold requirement of 1:1 replacement.

2. **Where possible, use the financially favorable FTA-Assisted Joint Development method of approval and conveyance.** When a proposed JD project involves an existing FTA real property interest, federal law and policy provide two alternative ways of accounting for that interest. One is FTA's defined JD mechanism, known as FTA/JD. In an FTA/JD project, the JD is an FTA capital project and the proceeds of the JD transaction are retained by the

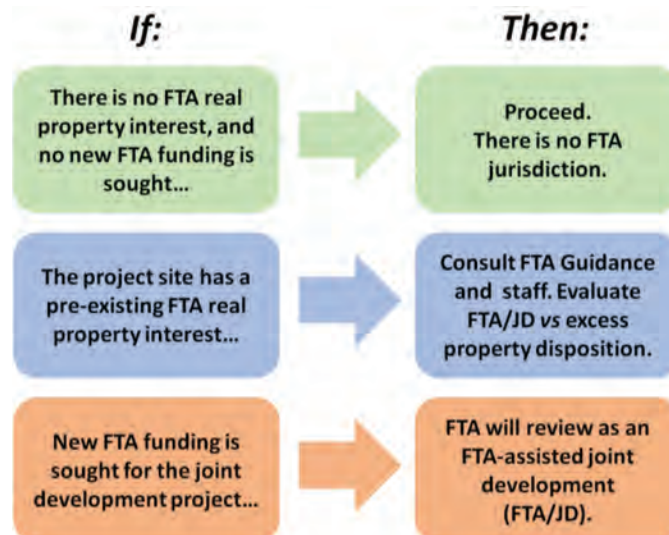


Figure ES-8. FTA joint development jurisdiction.

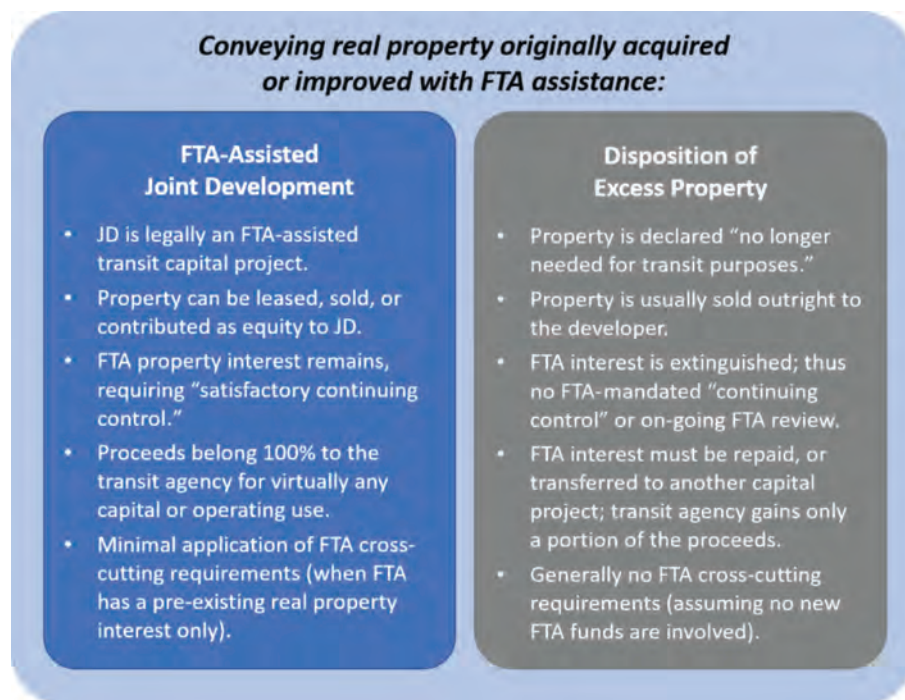


transit agency. The federal interest is not extinguished, and the conveyance must provide the transit agency with satisfactory continuing control.

The alternative method is to declare the property excess and dispose of it outright. While FTA must be consulted in either case, the two alternatives differ significantly in process, legal structure, and financial benefit to the transit agency. While transit agencies differ in their preferences, most of those surveyed for the guide with relevant experience prefer the FTA/JD method. Where possible, that is the recommended best practice.

The guide provides a detailed overview of FTA policy and practice, both for FTA/JD and for excess property dispositions, drawn from FTA's *Joint Development Guidance*, *Award Management Circular*, and other key documents. The pros and cons of the two alternatives, from the transit agency perspective, are summarized in Figure ES-9.

3. **Align the FTA process with the transit agency's planning, solicitation, and implementation stages.** The responsibility of determining whether FTA jurisdiction applies, and of reviewing JD proposals when it does, is delegated to the 10 FTA Regional Administrators. A best practice for any transit agency is to consult its FTA Regional Office in the early stages of creating a JD program or initiating a specific JD project. The guide provides a roadmap of how to mesh FTA consultation, review, and approval with the typical steps of a transit agency's JD process.
4. **Plan new FTA-funded corridors with an eye toward JD as part of the project.** The chapter concludes with a discussion of expanded opportunities for FTA/JD. Transit agencies seeking to advance new projects through FTA's Capital Investment Grants pipeline (or grants from other FTA programs) should be proactively mindful of potential JD opportunities. Construction staging areas and surface parking lots can be strategically sited to that end, and many elements of a JD project are eligible for FTA grant funds and the federal surface transportation loan programs.



**Figure ES-9.** *FTA-Assisted Joint Development and excess disposition alternative.*

## Chapter 7—Economics of Joint Development

This chapter seeks to enhance the reader's practical understanding of the economics of JD. When a transit agency initiates a JD solicitation or enters negotiation with a developer, how can it optimize the chances of concluding an agreement? At the end of the day, a project must be market-receptive and financially feasible, or it will not happen.

The surveys of transit agencies and private companies undertaken for this guide are revealing. Transit agencies undertaking JD are motivated, with varying emphasis, by the goals of financial return, enhanced ridership, and the benefits associated with TOD. Developers, investors, and lenders who are drawn to TOD/JD see a shift in the market toward urbanism and transit and an economic advantage in location efficiency—the transportation and other cost savings baked into TOD, not least of them the ability to cut back on expensive parking. Developers who have cultivated the skills and capacities to succeed in the TOD/JD space see themselves as wielding a competitive advantage.

The interests of the parties, while overlapping enough to envision an agreement, are by no means identical, as seen in Figure ES-10. Beyond the inherent push-and-pull over land value, two issues have emerged as cost and revenue drivers in many JD projects:

- Structured parking, whether for park & ride replacement or a JD program; and
- Affordable housing, which many local jurisdictions and an increasing number of transit agencies require or encourage as a matter of public policy.

### Strategies to Enhance Feasibility



Before turning to parking and affordable housing, the discussion begins with strategies to enhance the general prospects for feasibility, particularly around land value. The guide identifies four best practices.

1. **Define agency financial return strategically, based on residual land value, downstream participation, and enhanced farebox revenues.** A transit agency's expectations of financial return, and its assessment of the outcome, depend in part on how they defined financial return in the first place. This is a broader concept than the developer's proposed cash payments—it is the agency's business case for undertaking the project. It should recognize any in-kind capital or operating obligations on the developer's part, and in the case of a long-term lease or equity partnership, the present value of the downstream components. It should also recognize the estimated present value of net new farebox revenues reasonably attributable to the project—not as part of what the developer pays, but as part of what the transit agency gains.

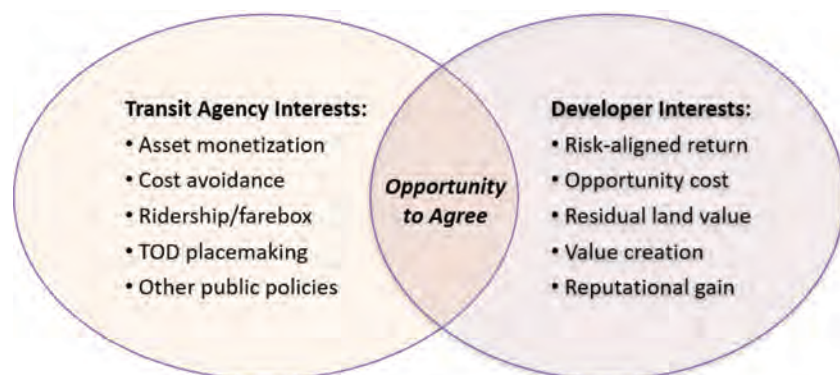


Figure ES-10. Competing interests in a joint development project.

Integral to the agency's financial expectations is its understanding of a property's fair market value (FMV). It is best understood as the site's residual land value—the amount a developer can reasonably pay for the site when all project costs are subtracted from project value. The calculation should recognize the cost of required in-kind contributions (such as park & ride replacement) and, if applicable, the subsidy costs of affordable housing.

2. **Make the pie bigger by working with the zoning jurisdiction to increase allowable density before initiating a project.** The tension over land value reflects the envelope of development that can be built on a site. Where supported by market demand and politically achievable, a proactive strategy to up-zone the site prior to launching the project is a better alternative than soliciting developers on the basis of existing density limits and hoping for future zoning relief.
3. **Make the gap smaller by seeking state, regional, or local financing.** In most transit markets, there are economic development programs available, at least in part, for TOD/JD projects. These programs support site assembly and remediation, infrastructure, or gap financing, and they may be targeted, as a matter of policy, either to TOD per se or to TOD-friendly purposes like downtown or neighborhood center revitalization. These programs are particularly important when transit agencies and their local government partners are trying, through JD and other strategies, to draw investment into a soft market. A transit agency should work with its economic development counterparts—before developer solicitation—to secure up-front support for the JD project.
4. **Create a culture of predictability across all stages of the JD process.** Predictability, a universal concern among developers, has value implications. It rests on the strength and skill of the TOD/JD office and its internal and external coordination mechanisms.

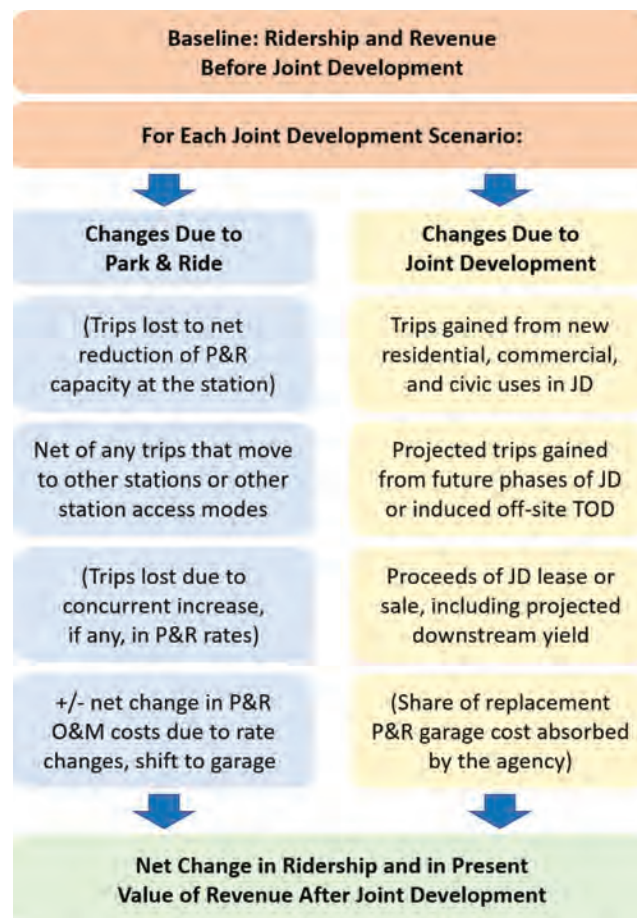
## Parking and Joint Development

The relationship between JD and parking encompasses two distinct issues: the location and replacement of park & ride capacity, and the residential and commercial parking ratios applied to JD projects. The cost of structured parking is a deal driver, with a significant impact on the size of the funding gap addressed above. Where physical space is limited, excessive parking, and the driving required to access it, can detract from a station area's pedestrian and bicycle character. These issues are addressed through five best practices.



1. **Provide new transit passenger parking at appropriate stations only.** New park & ride capacity should be provided only where warranted by transportation network needs. This includes stations at or near the ends of radial transit corridors or strategic locations in the roadway network that are significant subregional collector points.
2. **Evaluate park & ride replacement on a case-by-case basis, allowing significant reduction or elimination where appropriate.** The conversion of surface park & ride lots to JD parcels is a common strategy and a cornerstone of the JD program at some rail agencies. There has been a sea change in how transit agencies approach this opportunity—from the 1:1 replacement policy prevalent 15 or 20 years ago to a case-by-case approach, which may result in parking reduction or even elimination at a particular site. This change reflects high construction costs, the rise of alternative first- and last-mile station access solutions, and FTA's clarification that it does not require 1:1 replacement as long as there is no net loss of ridership. The “all-in” analytic logic used by the Bay Area Rapid Transit District (BART), Caltrain, and others—considering revenue and ridership from JD as well as park & ride—is illustrated in Figure ES-11.
3. **Pursue reduced, TOD-friendly parking ratios for the residential, commercial, and mixed-use components.** To the degree consistent with zoning (or anticipated zoning relief), the transit agency should establish parking ratios for the JD uses that take full advantage of the mixed-use transit environment. These standards will vary by location,





**Figure ES-11. Summary of park & ride replacement analysis.**

but if reasonably applied this practice will reflect market preferences. Reduced parking, and the associated cost reduction, can be particularly important in the economics of affordable housing.

4. **Parking should be shared among uses, including park & ride where feasible.** Shared parking among uses with divergent peak demand profiles is an established strategy for meeting actual parking needs at reduced cost. The concept is now being extended to shared facilities that accommodate both TOD uses and park & ride.
5. **Parking should be located and designed so as to be compatible with TOD.** The placement of off-street parking in the site plan, and its design relative to the streetscape, should be planned intentionally to minimize spatial and visual conflicts with the TOD/JD program. This strategy has economic as well as aesthetic implications.

## Affordable Housing and Joint Development



Several U.S. metro areas recognize a crisis of affordability, and many more see the rising land values associated with TOD as a double-edged sword—combining needed reinvestment in urban neighborhoods with gentrification and the threat of displacement, particularly around new or improved transit. Where housing costs are a front-line concern, there is a growing expectation that transit agencies engaged in JD will play

an intentional role in promoting affordability. At the same time, agencies recognize that the economics of affordable housing may impact their own land value. The guide identifies several best practices.

1. **Promote affordable housing in JD projects.** This may involve inclusionary requirements if the transit agency or zoning jurisdiction finds such measures appropriate. (Inclusionary policies require or strongly encourage targeted percentages of affordable units. Several U.S. transit agencies with large, multi-site JD programs have adopted inclusionary provisions of their own, and others incorporate inclusionary zoning provisions enacted by host municipalities.) Inclusionary requirements are not necessarily the appropriate method for every setting, and other tools are often available. To be effective, inclusionary requirements must usually be backed up by zoning and financing incentives.
2. **Recognize the economics of affordable housing in setting or negotiating land value.** The land price should reflect the real-world economics of the project in question. To the extent that the subsidy costs of the affordable units are not offset by outside sources, the land value may have to make up some of the difference. Transit agencies may consider discounting land value to support affordable units, either as a matter of explicit policy (as adopted by several agencies, including Sound Transit, LA Metro, and BART) or by recognizing any required affordability percentage in the fair market appraisal of the property.
3. **Work with housing agencies to prioritize the site for applicable affordable housing subsidies.** There is a wide variety of public programs and other sources dedicated to lowering the delivery cost of affordable housing: tax credits, tax-free housing bonds, contributions from state and local housing trusts, participation by non-profit developers, and others. Many transit agencies make it a practice to work with the state, regional, municipal, and non-profit sponsors of these programs to line up support prior to developer solicitation. Securing one or more third-party subsidies is a way to make a project's financial gap smaller.
4. **Work with local jurisdiction to secure density bonuses and reduced parking requirements.** Municipal jurisdictions that promote affordable housing (particularly those that require it through inclusionary policies) often make various entitlement incentives available for this purpose. The most common include density bonuses calibrated to the percentage and level of affordability and a reduction in the required parking ratio for the affordable units or, in some cases, for an entire project in a strong transit location.

## **Chapter 8—Joint Development Horizon**

In modern U.S. practice, the most common form of JD still occurs on transit-owned real property at existing rapid transit or commuter rail stations. But there are other models. JD can involve property owned by other public entities or by private developers. It can utilize a transit agency's non-station assets. Nor is the JD opportunity confined to existing corridors or stations; it is applicable to new corridors, if planned with JD in mind.

This chapter addresses ways to expand the geographical and institutional horizon of JD practice. It explores six broad concepts, identifying best practices to the extent that these have emerged. The models outlined in this chapter, while innovative, have been used in a variety of projects from which agency leaders and practitioners can learn. Several have the added benefit of being applicable, in actual practice, to the street-running bus systems operated by most U.S. transit agencies and the streetcars and street-running light rail services operated by some. Making JD accessible to those systems is a key goal of this guide. The models are summarized in Table ES-1, with a listing of the examples used to illustrate them in Chapter 8.

**Table ES-1. Innovative joint development models.**

Joint Development Model	Examples
<p><b>Hub Stations and Transit Centers</b></p> <p>Most transit systems have places where multiple routes or modes converge—often in or near the downtown core, but sometimes on the periphery of larger systems. While many are associated with rail transit, hub stations and transit centers are also common among mid-sized and smaller transit agencies whose systems consist principally or entirely of bus routes. For these agencies, hub stations and transit centers are where they are most likely to own off-street real estate or otherwise participate in off-street development transactions.</p> <p>JD projects at hub stations and transit centers vary in scale, complexity, and types of service. Deals tend to be innovative because of the multiplicity of interests, goals, resources, and challenges involved.</p>	<ul style="list-style-type: none"> <li>• Denver Union Station</li> <li>• Boston’s North and South Stations</li> <li>• Amtrak legacy stations</li> <li>• Memphis Central Station</li> <li>• Springfield (MA) Union Station and Holyoke (MA) Transportation Center</li> <li>• Kansas City’s 3<sup>rd</sup> and Grand Center</li> </ul>
<p><b>Sister Land Owning Agencies</b></p> <p>The discussion of hub stations and transit centers shows the value of collaborating with other public land owners to assemble workable joint development sites. This concept has a much wider application, as illustrated by the examples listed here. In every case, the real estate transaction between the transit agency and a sister land owning jurisdiction was part of an ongoing planning collaboration. The agencies’ roles and responsibilities in a particular collaboration should make the most efficient use of each agency’s time and resources, and present a clear, seamless face to potential developers.</p>	<ul style="list-style-type: none"> <li>• DART joint projects with municipalities</li> <li>• Denver RTD joint projects with municipalities</li> <li>• LA Metro joint project with LA County</li> <li>• Metro Transit and City of St. Paul: Allianz Field</li> <li>• MBTA donated right-of-way projects</li> <li>• Portland Red Line Airport MAX</li> </ul>
<p><b>Adjacent Private Land Owners</b></p> <p>An emerging business model is for an adjacent land owner to fund a new station, in whole or in significant part. This could be an infill location where none had existed; it could improve or replace an existing station; or it could be a station on a new or extended corridor. The developer may, by agreement with the transit agency, design or build the station as well as pay for it.</p> <p>A new transit station is normally the responsibility of a transit agency. A developer would agree to take on this cost for one reason: because the real estate location is “hot” and favorably situated—but for high-quality transit. While stations funded and built by abutting owners are still exceptional, those that have been implemented or advanced to the planning stage are instructive.</p>	<ul style="list-style-type: none"> <li>• MBTA: Assembly Square and Boston Landing</li> <li>• Austin Cap Metro Red Line infill stations</li> </ul>
<p><b>District Value Capture</b></p> <p>District value capture includes tax increment financing (TIF) and special assessment districts. In general, district value capture and JD are <b>not</b> the same thing. However, there is a subset of value capture in which the district is closely tied to station area development, the transit agency is a planning partner, and the value capture revenue flows contractually <b>into transit improvements</b>. In such cases, district value capture closely resembles joint development as defined in this guide. The point is not merely taxonomic. If transit agencies have the opportunity to participate actively and beneficially in district value capture, the necessary skills and capacities should be included in their TOD/JD staffing and consultant plans.</p>	<ul style="list-style-type: none"> <li>• Portland Red Line Airport MAX</li> <li>• Denver Union Station</li> <li>• San Francisco Transbay/Salesforce Center</li> <li>• WMATA NoMa-Gallaudet Station</li> <li>• New York 7 Subway Extension</li> <li>• Miami-Dade Transportation Infrastructure Improvement District</li> <li>• Georgia Community Improvement Districts</li> <li>• DART TIF-funded stations</li> <li>• Pittsburgh East Liberty Transit Revitalization Investment District</li> <li>• Portland Streetcar Improvement District</li> </ul>



Table ES-1. (Continued).

Joint Development Model	Examples
<b>New and Extended Corridors</b> For agencies planning system expansion, a new or extended corridor is an opportunity to accommodate contemporaneous or future JD. This philosophy should be made clear to the project's planning, engineering, and right-of-way team from day one. Key strategies include overall or "macro-level" station location; "micro-level" location, access, and orientation; right-of-way acquisition strategy; location of construction staging areas; and short- and longer-term park & ride locations.	<ul style="list-style-type: none"> <li>• Policies at Sound Transit, LA Metro, KCATA, Miami-Dade</li> <li>• Sound Transit Federal Way Station</li> </ul>
<b>Non-Station Assets</b> Finally, agencies may find worthwhile JD opportunities in non-station assets. Depending on the use, and whether the asset in question is served by nearby transit, the development might or might not be transit-oriented (in the list shown here, all but the last example would be).	<ul style="list-style-type: none"> <li>• Sound Transit East Link Operation &amp; Maintenance Facility</li> <li>• San Francisco Muni Potrero Yard Modernization</li> <li>• WMATA Headquarters and Navy Yard chiller plant projects</li> <li>• Metro Transit Police Headquarters sale in Minneapolis</li> <li>• Central Ohio Transit Authority shared natural gas fueling facility</li> </ul>

## Chapter 9—Conclusion

Transit agencies describe three over-arching goals for undertaking JD: to grow ridership; to generate a financial return; and to advance a nexus of placemaking, equity, and sustainability goals broadly associated with TOD. The concluding chapter addresses how things actually turn out—how an agency's JD goals can be turned into the measurement of future outcomes.

**Defining and measuring outcomes.** Successful JD may impact different geographic contexts in different time frames:

- A. The specific outcomes of individual JD projects should be discernible in the near- to mid-term, as should the aggregate outcome of multiple JD projects.
- B. The catalytic effects of JD on the broader development of station areas and corridors constitute a mid- to long-term set of outcomes.
- C. "Moving the needle" on regional land use and mobility is a longer-term aspiration.

Table ES-2 illustrates how future JD outcomes could be defined and measured. Columns A, B, and C represent the three time horizons. For each of them, conceptual metrics associated with the ridership, financial, and TOD goals of JD are listed (and developed more fully in the chapter). It is understood that not all of these items will apply to every agency; the long-term column, in particular, may have limited relevance to systems with only a handful of JD projects. Each transit agency can craft metrics that reflect its own regional context; BART's table of TOD/JD performance standards is provided as an example from actual practice.

**Managing risk.** As important as pursuing positive outcomes is the avoidance of foreseeable negative ones. Inattention to risk (or a lack of risk experience in JD and related contexts) can lead to adversity. At the same time, an outlook dominated by risk aversion rather than risk anticipation and management can lead an agency to shy away from JD, missing out on its potential benefits. In reading the guide, one encounters in every chapter issues that create risk and practices to avoid or mitigate it. Chapter 9 reaches back into the

**Table ES-2. Conceptual metrics for joint development outcomes.**

	<b>A Near -Term (5 years)</b>	<b>B Mid -Term (5 to 10 years)</b>	<b>C Long-Term (beyond 10 years)</b>
	<b>Implementation of JD project(s), aggregate impacts</b>	<b>Broader station- area and corridor development</b>	<b>“Moving the needle” on regional land use and mobility</b>
<b>Ridership Outcomes</b>	Ridership at affected stations (raw and net new)  Transit mode share in affected station areas and corridors  Directionality and hour of trips (stations)	Ridership at affected stations and corridors (raw and net new)  Transit mode share in affected station areas and corridors  Directionality and hour of trips (stations and corridors)	Ridership at affected stations and corridors (current and trend)  System ridership (current and trend)  System mode share (current and trend)  Directionality and hour of trips (corridors and system)
<b>Financial Outcomes</b>	Net new farebox revenue from JD  JD cash in-hand  JD in-kind contributions  Net present value of JD transaction(s)  JD share of affected station costs	Net new farebox revenue from JD and other station area development  Annual stream of JD revenues  Percent of operating budget covered by net new farebox and annual JD revenues  Net present value of JD transactions	Farebox revenue from JD and other station area development  Annual stream of JD revenues  Percent of operating budget covered by net new farebox and annual JD revenues
<b>TOD / Smart Growth Outcomes</b>	Housing units and square footage of commercial space built or under construction in JD projects  Percentage of region's housing and jobs within a half-mile of transit  Percent of affordable units in JD projects  Housing and Transportation Affordability Index for affected station areas  Non-single occupant vehicle mode share  Vehicle miles traveled per capita in affected station areas and corridors	Housing units and square footage of commercial space built or under construction in station areas  Percentage of region's housing and jobs within a half-mile of transit  Housing and Transportation Affordability Index for affected station areas  Non-single occupant vehicle mode share  Vehicle miles traveled per capita in affected station areas, corridors, and region	Percentage of region's housing and jobs within a half-mile of transit  Housing and Transportation Affordability Index for aggregate of all station areas and region as a whole  Non-single occupant vehicle mode share  Vehicle miles traveled per capita in affected station areas, corridors, and region

preceding chapters to outline a comprehensive risk management framework, based on five broad categories of risk applicable to JD: organizational, market, entitlement, stewardship, and transactional.

**A final word.** The guide began with a broad, transaction-based definition of JD. Many projects involve FTA; many do not. JD often occurs on transit agency property—indeed, this remains the most common form. But JD can occur on land owned by other public agencies or by private developers, through a variety of creative business models. While JD is often associated, in fact and in perception, with rail transit corridors and off-street rail stations, there are opportunities for impactful projects along bus and streetcar lines, at bus transit centers, and at non-station facilities.

And while large rail and multi-modal agencies have produced much of the accumulated practice, successful JD has been—and will continue to be—achieved by transit agencies of all sizes and service modes, in every region of the country.