

Frequently Asked Questions – Asset Recycling

Disclaimer: The contents of these Frequently Asked Questions (FAQs) do not have the force and effect of law and are not meant to bind the public in any way. These FAQs are intended only to provide information and clarity to the public regarding existing requirements under the law or agency policies.

Value Capture by Asset Recycling is the gift that keeps on giving: An infrastructure investment can generate value directly (user fees or fare), indirectly (incremental property tax revenue and revenue generated from economic activities in adjacent areas), or through the value of publicly owned infrastructure assets (sales or leases). State and localities can capture a portion of this value to help fund and finance specific infrastructure projects or other public infrastructure.

Asset recycling, the sale or long-term lease of publicly owned assets, is another form of value capture. Funds generated this way can pay for infrastructure that supports economic growth, enhances safety, and builds strong livable communities. In an asset recycling value capture strategy, proceeds from leases or sales of existing infrastructure are reinvested (“recycled”) in much-needed new infrastructure improvements to spur economic development. The new infrastructure can include both revenue- and non-revenue generating facilities. Value Capture by Asset Recycling strategies create a continuous funding cycle that stretches lease proceeds much further and supplements traditional funding sources.

(1) What is the Federal role in Asset Recycling?

In the case where there is no Federal interest in a property, Federal approval is not required for the disposal or lease of property.

Federal approval is required for disposals or leases of property if the property is Interstate ROW, was acquired with Federal Funds, or incorporated into a Federal-aid project. The Federal portion of the Fair Market Rent received for the lease or sale of property must be used for Title 23 eligible activities.

- §710.407 Leasing. (a) Leasing of real property acquired with title 23 of the United States Code, funds shall be covered by an agreement between the State transportation department (STD) and lessee which contains provisions to ensure the safety and integrity of the federally funded facility. It shall also include provisions governing lease revocation, removal of improvements at no cost to the FHWA, adequate insurance to hold the State and the FHWA harmless, nondiscrimination, access by the STD and the FHWA for inspection, maintenance, and reconstruction of the facility.
<https://www.govinfo.gov/content/pkg/CFR-2012-title23-vol1/pdf/CFR-2012-title23-vol1-sec710-405.pdf>
- § 710.409 Disposals. (a) Real property interests determined to be excess to transportation needs may be sold or conveyed to a public entity or to a private party in accordance with §710.403(d).

For tribal governments, if the Tribe has legal title to the property, the Tribe may sell it if it is no longer needed by the Tribe. The intent of this arrangement is to acquire personal property that will support delivery of the TTP Tribal Transportation Program (TTP) and increase the Tribe's capacity to deliver transportation projects. Excessive acquisition of property for quick sale is not the intent of the program and will impact FHWA's ability to approve future acquisitions. For additional information, visit <https://highways.dot.gov/federal-lands/programs-tribal/surplus-excess-property>

(2) What is Infrastructure Asset Recycling?

“Asset recycling” refers to the sale or long-term lease of a publicly owned asset to a qualifying private entity and recycling the proceeds from these transactions into new unfunded, or partially funded, infrastructure needs. There is no standard definition for asset recycling, but it is a way for the public sector to fund infrastructure using the proceeds from the sale or long-term lease of an existing State or locally owned infrastructure asset, such as a highway right of way. Such assets are often obsolete, unused, unproductive, or underutilized land or facilities (whether buildings or infrastructure). The assets are sold or leased to a private entity for an up-front payment. Asset recycling is also known as capital recycling.

The private sector agrees to assume operations and maintenance of the asset, and to improve or maintain the asset according to predetermined standards. Such facilities can include roads, bridges, airport, utilities, wastewater facility, landfill, parking facility, and other types of infrastructure assets. The State/locality can invest a portion of the proceeds in new infrastructure that can support economic growth, and, by using other value capture tools, capture a portion of new tax revenues for other improvements (such as in a tax increment finance zone or transportation reinvestment zone). They can also create a revolving investment fund to generate investment income to fund future capital improvement programs.

Experience with infrastructure asset recycling in the United States is relatively limited, but not new. It dates back to the Chicago Skyway's 99-year lease in 2005, the Indiana Toll Road's 75-year lease, Puerto Rico's PR 22 and 5 in 2010, Puerto Rico's Luis Muñoz Marín International Airport in 2012, and others. In exchange for the sale or lease of those assets, the States received up-front, lump-sum payments. (See Question 12 for additional discussion on asset recycling project examples in the U.S.)

Payments received from lease proceeds can be used to revitalize existing assets, or fund new and critical infrastructure needs that might otherwise have been unfunded or funded by raising taxes or increasing public debt.

(3) What is the infrastructure asset recycling mechanism?

An asset recycling strategy involves two well-known activities--sale or lease of existing assets to a private consortium and investing the proceeds in a new infrastructure asset. However, it innovates by taking a long-term, comprehensive view of these activities, which involves a strategic assessment of:

- The capital value tied up in maintaining existing obsolete infrastructure assets on the state/local balance sheet.
- The potential benefits to be obtained by monetizing these assets and directly reinvesting the capital proceeds to create additional revenue to fund all or a portion of new infrastructure assets
- Additional value capture strategies to monetize a portion of the new value created by economic growth from new infrastructure asset funded by asset recycling
- The ability and capacity of the government to meet the challenges (political, construction, and demand risks of a new infrastructure asset) and to reap the benefits and repeat the cycle

(See Question 17 for additional discussion on basic steps involved in implementing asset recycling)

(4) Why Consider Asset Recycling?

The American Society of Civil Engineers has estimated that an additional \$4.5 trillion is needed over the next seven years just to bring existing U.S. infrastructure up to acceptable standards. Without this, the nation's potential economic growth will be limited. The growing infrastructure funding needs, and a shortfall in revenue available, creates an infrastructure funding gap. With record investment needed for capacity and system improvement becoming the new normal, asset recycling can create a sustainable funding model for infrastructure improvements by capturing a portion of untapped value available in existing transportation facilities as well as the economic growth generated for beneficiaries by the new and improved infrastructures it funds .

Infrastructure asset recycling is a means of increasing investment in infrastructure, both existing and planned. The basic idea calls for the sale or long-term leasing of existing infrastructure facilities to well-qualified private partners, and "recycling" the proceeds into new (but currently unfunded) infrastructure. In the case of aging or outdated infrastructure, this will require significant additional private investment to refurbish and modernize the facility. Asset recycling can help fix both of America's serious infrastructure problems: inadequate and aging facilities and the lack of funding for new infrastructure improvements.

(5) What are the benefits of Asset Recycling?

With asset recycling, State and local governments can tap into a source of infrastructure funding without raising taxes or increasing borrowing and debt. This allows the public to reinvest in new infrastructure and services. Asset recycling benefits may include:

- Generating new capital for infrastructure investments to meet future demands, and bringing in a private partner who risks capital which creates an incentive to properly maintain and rehabilitate aging infrastructure assets
- Monetizing underutilized assets to fund infrastructure maintenance needs. Ensure funds raised from asset recycling are only spent on new infrastructure projects
- Easing pressure on State and local budgets.
- Transferring operations and maintenance costs and risks to capable private firms. Saving public maintenance expense, particularly on older, mature assets, which would otherwise cost more money and lose value over time.
- Using the sale/lease proceeds to fund new urban infrastructure, paying for infrastructure upgrades in rural areas, or retiring outstanding debt on existing facilities. This could be a very useful tool for both urban and rural communities. In urban areas, it could attract new private partners who could take over the old asset while generating revenues for improvement in rural areas
- Allowing the development of new infrastructure without increasing debt, taxes, levies, or tolls to cover funding gap.
- Enabling investment in new income-generating assets that ensure ongoing revenue streams for government by reinvesting the proceeds of asset recycling into new revenue generation infrastructure development.
- Improving other assets like nearby roads or transit systems.

(6) How are Long-term Asset Leasing and Asset Sales Different?

There is no clear answer as to which method is better. Each State and locality must decide based on different policy and objectives. States and localities can consider the sale of a facility when it has a surplus of infrastructure assets or in cases where they are unproductive. Whether it is lease or sale, the public agency can ensure that the purchaser agrees to maintain given levels of performance and safety and the public sector would also receive a one-time payment upfront. It is also important to recognize that, in addition to contractual vehicle, public sector has regulatory vehicle at their discretion to govern the performance and safety levels of the asset, especially under the asset sales model.

In an asset leasing approach, the public sector would receive a stream of payments over the life of the lease, maintain ownership, and still retain residual value of the asset at the end of the lease. As desired, the public sector can also choose to re-negotiate lease terms for the future once the lease ends. Leasing allows for contractual arrangements related to performance and service outcomes to ensure an asset is operating in line with public interests. It allows review of performance on an ongoing basis and to ensure minimum standards are being met.

In both cases, operations and maintenance of the facility are transferred to the private entity. In places where there are community concerns around privatization of public asset and where local control of transportation is important, States and localities might consider asset leasing rather than selling the asset. In the typical long-term lease model, the government defines, in the lease, what the operator of the asset can and must do, thereby retaining control of aspects key to the public interest. In addition, when serious non-performance issues by the private sector are encountered, it is easier to recover the asset ownership by the public sector under the lease model.

(7) Is asset recycling the same as privatization?

Only in the case of asset sales. The portion of the asset would be transferred to private ownership, such as in the case where the private sector purchases surplus or unproductive infrastructure assets with a cash payment.

Generally, however, asset recycling involves long-term lease concessions. In contrast to privatization (i.e., sales), lease-based asset recycling:

1. Monetizes an existing infrastructure asset or assets without the sale to the private sector. Typically, the purchaser assumes the operation and maintenance responsibilities of the asset(s) and provides additional safeguards for the traveling public. The agreement includes the disposition of user fees and the lease payment to the governmental entity.
 2. Reinvests the stream of proceeds into new infrastructure and may allow the capture of some of the value generated from new infrastructure investment to create an on-going transportation fund for State and local authorities. Other existing value capture techniques can capture a portion of this additional economic value. Even if the new infrastructures are non-revenue generating facilities (e.g., toll roads), they can support economic development and provide benefits to communities.
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(8) Are only revenue-generating infrastructure facilities appropriate for asset recycling?

No. Depending on State and local policies and objectives, the asset can simply be non-productive or underutilized.

An example of non-revenue generate infrastructure asset is the sale of excess land or right-of way, and the use of the sale proceeds to fund needed infrastructure assets. This was the case in September 17, 2018 when the Arizona Department of Transportation sold a parcel of land it owned along Interstate 10 in Phoenix for \$28.7 million, the largest sale of excess property in the agency's history. Proceeds from the sale are being used for an upcoming project to widen I-10 between the Loop 202 (SanTan Freeway) and the I-17 "Split" interchange near Phoenix Sky Harbor International Airport. The project, slated to start construction in 2021, will widen the mainline and includes improvements at the Broadway Curve to help traffic flow more efficiently. The agency had owned the property since 2011. Several firms, including cabinetry and shipping companies, have been leasing space on the property.

(9) Does asset recycling mean loss of public control over the asset?

No. The typical long-term lease model lets the government define, by contract, what the operator of the asset can and must do, thus retaining control of aspects key for the public interest. Whether it is under asset lease or sales model, investments in infrastructure assets attract pension funds, especially local ones, and investors keep partial control of the assets through the local pension fund board. Also, with them as investors in infrastructure, citizens benefit from the asset twice, as users and as investors through their pension plans. As demonstrated in Australia, asset recycling transactions involving public pension funds have shown to successfully solve both the unfunded pension liability issue (a serious problem in the U.S.) as well as critical infrastructure funding issues.

The State and local sale of assets to the private sector usually includes regulation or a contract clause limiting user fees or profits of the private actors, as well as requirements in terms of levels of service or investment in maintenance.

(10) Is asset recycling funding or financing?

Funding. Asset recycling is considered funding because it provides the capital for new infrastructure projects that does not increase the public sector debt and does not have to be repaid. It also instantly brings more capital to the State/local authorities' balance sheet. The sale of an asset ideally reflects the current value of any future revenue stream. Unless this capital is used for the whole lifecycle of a new asset (construction, maintenance, and operations), the State/local government may need to secure future additional funding for the new assets.

In general, there are two important aspects to asset recycling as a funding source that needs to be recognized: (1) the magnitude of initial proceeds from asset recycling (especially those that can generate revenues) can be very large (in the form of lump sum upfront) when compared to other non-deficit funding sources (whether from user fees or various VC techniques) and (2) in several large transactions in Australia and the U.S., the final private sector bids far exceeded the public sector's expectation, indicating that the asset valuation is reflective of not only leveraging of future revenue streams but also of sunken capital investments that created the assets to start with.

Funding: State or local money is provided for a specific purpose (e.g., to a project), usually free of charge (interest free), with no expectation of repayment.

Financing: Capital (debt or equity) provided for a project that is expected to be repaid with interest.

(11) When is Asset Recycling the Right Choice?

The following can help decide if asset recycling is a viable value capture technique.

1. Assets with a competitive market: Publicly owned assets are suitable candidates for transfer to the private sector when there are sufficient private investors looking for infrastructure investment opportunities.
2. Assets with a competitive market through regulatory structures: Publicly owned assets are suitable candidates for transfer to the private sector by virtue of modified regulations that make the investment attractive to investors.
3. Assets with no competitive market as regulatory structures are not developed: Publicly owned assets are suitable candidates for transfer to the private sector when tax laws make it easy to finance both new and existing infrastructure projects.
4. Assets with significant structural or regulatory impediments: Assets are not suitable for transfer to the private sector as they are unlikely to yield sufficient upfront revenue and/or carry a large community service obligation, e.g., State statute might dictate a shorter lease term and/or limit user fees or prohibit P3 project delivery altogether.

(12) How does US Asset Recycling compare internationally?

There is no standard definition or model for Asset Recycling. Asset recycling is also known as capital recycling. It is understood to be a way for the public sector to fund new infrastructure assets or revitalize existing infrastructure assets using the upfront proceeds from the sale or long-term lease of existing public infrastructure asset. Australia has been leading the charge in successful asset recycling models, most notably in New South Wales (NSW) and Queensland, that involved their public pension funds. The essential difference between U.S. asset recycling model and that of Australia is that the U.S. Federal government does not provide incentive payments to the owner of an infrastructure asset. In the Australia Asset Recycling Model, States that sell infrastructure such as roads, ports, and electricity grids are incentivized to receive an extra 15 percent on top of the sale price from the Australian federal government through the National Partnership Agreement (NPA).

For asset recycling model in the U.S., the following are a few notable and common features of successfully completed projects:

- The State/local authority stipulates system improvement standards and infrastructure condition required in the lease concession agreement and retains ownership of the infrastructure asset.
- State/local authorities are clear about where the money is going when it monetizes an infrastructure asset.
- The State/Local government regulates its expectations of system performance standards in the lease or sale documents.

For Australian asset recycling model, as discussed above, when a state monetizes an existing infrastructure asset through sale or lease, and uses the proceeds to reinvest in new infrastructure, it receives an additional 15 percent of the estimated proceeds from the federal government. The Asset Recycling Initiative (ARI) was

designed as a five-year program from 2014-2019, and the funding was allocated to specific proposals on a first-come, first-served basis. By the time the NPA expired in June 2019, the initiative provided \$2.3 billion in funding to the participating jurisdictions and unlocked over AU\$15 billion in additional economic infrastructure. The big-ticket deals included the 99-year partial lease by the NSW electricity grid (Ausgrid) to two local pension funds for AU\$16 billion (\$11 billion in U.S. dollars). This was the country's biggest privatization undertaking. In the U.S., most electric and gas utility infrastructure is already privatized and owned by private investors.

(13) Is Asset leasing preferred over asset sales?

It depends on the type of infrastructure asset and State/local laws, regulations, policies, and objectives. Generally, an asset leasing approach is preferred in circumstances where there are contractual arrangements related to performance and service outcomes to ensure an asset is operating in line with public interests, and it provides a stream of revenues into the future. Asset leasing provides the opportunity to review performance on an ongoing basis and to ensure minimum standards are being met. It focuses on transferring the operation of an asset rather than the ownership. It also may address community concerns around privatization and national sovereign interests in the case of foreign investors. (See Question 6 for additional discussions on pros and cons of lease vs. sales).

(14) Has Infrastructure Asset Recycling been done in U.S.?

Yes, there are several examples where asset recycling was used to recover the "sunken" capital investment in existing assets and generated substantial funding for new infrastructure projects and upgrades/maintenance of existing infrastructure. The following provides notable asset recycling examples in different sectors:

- **Freeway to Boulevard:** The removal of aging freeway infrastructure and its replacement with a boulevard to accommodate all users, facilitate livable communities, and reduce on-going maintenance expenses. The state/local authority sale of excess land to the private sector for developments such as Inner Loop East Expressway removal in Rochester, New York; Park East Freeway removal in Milwaukee, Wisconsin; Embarcadero Freeway in San Francisco, California; East West Expressway, Orlando, FL; Cleveland Memorial Shoreway/Route 6 (West), Cleveland, Ohio; Portland Harbor Drive, Oregon; Riverfront Parkway, Chattanooga, Tennessee, and others.
- **Exiting Toll Roads:** Chicago Skyway in City of Chicago, Illinois; Indiana Toll Road in Northern Indiana; Northwest Parkway in the Denver Metro Region, Colorado; Puerto Rico PR-22 and PR-5 in Northern Puerto Rico; Virginia I-895 / Pocahontas Parkway P3 (2006); Transform 66 - Outside the Beltway - Fairfax and Prince William Counties, Virginia; and others
- **Airport:** San Juan International Airport located in San Juan, Puerto Rico. This was the first P3 airport pilot project in the US
- **Marine Terminal:** Maryland's Seagirt Marine Terminal, Baltimore, Maryland; Port of Portland Terminal 6, Portland, Oregon; Port of Ivory in the city of Reedley, California
- **Rail:** Sooner Sub railroad line, between Sapulpa and Midwest City, Oklahoma
- **Parking Facility:** Ohio State University parking system; Scranton Parking Concession (2016); Harrisburg Parking Spaces, Pennsylvania; North Station Parking Garage in Massachusetts; Indianapolis Parking

Meters Concession, Indiana; Chicago Parking Meters, Illinois; Millennium Parking Garages Sale (2006), Illinois

- **Land:** The Closed Landfill Solar Project - Milwaukee, Wisconsin, Amesbury Landfill Solar Plus Storage Project, Amesbury, Massachusetts; New Jersey Landfill Solar Power Plant, New Jersey
- **Water System:** Bayonne, water/wastewater system, New Jersey; Scranton Sewer Sale (2016), Pennsylvania; Middletown Water and Sewer, Pennsylvania; Lower Colorado River Authority Water Utility, Texas.

(15) What Are the Challenges with Asset Recycling?

While both public and the private partners benefit from the asset recycling transaction, asset recycling transactions require legislation and political support that are sometimes difficult to obtain. Many U.S. States still lack the legislation, structure and processes, and political/institutional culture to manage it effectively.

Some States and local governments prohibit public-private partnerships and have rules in place that make it extremely difficult to monetize infrastructure assets. They also lack the skills and in-house capacity to manage public-private partnership transactions effectively and fairly. In addition, a lack of political or community support of asset monetization (often perceived as outright privatization) can derail transactions before they even start.

(16) How do agencies address these challenges?

Communication and outreach to the public of Asset Recycling Strategy can help address challenges. This is supported by:

- Developing an inventory of all infrastructure assets owned by a particular jurisdiction and the infrastructures' condition, identifying projects with sustainable funding sources that would make asset recycling appealing to the private sector.
- Building the business case for Asset Recycling and strategies to grow the proceeds to fund new infrastructure needs in order to meet demand for new infrastructure and reduce congestion and to address other population and demographic factors.
- Engaging the public and private partners in an on-going fashion as necessary before launching an asset recycling project. This dialogue is important for building strong public support as well as assuring there is enough private sector interest to generate competitive bids. Private investors want to know up front what assets will be included in any arrangement, the value of those assets, and what the contractual requirements are likely to be.
- Addressing public concerns of risks such as previous unsuccessful Asset Recycling projects and providing potential solutions to these risks.
- Obtaining legal and financial expertise, including those in the sale and/or lease of public assets.
- Determining the right balance between public and private sector interests.

- Building trust with communities through capital improvement plans and budget transparency, prioritized planning, and safeguards.
- Explaining how proceeds from Asset Recycling can be reinvested into the infrastructure assets that support community needs and economic development.
- Building new infrastructure without increasing debt levels and taxes, or reallocating funds from other much needed public services.
- Targeting opportunities for efficiency gains in existing infrastructure and more private-public knowledge transfer.
- Promoting infrastructure as a tradable asset class for sources of capital from institutional investors.
- Addressing concerns about privatizing a workforce and communicating potential solutions.
- Demonstrating how Asset Recycle strategies create a continuous funding cycle to stretch the lease proceeds much further to supplement traditional funding sources.

(17) How Does Asset Recycling Work?

Processes depend on the project and specific State and local policies and laws. Below are steps that are generally involved in implementing asset recycling:

1. Take inventory of all infrastructure assets owned by the public entity considering asset recycling.
2. Identify, within the inventoried assets, those that may be attractive to the private sector. Assets suitable for long-term lease often include those capable of generating predictable revenue. This ensures the investor of both a sufficient rate of return and the timing of revenues from the leased or purchased asset. Examples of such revenue-generating assets include sewer and water treatment facilities, parking garages and meters, toll roads, etc.
3. Assemble a legal and financial team that has experience in the sale and/or lease of public assets. In order to determine the fair market value of the asset and to set reasonable expectations for up-front revenues that could be generated, local officials must collect detailed information regarding revenue generation figures and lifecycle costs. A team will need to build methods to assess the value and priority of assets to justify how they will answer present and future needs and also communicate the list and the choices made.
4. Engage the public through opinion surveys and community meetings. Communication with communities to inform and to understand their needs and concerns is a major key to the success of private-sector engagement.
5. For proposals for the sale or lease of Federal-aid property, submit them to the State Department of Transportation (SDOT). If applicable, the SDOT will review and submit to FHWA for approval.
6. Develop and issue a request for proposals (RFP) for competitive bids, whereby multiple potential qualified private owner-operators bid against each other for the right to lease or purchase a revenue-generating municipal asset.

7. Execute sales or lease agreements for existing assets and receive upfront payments by monetizing existing assets. If the sale or lease is for Federal-aid ROW, the Federal portion must go towards Title 23 eligible activities. Establish an interest-earning account separate from the State's or locality's general fund for the proceeds and interest income. Specify clearly what the capital from the fund will be used for. This provides a strong message to the public, as well as a guarantee of long-term value creation. These sales or lease agreements should ensure the following:
 - Protect the public interest by enforcing the service level and safeguarding clauses in concessions.
 - Concession agreements can be crafted with clauses that protect the service levels of the facility for users through key performance indicators (KPIs) and safeguards, enforcing issues such as operations and maintenance standards, asset capacity upgrades and agreement on pricing levels and indices.
 - Engage the public through opinion surveys and community meetings. Communication with communities to inform but also to understand their needs and concerns is still key to the success of private-sector engagement.
 - Establish handback conditions (for lease model). Handback conditions can require the private sector to ensure assets are well maintained and agree to an approach to delivering upgrades from the outset. This helps ensure assets are returned in good condition, avoiding the asset being 'run into the ground'. Handback conditions also enable governments to clearly outline improvements that may not be feasibly delivered if the asset was to remain in public hands. When the improvement is handed back it will be in better condition than would have been practical in challenging financial situations.
 8. Use the proceeds from sale or lease infrastructure asset to (1) pay down pension shortfalls or retire existing debt or lien on the disposition asset first and (2) reinvest in new or unfunded or under-funded infrastructure, thereby "recycling" the proceeds realized from the concession transactions to pay for new infrastructure and enabling significant investment in public infrastructure at little additional cost to taxpayers.
 9. Investigate other possible Value Capture tools that may become more viable with the use of Asset Recycling for additional funding sources on a particular infrastructure investment.
 10. Recycle newly built assets as they mature and become good candidates for additional long-term leases. Repeat the cycle to enable continuous reinvestment and renewal.
 11. Maintain ownership when possible. Under a lease agreement, the public sector maintains ownership of the leased asset and, at the end of the lease period, can either resume operation of the asset or negotiate a new lease agreement with the same or different operator. The private entity assumes many of the risks of ownership, including unexpected repair and maintenance costs. While up-front proceeds are certainly a "plus" with asset leases, shifting risk and obligation to a private entity can be the motivating factor for a state/local looking to monetize an asset.
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(18) What are some potential reinvestment/procurement methods for New Infrastructure?

- Traditional procurement: An example is design and build contracts. The State/local agency provides direct public funding using the capital proceeds and also bears the risk associated with managing the delivery of infrastructure projects.
- Joint venture: State/local agencies may choose to continue a partnership with long-term investors and enters directly into a joint venture for one or several existing or planned infrastructure projects. The State/local agency uses the capital proceeds from the divested assets to cover their equity stake in a special purpose vehicle (SPV) alongside the private partner. This is an appropriate choice where successful and well-established public-private partnerships exist, such as those between local government and private consortiums led by local pension funds and supported by specialist infrastructure investors.
- Public Private Partnership (P3) Concession. Asset recycling can also help to enhance new P3 projects by using the capital proceeds to provide guarantees to investors in the form of a standby line of credit. This will only be made available if agreed upon risks materialized early in the process, such as insufficient patronage in the early years of operation. This allows the project to achieve a higher investment grade rating category than is possible from the project on a standalone basis. This can be particularly useful in emerging markets where there can be perceived higher political risks by investors.

(19) What is the Importance of an Asset Inventory?

An asset inventory is a database of all assets an agency manages. This inventory is important first step in determining whether and to what extent asset recycling can be used to leverage the existing assets to generate new revenues for infrastructure and also improve the public entity's overall fiscal health. The database includes:

1. Unique identifiers for land parcels and individual infrastructure such as buildings, toll highway, land, etc.
2. Asset types by original construction use i.e. courthouse, buildings, unproductive land, office, toll roads/bridges etc.
3. Location data both state/local addresses and geo-position (latitude/longitude).
4. Characteristics including size, ownership, and year of original construction.
5. Valuation data i.e. Net Book Value and Current Replacement Value.
6. Condition metrics e.g. age, Facility Condition Index (FCI), deferred maintenance.
7. Management responsibilities for both capital renewal and operations and maintenance.
8. Ongoing costs – to manage and maintain.
9. Relationship to government program use – i.e. asset categorization, based on anticipated longevity of government use.

(20) Value Capture Asset Recycling Versus Public Private Partnerships (P3s)

Asset recycling is a value capture strategy. However, how asset recycling is implemented, especially when the deal involves upgrading/modernizing the existing infrastructure, the financing and delivery model for the upgrade/modernization can closely mirror the P3 model. This is why asset recycling is also referred to as brownfield P3 ("brownfield" here meaning existing and not new "green" infrastructure).

Asset recycling allows a cycle in which new infrastructure is funded by monetizing the value of existing infrastructure assets through sales or lease agreements. In addition, it may or may not generate revenues. The new infrastructure funded by the asset recycling proceeds can utilize P3s for project delivery (including Design-Build, Design-Build-Finance, Design-Build-Finance-Maintain, or Design-Build-Operate-Maintain Concession).

Asset recycling can further reinforce the "beneficiary pays" principle of economics, thus ensuring financial equity, by enabling additional value capture from the private property owners that benefit from the new infrastructure (paid for by the asset recycling proceeds) to support other new or future infrastructure projects.

More generally, P3 is not, in itself, a revenue-generating tool. P3s generally engage the private sector to build, operate, and maintain the new infrastructure with high quality of service to increase users' willingness to pay to generate new revenues. The infrastructure asset being leased must generate revenue to be of interest to private sector. The potential benefits of P3s include accessing private capital, advancing projects despite government debt limitations, incentivizing innovation, improving quality and efficiency, allocating risk to partners most capable of managing it, providing greater price and schedule certainty, providing resources for operations and maintenance, and facilitating life-cycle cost efficiency.

However, P3s also have limitations, such as not being a funding source but rather a project delivery method that requires a return on investment for the private partners. P3s generally have high transaction costs, benefit large and new construction projects and present risks with complex procurement that require technical capabilities to manage its development and long-term contract oversight. All of this makes defining a possible revenue stream difficult. Few county/local projects are likely to meet the parameters required for the management of a P3 project. Thus, State and local authorities must consider obtaining the appropriate legal and advisor experience and expertise in the Lease Concession to assist in developing a Value Capture Asset Recycling Program using P3s.

Glossary

Competitive Market: When there are buyers and sellers of similar infrastructure assets. In the case of Asset Recycling, the private capital markets have the interest and the capacity to undertake a long-term operation and maintenance of the infrastructure asset. There is substantial interest in infrastructure investment opportunities by private investors.

Concessionaire—The private sector party to a concession agreement. The concession company or concessionaire has the right to implement the concession, assemble the financing, and negotiate agreements with the public sector. Most concession companies are established as Special Purpose Vehicles (SPVs) or Special Purpose Entities (SPEs), which are a combination of firms that create a joint venture for the purpose of bidding on a project.

Handback provision—The terms, conditions, requirements, and procedures governing the condition in which a private partner is to return an asset to the public sector upon expiration or earlier termination of the agreement, as set forth in the contract.

Lease Concession—A lease concession structure involving a lease of an existing or to-be-constructed public asset to a private concessionaire for a specified period of time. In general, the concessionaire will receive the right to collect revenue generated by the asset over the life of the contract (typically 25–99 years) in exchange for agreeing to construct or operate and maintain or improve the facility during the term of the lease.

Life-cycle cost—The total cost from a project's inception to the end of its useful life. One potential advantage of P3s is optimizing life-cycle costs, either by building to a higher standard at the beginning of a project, minimizing operations and maintenance expenditures over time, or enhancing operations and maintenance such that rehabilitation is not required as often

Monetization—An existing infrastructure asset lease concession in which the public sector receives an up-front payment from the private sector for the right to future revenues from an existing facility. In essence, the public sector is “monetizing” (i.e., turning into cash) the asset it owns.

Monitor Performance (Public Partner)—The public sector monitors performance of the private partner with respect to the obligations in the contract. If the private partner fails to comply with the provisions, the public partner takes the steps that are specified in the agreement. Some agreements allow the public sector to assess financial penalties for noncompliance. Others provide for “default points” for serious violations of the agreement. Some agreements allow a concession to be canceled if a concessionaire receives too many default points, and the public sector can award it to another concessionaire or bring it back under public control.

Performance measure—Outcome-based metrics used to specify standards in a lease concession agreement. These measures are used throughout all phases of a project and enable the public sector to determine specifications that the private sector must meet in order to be in compliance with the terms of the contract. Failure to perform to these standards may result in a compensation event, whereby the private sector party is penalized a sum of money or receives “cancellation points” that may ultimately lead to loss of the concession.

Privatization—The full transfer of public infrastructure to the private sector. This is distinct from a long-term lease concession, in which ownership remains in the public sector

Project Revenue—Money generated from the operation of a facility, usually in the form of fees, tolls, or fare.

Risk Allocation—The process of allocating risk between the public and private parties. The principle is generally to allocate the majority of the risk to the party best able to manage that particular risk. For example, a concessionaire usually bears the risk of operations and maintenance cost increases, because the company is most likely to be able to control these increases.

Special Purpose Vehicle (SPV)—Special Purpose Vehicle (SPV) or Special Purpose Entity (SPE)—A corporate body (usually a limited company of some type or sometimes a limited partnership) of several companies created specifically to implement a lease concession project.

Resources:

- Asset Recycling for Social Infrastructure in the United States; https://www.researchgate.net/publication/339938782_Asset_Recycling_for_Social_Infrastructure_in_the_United_States
- Recycling our Infrastructure for Future Generations; http://www3.weforum.org/docs/WEF_Recycling_our_Infrastructure_for_Future_Generations_report_2017.pdf
- Asset Recycling and Its Potential for Infrastructure Savings, Brianna Fernandez; <https://www.americanactionforum.org/research/asset-recycling-potential-infrastructure-savings/#ixzz70mhnAnfm>
- Asset recycling – a concept that taxpayers need to understand!, Posted in Mary Scott Nabers' Insights by Mary Scott Nabers; <https://www.spartnerships.com/asset-recycling-concept-taxpayers-understand/>
- It's time to revitalize US Infra Through Asset Recycling; <https://www.infrastructureinvestor.com/its-time-to-revitalise-us-infra-through-asset-recycling/>
- US Infrastructure and Beyond -What's Being Proposed and How to Pay for It? <https://www.pentegra.com/current-thinking/straight-talk-about-investments-and-financial-markets/us-infrastructure-and-beyond-whats-being-proposed-and-how-to-pay-for-it/>
- Asset recycling may look new and exciting. But it's the last gasp of a failed model John Quiggin; <https://www.theguardian.com/commentisfree/2017/jun/07/asset-recycling-may-look-new-and-exciting-but-its-the-last-gasp-of-a-failed-model>
- [Asset Recycling for Social Infrastructure in the United States;](https://www.researchgate.net/publication/339938782_Asset_Recycling_for_Social_Infrastructure_in_the_United_States) https://www.researchgate.net/publication/339938782_Asset_Recycling_for_Social_Infrastructure_in_the_United_States
- Asset Recycling Could Generate \$885 Billion For U.S. Infrastructure Investment; https://www.concreteconstruction.net/business/management/asset-recycling-could-generate-885-billion-for-u-s-infrastructure-investment_o
- 23 CFR § 710.409 - Disposal of excess real property; <https://www.law.cornell.edu/cfr/text/23/710.409>
- Sale of Surplus City or Town Property; <https://mrsc.org/Home/Explore-Topics/Legal/General-Government/Sale-of-Surplus-City-or-Town-Property.aspx>
- The FHWA issued a guidance document on April 27 to provide “clarification” to both its division offices and state on State DOTs Leveraging Alternative Uses of the Highway Right-of-Way Guidance; https://www.fhwa.dot.gov/real_estate/right-fway/corridor_management/alternative_uses_guidance.cfm
- Renewable Energy Projects in Highway Right-of-Way (ROW): https://theray.org/wp-content/uploads/2018/04/FHWA_Quick-Guide-Renewable-Energy-in-Highway-ROW.pdf

- 23 CFR § 710.405 - ROW use agreements; <https://www.law.cornell.edu/cfr/text/23/710.405>
- National Conference of State Legislatures public-private partners project resources at <http://www.ncsl.org/issues-research/transport/partners-project-on-public-private-partnerships-p.aspx>
- e-CFR data is current as of July 21, 2021; Title 23 → Chapter I → Subchapter H → Part 710 —RIGHT-OF-WAY AND REAL ESTATE; <https://www.ecfr.gov/cgi-bin/text-idx?SID=9ab38b263f1cf4c85bb1cd3c6a3690eb&node=pt23.1.710&rgn=div5>



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