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CENTER FOR
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How To Brief No. 7: HOW TO IDENTIFY AND MITIGATE RISK FOR VALUE CAPTURE

Value capture techniques recover a portion of increased property values, the value of new real estate development, or other economic activity (such as retail sales) that is created by public investment in infrastructure. As a result, value capture revenues are vulnerable to market risk. Market risk includes fluctuation in the local real estate market as well as unexpected events, such as a national recession. Revenue shortfalls can delay or even cancel projects. When project sponsors pledge value capture revenues to cover debt service for bonds or infrastructure loans, shortfalls can create a serious financial burden on the project's budget and affect the sponsoring agency's credit rating and ability to borrow in the future. Agencies can use market analysis and financial projections to help identify risk. Market risk can be mitigated by allocating it fairly among project partners, using complementary value capture techniques together, including revenues from non-real estate-based sources in the overall funding plan, and having a contingency plan in place.

Key Takeaways

> **Value capture techniques can be vulnerable to market risk.** Value capture revenues are strongly influenced by the business and real estate market cycles, shifts in demand for different types of development, economic downturns, and economic shocks. The implementing agency needs to be able to identify sources of risk, evaluate the magnitude and likelihood of different shock events, and quantify potential impacts on value capture revenue.

> **Market risk should be allocated fairly among project partners and beneficiaries.** This reduces the risk to each partner and encourages responsible decisionmaking by both public and private sector participants.

> **Market risk can be mitigated (though not entirely eliminated).** Key approaches to reducing market risk for value capture include using contracts and agreements, selecting private sector partners through a competitive bidding process, using complementary value capture techniques together, and including funding sources that are not dependent on the real estate market or property values in a project's overall funding plan.

> **Develop agency capacity for market risk mitigation.** Mitigating market risk requires the technical capacity to analyze socioeconomic and local real estate market conditions and trends to make financial projections for different scenarios.

Introduction

One key difference between traditional transportation infrastructure funding sources and value capture sources is the element of market risk. Value capture revenues are based on the value that publicly funded infrastructure investments generate for beneficiaries, which is usually measured in terms of impact on property values, new development enabled by the infrastructure, or other economic activity such as retail sales and hotel occupancy. Although infrastructure investments can create value that accrues in these ways, value is also influenced by macroeconomic factors, real estate market and socioeconomic conditions, and the effects of other public policy actions. The economy and real estate markets naturally fluctuate over time, sometimes following cyclical patterns that can be anticipated, but periodically experiencing more significant, unanticipated shifts.

Real estate market downturns can reduce a value capture technique's revenue stream, which can limit a technique's ability to close a funding gap. When the value capture technique's revenue stream backstops a loan or bond issue, an unexpected revenue shortfall can require an agency to tap into its general fund budget and can affect its credit rating. Agencies may be unable to secure financing based on value capture revenue projections that lenders or bond issuers consider excessively risky, leaving important infrastructure projects unfunded.

For value capture techniques to be reliable funding sources, the implementing agency should identify sources of risk, evaluate the magnitude and likelihood of different shock events, and quantify the impact of these risks and shocks on revenue generation.

Identifying Sources of Risk and Quantifying Risk

New or improved infrastructure provides enhanced economic and real estate opportunities, which is the source of revenue for value capture techniques. As a result, any change to the local economy and/or real estate market—which may be driven by regional or national events completely unrelated to a given infrastructure project or value capture program and entirely beyond the control of local agencies and decisionmakers—can affect the revenue potential of a value capture technique.

Risk identification is a key aspect of the pre-implementation market analysis (see How To Brief: How To Use Market Analysis for Value Capture). The market analysis should provide objective information about the health of the local economy, strength of the local real estate market, and the macroeconomic and socioeconomic factors driving the current state of the economy and real estate market. It should also identify potential vulnerabilities in the economy or real estate market. Understanding factors driving current conditions can help agency decisionmakers anticipate how the private sector will respond to a new infrastructure investment and identify vulnerabilities that could affect revenue expectations. Vulnerabilities could include an economy that is over-reliant on a limited number of major employers or a single industry (e.g., the military); a sluggish local economy; changing consumer preferences for housing, retail, and work space; or constraints on the amount of land available for development.

Value capture techniques that rely on the participation of developers, such as tax increment financing (TIF) or joint development, are also subject to project-specific risk. In addition to the

macroeconomic factors discussed above, the market study needs to support the business case for the accompanying private development being proposed.The market study should address how the development project is likely to perform under existing and future market conditions, and how it will benefit from the proposed infrastructure investment. It should also analyze the specific vulnerabilities of the proposed development. The market study will need to indicate how much demand there is for the development (e.g., retail, office, residential), how much competition there is from other development, and the degree to which fluctuations in rents and sale prices may affect the project's future assessed value.

If the value capture technique relies on a single or small number of developers (such as a TIF or joint development) the agency should evaluate the developer's performance history and financial stability. A developer may drop out of an agreed-upon project because of the market factors discussed above, but they can also succomb to factors internal to their own company's financial situation and business decisions. An agency can mitigate this risk by partnering with developers that can demonstrate financial stability and a history of successfully completing projects of similar size and scope.

Common Measures of Demand for Real Estate Development

- **Residential.** Population growth, household income growth, and residential rents, sale prices, and vacancy rates.
- **Retail**. Population and income levels and growth within a certain travel time or distance (depending on the type of retail, i.e. neighborhood-serving vs. region-serving); and retail rents and vacancy rates.
- **Office**. Job growth, particularly in office-intensive industries such as information, finance and insurance, professional, scientific, and technical services, management, and administrative support; and office rents and vacancy rates.
- **Industrial**. Job growth in manufacturing, wholesale trade, and transportation and warehousing; industrial rents and vacancy rates.

When sources of risk have been identified, agency staff can make revenue projections under various likely scenarios to determine the possible range of revenue shortfall, as well as the amount needed in the event of a worst-case scenario. This scenario-planning process allows the agency to determine how much can safely be borrowed for the project (if it is to be financed), to allocate risk among beneficiaries, and to plan risk mitigation measures such as those presented below.

Allocating and Mitigating Risk

Just as value capture is about sharing costs fairly among beneficiaries, risk should be allocated fairly among the project's sponsors and partners. For example, if value capture is used for urban revitalization or an economic development initiative, a municipality naturally assumes some level of risk to enable developers to take a chance developing in areas that they had not previously considered. The municipality, however, must take care not to assume so much market risk that

developers will be motivated to build projects that are not likely to be supported by future market conditions or that cannot withstand routine fluctuations in the real estate market.

Developers often have ambitious visions of future market conditions, and even experienced, successful developers make mistakes. But what may be a one-time, inconsequential loss to a developer could still present a significant financal and fiscal problem for a municipality. Vetting a developer's expectations with an independent market analysis gives the sponsoring agency an objective perspective. The market analysis can help the municipality determine how much risk it can safely assume to support its goals (e.g., economic revitalization, affordable housing, employment space) and how much should remain with the developer to ensure sound investment decisions by all parties.

Using a Competitive Bidding Process

For joint development projects, including above-grade ("air rights") joint development, selecting a developer through a competitive bidding process can help mitigate and allocate market risk. The Nevada Department of Transportation uses a competitive bidding process to select partners for joint development (see Case Study: Reno's I-80 Air Rights Project). The number of bidders for a given joint development opportunity provides an indication of market interest for the project, helping the agency weed out unrealistic proposals as well as proposals that undervalue the development opportunity. Competition among a number of bidders gives the agency some level of assurance that if the original developer selected is unable to complete the project, a qualified partner can be secured to complete the development.

The range of proposals submitted by developers provides another indication of market support and can also help an agency determine reasonable allocation of risk (e.g., developer willingness to guarantee debt service payments, agree to a minimum assessed valuation, or make a private investment that is significant relative to the public investment). If the proposals all ask the agency to assume an unreasonable share of risk (i.e., beyond an amount the agency can bear), the agency may conclude that the joint development, as scoped by the agency, is too risky to proceed. A developer's willingness to assume risk should be weighed against its capacity to accept risk and its experience in the local real estate market. A competitive bidding process that attracts only inexperienced developers may also indicate an overly risky project.

Using Legal Agreements and Contracts

For many value capture techniques, market risk can be mitigated through legal contracts and agreements. Such agreement could require require a developer to meet debt service obligations in the case of a revenue shortfall (see Case Study: Yankton County, South Dakota, Napa Junction Rail Industrial Park Service Road TIF), or require a developer to agree to a certain not-to-fall-below value of development (see Case Study: N Street Protected Bikeway TIF).

The City of Chesapeake, Virginia, avoids the risk of nonperforming developers who have made voluntary contributions for infrastructure ("proffers") by specifying how the contribution is to be conveyed (e.g., cash to a designated city account by a given date, land or right-of-way by registered deed) and stipulating that an occupancy permit will not be issued until the

contribution has been delivered according to the terms of the agreement (see Case Study: Elbow Road Widening Phases II and III, Chesapeake, Virginia).

Using Complementary Value Capture Techniques and Blended Funding Plans

Of course, legal agreements are not always sufficient to prevent revenue shortfalls due to significant unanticipated market shifts or developer nonperformance. Furthermore, some value capture techniques, such as system development charges and developer impact fees, do not involve contracts between an agency and private developer. Using risk bearing value capture techniques together and/or assembling a funding plan that incorporates value capture and non-value capture sources can mitigate risk.

A relatively speculative value capture technique can be paired with one with a more predictable revenue stream. A common example is to use TIF, which relies heavily on increasing property values and new private development, backstopped by a special assessment district (if revenue needs are great) or a business improvement district (if revenue needs are smaller). Though special assessment districts are also subject to changes in property values (assessments are based on assessed property value), they can be structured to provide more certainty. Biddeford, Maine, used this approach to fund a downtown parking garage and complete its downtown RiverWalk pedestrian facility (see Case Study: Pearl Street Garage and Riverwalk, Biddeford, Maine). For this project, the TIF revenue and the parking fee revenue are pledged to cover debt service. If parking revenue falls below a certain level, a special assessment district made up of downtown businesses (i.e., project beneficiaries) will be levied an assessment to make up the shortfall. This backstop, if it becomes necessary, would provide a predictable revenue stream because under the terms by which the special assessment district was created, it has pledged to cover the shortfall. This allows the municipality to assure the city’s residential taxpayers that their taxes will not be affected by an infrastructure investment that primarily benefits downtown businesses and commercial property owners. Establishing the special assessment district required a majority vote among affected property owners. Their willingness to assume this risk indicated their confidence that the project’s benefits would outweigh any potential assessment.

The Atlanta Beltline project, a $4.8 billion transportation investment, instrumental to economic and community revitalization in the Atlanta metropolitan area, drew from both value capture and non-value capture funding sources. According to the original funding plan, a tax allocation district (Georgia’s form of a TIF) was established to fund a significant portion of the investment. The impact of the 2008 financial crisis on the real estate market caused funding shortfalls in early years that were difficult to recover from. The short-term impact of the COVID-19 pandemic on the local real estate market exacerbated the shortfall to the extent that an alternative funding source was necessary. In 2021, a special assessment district was formed by majority vote of commercial property owners in the tax allocation district to offset their revenue shortfalls.

Techniques can be paired in other ways, too. For example, impact fees, which are one-time payments by developers intended to offset demands placed on infrastructure by development and growth, could be paired with a sales tax district, which provides an ongoing revenue stream for a defined period of time. If the pace of new construction slows below a certain level, the

sales tax district—which is based on retail sales and not property values—can continue to provide revenue to cover debt servicing.

TIF is not typically used with impact fees or negotiated exactions because this can introduce risk rather than mitigate it. This is because TIF is used to catalyze development where the lack of public infrastructure has constrained private development. In this context, fees or exactions would increase the cost of development and deter private investment, muting the potential catalyzing impact of the TIF. Pasco County's Multimodal Mobility Fee Program is a carefully designed exception.

The Pasco County Multimodal Mobility Fee Program is an example of how revenues from value capture and non-value capture can be used together to offset risk. As noted above, TIF and impact fees are not typically used together, but Pasco County's Multimodal Mobility Fee Program is designed to use revenue from these sources in a complementary way. A portion of tax increment generated by a TIF district made up of unincorporated Pasco County (excluding tribal areas) is used to buy down mobility fees for certain types of transit-oriented or job-creating developments—to reduce or waive them entirely depending on the project type. This revenue is further supplemented by a non-value capture technique, the county's one-cent fuel tax—Penny for Pasco—which is not subject to fluctuations in the real estate market. In this way, value capture techniques are used in a complementary way and supplemented with a non-value capture revenue source to reduce the risk of unanticipated market response to the impact fees.

TIF and joint development both depend on land value increases, so if they are paired, risk mitigation measures should cover potential revenue shortfalls from both revenue sources, perhaps by incorporating non-land value capture sources into the funding plan.

Agency Capacity for Risk Identification and Mitigation

Transportation agencies are typically familiar with construction- and engineering-related risks, and have the procedures, capacity, and expertise to mitigate risk from those sources. Understanding and mitigating market risk for value capture, however, involves procedures and tasks that use a different set of skills and expertise. The three areas of capacity needed for an agency to mitigate market risk are:

- Analysis of socioeconomic and local real estate market conditions and trends
- Real estate valuation
- Financial projection and scenario analysis.

Many agencies have some level of capacity in these areas that can be developed to meet the needs of value capture. Agencies can also draw from the expertise of other local and regional agencies or use consultants to complete specialized analysis that falls outside their expertise.

Capacity for financial projection and scenario analysis, real estate valuation, and certain aspects of local real estate market conditions may already exist in the agency. Many municipalities and county governments have property assessors with the expertise to determine baseline and incremental growth in property values, on individual properties or for all properties in a district

that are necessary for value capture implementation (e.g., TIF, special assessment district). An experienced property assessor can contribute insight into real estate market trends to mitigate market risk in value capture implementation.

Similarly, many municipal and county budget and finance departments have staff with the expertise necessary for making financial projections and performing financial scenario analysis to support value capture implementation. This experience can be leveraged for vetting projections submitted by developers and for producing the financial documentation required for bonding and borrowing against projected revenue earned through value capture techniques.

General socioeconomic conditions and trends should be monitored for a period before a value capture technique is implemented, as well as for the duration of the implementation. Agencies can develop capacity in understanding regional socioeconomic conditions affecting value capture techniques using data and analysis obtained from a metropolitan planning organization, regional planning agency, council of governments, or university research department. Some agencies publish such information at regular intervals and make it freely available and others charge a fee for specialized data requests and analysis.

Value capture implementation may require analysis of specific market risk factors and the probability and magnitude of unexpected events. The range of possible outcomes may require experience in planning and land use economics, market analysis, and finance, and specialized knowledge of the real estate market in the project's area.

Larger agencies may have staff with the necessary real estate and finance expertise. Smaller agencies can stay informed about general real estate market conditions and outlook by consulting with local real estate brokers and following industry publications. Some agencies may opt to contract out for value capture implementations that require real estate expertise related to a specific type of development, or to understand the real estate market underlying a value capture technique. Agencies may also choose to evaluate real estate market analysis and financial projections submitted by a developer. Requiring that such analysis be performed by an independent consultant can provide some risk mitigation, but agencies should analyze the methodology, assumptions, and data sources used to complete such studies carefully.

Though market risk can never be eliminated entirely, the measures described above can help mitigate risks so that value capture can be used to fund transportation infrastructure.