

Office of Legislative Oversight

**MEMORANDUM REPORT**

July 15, 2014

TO: County Council

FROM: <sup>AT</sup> Aron Trombka, Senior Legislative Analyst  
Office of Legislative Oversight

SUBJECT: **OLO Memorandum Report 2014-9:  
Alternative Infrastructure Financing Methods**

County Council Resolution 17-830 established the Fiscal Year 2014 Work Program for the Office of Legislative Oversight (OLO). As part of the approved Work Program, the Council directed OLO to prepare a report that describes alternative methods to finance the construction and renovation of transportation, school, and other public infrastructure. The assignment further called for the report to include case studies that detail alternative infrastructure financing methods employed in other jurisdictions.

Overview of Findings and Conclusions: This memorandum report describes current methods of infrastructure financing available to Montgomery County and presents information and case studies regarding recent developments in alternative infrastructure financing employed elsewhere in the country, including private financing of capital projects and infrastructure banks. The primary findings and conclusions of this report are summarized below:

- When determining the optimal financing strategy for a project, ***alternative financing methods should be assessed in the context of the County's current AAA borrowing costs.*** The County funds construction of capital facilities through a variety of financing methods including borrowing, intergovernmental aid, and use of current revenue. General obligation bonds fund about one-half of the total six-year capital spending programmed in the Capital Improvements Program. County general obligation bonds have received the highest possible credit rating possible for a local government from all major rating agencies. These bond ratings provide the County with ready access to borrowing markets at the lowest available interest rates for municipal debt.

- ***Private financing of capital projects offers certain advantages over traditional methods for certain types of public facilities but comes with financial and policy tradeoffs.*** In the traditional method of public facility development, a public sector entity retains control over all elements of the capital and operating phases of the facility throughout its life cycle. In recent years, governments have pursued alternative methods of public facility development in which the private sector takes a lead role in project financing.

Private financing may expand total investment dollars, accelerate project delivery, and reduce a government's debt burden as compared to traditional financing. However, most successful public private partnerships have involved large transportation facilities capable of generating significant revenue streams through tolls or fees. Non-transportation government functions (such as education and public safety) and smaller transportation projects have no or limited capacity for revenue generation, and so, are unlikely to attract private investment interest. Public-private partnerships also typically involve some type of public sector contribution in the form of direct payments, land donation, or the concession of future revenue streams. In addition, in some cases, private investment requires the public partner to cede control over policy considerations such as fee structures and facility access.

- ***Infrastructure banks are a financing mechanism for larger governmental units to assist smaller governmental units that lack the revenue streams, cash flow, or credit status to fund infrastructure improvements.*** An infrastructure bank may be capitalized by various means including direct appropriation of government funds, dedicated revenue streams, bond sales, and private sector investment. The capital assets in an infrastructure bank serve as a revolving fund with loan repayments replenishing the bank's fund balance. Multiple proposals have been floated to create a national infrastructure bank. State-level infrastructure banks have been in existence for several decades in many states but not in Maryland. In recent years, a few municipalities have established local infrastructure banks.

**Methodology:** To prepare this report, OLO gathered information through Internet research supplemented by telephone and email communications with subject matter experts.

**Acknowledgments:** OLO appreciates the assistance of the Director and staff of the Montgomery County Department of Finance including Joseph Beach, Robert Hagedoorn, Mary Casciotti, Jacqueline Carter, and Michael Coveyou. In addition, OLO staff members Natalia Carrizosa and Kelli Robinson provided valuable assistance.

**Organization of the Report:** This memorandum report is organized into four sections:

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## SECTION 1: CURRENT METHODS OF INFRASTRUCTURE FINANCING

The County funds construction of capital facilities through a variety of financing methods including borrowing, intergovernmental aid, and use of current revenue. This section provides an overview of current methods available to the County to finance infrastructure development.

### 1.A. General Obligation Bonds

The County Government issues general obligation bonds to finance construction of capital facilities. The proceeds from general obligation bonds fund about one-half of the total six-year capital spending programmed in the current Approved Capital Improvements Program (CIP), making up the single largest funding source for the capital improvements funded by tax-supported County agencies.<sup>1</sup> The County structures most general obligation bond issuances with level annual debt repayment extending over a period of 20 years. The money to repay general obligation debt comes primarily from general revenues (except for bonds to construct facilities supporting the activities of certain enterprise funds).<sup>2</sup>

County general obligation bonds have received the highest possible credit rating possible for a local government from all major rating agencies. The County has earned an Aaa rating from Moody's Investors Service every year since 1973, an AAA rating from Standard and Poor's every year since 1976, and an AAA rating from Fitch every year since 1991. The County is one of only 14 AAA rated counties in the United States with a population greater than 900,000.<sup>3</sup> These bond ratings provide the County with ready access to borrowing markets at the lowest available interest rates for municipal debt. In the most recent general obligation bond sale, the County's cost of financing infrastructure was 3.13%.

### 1.B. Current Revenue

The County also allocates the use of current revenue (cash on hand) to fund capital projects. Use of current revenues is known as "pay-as-you-go" (PAYGO) financing. PAYGO replaces bond financing for debt-eligible expenditures. County policy is to allocate PAYGO for at least ten percent of the general obligation bond funding amount for each fiscal year.<sup>4</sup>

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<sup>1</sup> Office of Management and Budget, *County Executive's Recommended FY15 Capital Budget and FY15-20 Capital Improvements Program – Highlights*, <http://www.montgomerycountymd.gov/OMB/Resources/Files/omb/pdfs/fy15/ciprec/cip-highlights.pdf>.

<sup>2</sup> Office of Management and Budget, *County Executive's Recommended FY15 Capital Budget and FY15-20 Capital Improvements Program – CIP Fiscal Policy*, <http://www.montgomerycountymd.gov/OMB/Resources/Files/omb/pdfs/fy15/ciprec/cip-fiscal.pdf>.

<sup>3</sup> Department of Finance, *Montgomery County Comprehensive Annual Financial Report for Fiscal Year 2013*, [http://www.montgomerycountymd.gov/finance/resources/files/data/financial/cafr/fy2013\\_financial\\_section.pdf](http://www.montgomerycountymd.gov/finance/resources/files/data/financial/cafr/fy2013_financial_section.pdf).

<sup>4</sup> Office of Management and Budget, *County Executive's Recommended FY15 Capital Budget and FY15-20 Capital Improvements Program – CIP Fiscal Policy*, <http://www.montgomerycountymd.gov/OMB/Resources/Files/omb/pdfs/fy15/ciprec/cip-fiscal.pdf>.

### **1.C. Intergovernmental Aid**

The County funds some capital projects in whole or in part through grants, matching funds, or cost sharing agreements with the Federal government and the State of Maryland.

- Federal Aid: Most Federal aid is provided directly to the State and redistributed to local governments. Approximately 85% of Federal aid in the current County CIP supports transportation projects (including the Silver Spring Transit Center, the Airpark, the Route 355 Pedestrian Crossing at the Medical Center Metro Station, and various bridge projects).
- State Aid: State aid for capital projects primarily supports the construction and renovation of school (K-12 and higher education), transportation, stormwater management, and water and sewer facilities. For several high-priority facilities, the County has advanced-funded highway and school construction projects in anticipation of reimbursement from the State.<sup>5</sup>

### **1.D. Revenue Bonds**

Revenue bonds finance specific projects associated with revenue-generating activities. Proceeds from the sale of revenue bonds may be used solely to finance the specific facilities authorized by the bond issuance. Revenues generated by the completed facilities or related activities fund debt service payments for the revenue bonds. For example, the County has issued revenue bonds to finance construction of parking facilities in the Bethesda and Silver Spring Parking Districts. Parking fees and fines and Parking District property taxes fund the debt service payments for these revenue bonds.<sup>6</sup>

### **1.E. Interim Financing**

The County has issued Bond Anticipation Notes, a type of short-term borrowing, as an interim form of capital project financing to take advantage of favorable interest rates. The County has employed interim financing in situations in which a reason exists to delay permanent financing. The County may elect to issue Bond Anticipation Notes when offsetting revenue is expected to become available in the future (for example, through land sales) but the exact timing of the future revenue is uncertain.<sup>7</sup>

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<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

## 1.F. Development-Related Infrastructure Financing

As part of the zoning and subdivision approval process, the County Planning Board, in some cases, can require a private developer to build or improve transportation facilities, dedicate land for schools and parks, and/or build or finance other public amenities. In addition, the County has established other means of raising revenue to fund infrastructure improvements necessary to support new development.

- **Impact Taxes:** The County charges impact taxes to provide public facilities needed to support new residential and commercial development. The County levies an impact tax to fund transportation improvements associated with new development. Transportation Impact Tax rates vary by geographic area of the County. In addition, most residential development in the County is subject to an impact tax for school facilities. School Impact Tax rates are based on average student generation rates for different housing types.<sup>8</sup>
- **Development Districts:** Development districts are special taxing districts in which the County levies special property taxes and assessments to finance infrastructure improvements. The County may issue low-interest, tax-exempt bonds to fund the construction of public facilities needed to accommodate development in the district. Revenue generated from the special property taxes and assessments is used to pay the debt service on the bonds. The County has established two development districts, both in the Germantown area (the Kingsview Village Center Development District and the West Germantown Development District). Development district special tax revenue is not subject the County Charter property tax limit.<sup>9</sup>
- **Special Taxing Districts:** The Code of Maryland authorizes Charter counties to create special taxing districts to fund local infrastructure improvements. Once a county has established a special taxing district, the county may issue bonds to finance capital projects. The county then may use revenue from special taxes assessed in the district to repay the bond debt. State law further stipulates that special taxing district revenue used to fund State or county transportation improvements are not subject to county tax limitations (such as the Montgomery County Charter property tax limit).<sup>10</sup> As authorized by State Law, the Montgomery County Council established the White Flint Special Taxing District in 2010. The Council amended the County Code to authorize the County to levy an ad valorem property tax and to issue bonds to fund certain designated transportation infrastructure improvements.<sup>11</sup>
- **WSSC Systems Development Charge:** State law authorizes the Washington Suburban Sanitary Commission to assess charges based on the number and type of plumbing fixtures in new construction. Revenue generated by this charge must be spent on new water and sewerage treatment, transmission, and collection facilities.

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<sup>8</sup> Ibid.

<sup>9</sup> Montgomery County Charter, Section 305.

<sup>10</sup> Code of Maryland, Local Government Article, Title 21, Special Taxing Districts, Section 21-702.

<sup>11</sup> Montgomery County Council, Chapter 68C.

## 1.H. Tax Increment Financing

Tax increment financing (TIF) allows a local government to borrow against the future increased value of property to make public improvements. TIF is predicated on the presumption that local infrastructure improvements will attract private investment which, in turn, will raise property assessments and property tax revenue. The incremental increase in property tax revenue resulting from TIF improvement is dedicated to repay TIF bond debt. In 1980, the Maryland General Assembly enacted the Tax Increment Financing Act that authorizes counties and municipalities to issue bonds to “finance development of industrial, commercial or residential areas.”<sup>12</sup>

In 2009, the General Assembly authorized the Maryland Economic Development Corporation to enter into agreements with certain local governments to use revenue from special taxing districts to pay debt service on TIF bonds issued to fund infrastructure improvements in support of transit-oriented development. During the 2013 session, the General Assembly approved the Sustainable Communities - Designation and Financing Act that granted local governments the authority to use TIF bond proceeds to finance the costs of infrastructure improvements which support “sustainable communities.” Under the 2013 law, counties may use TIF for a variety of purposes including: (1) historic preservation or rehabilitation; (2) environmental remediation, demolition, and site preparation; (3) parking lots, facilities, or structures of any type whether for public or private use; (4) highways or transit service that support sustainable communities; (5) schools; (6) affordable or mixed-income housing; and (7) stormwater management and storm drain facilities.<sup>13</sup>

From 2000 through 2010, Maryland counties and municipalities used TIF to borrow \$273 million through 15 separate bond issuances. Prince George’s County issued \$65 million in TIF bonds – the largest single TIF offering executed in Maryland – to finance infrastructure in support of the National Harbor project.<sup>14</sup> To date, Montgomery County has not employed TIF to finance infrastructure improvements.<sup>15</sup>

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<sup>12</sup> Maryland Department of Planning, *User Guide for Maryland Sustainable Community Revitalization – Tax Increment Financing Models and Guidelines*, <http://planning.maryland.gov/PDF/OurProducts/Publications/ModelsGuidelines/mg29.pdf>.

<sup>13</sup> Maryland General Assembly Department of Legislative Services, *Fiscal and Policy Note for House Bill 613*, [http://mgaleg.maryland.gov/2013RS/fnotes/bil\\_0003/hb0613.pdf](http://mgaleg.maryland.gov/2013RS/fnotes/bil_0003/hb0613.pdf).

<sup>14</sup> Partners for Economic Solutions for the Maryland Department of Planning, *Tax-Increment Financing*, January 24, 2011, [http://planning.maryland.gov/PDF/YourPart/773/20110124/msgc\\_012411\\_TIF\\_Presentation.pdf](http://planning.maryland.gov/PDF/YourPart/773/20110124/msgc_012411_TIF_Presentation.pdf).

<sup>15</sup> Montgomery County Department of Finance.

## **SECTION 2: PRIVATE FINANCING OF PUBLIC PROJECTS**

In the traditional method of public facility development, a public sector entity retains control over all elements of the capital and operating phases of the facility throughout its life cycle. In contrast, a public-private partnership (also known as a “P3” or “PPP”) is a contractual agreement between a public agency and a private entity that involves private sector participation in the planning, design, construction, renovation, financing, operation, and/or maintenance of a public facility. This type of agreement allocates project risks and benefits between the public and private sector partners.

Public-private partnerships have existed in the United States for generations. Many of the earliest major roads in the U.S. were private toll roads. Similarly, local and intercity coach services were some of the first privately-owned transit services. However, over the course of the 19th century and into the 20th century, private sector involvement in the development of public infrastructure declined as the Federal, state, and local governments increased the pace of facility construction. In the 1980s, as post-war infrastructure aged and Federal assistance decreased, state and local governments assumed a new interest in public-private partnerships.<sup>16</sup>

Public-private partnerships diverge from the traditional “Design-Bid” approach to public facility development. Under the Design-Bid method, a government agency contracts with one private entity to design a capital project and contracts with a separate private entity to construct the project. Throughout the Design-Bid process, the government agency retains management responsibility for project development and financing.

In recent years, governments have pursued alternative methods of public facility development in which the private sector takes a lead role in project financing. This section describes and presents case studies for three public-private alternative financing methods: “Design-Build-Finance” (Section 2.A.); “Design-Build-Finance-Operate-Maintain” (Section 2.B.); and “Design-Build-Finance-Maintain” (Section 2.C.).

### **2.A. Design-Build-Finance Projects**

In the design-build-finance (DBF) procurement method, the government awards a single contract for the design, construction, and financing of a public facility.

#### **2.A.1. Characteristics of DBF Contracting**

Under the DBF method, a private sector contractor receives compensation for the design and construction of a facility, including the cost of short-term project financing. The government retains ownership of the facility and is responsible for its operation and maintenance. Contractor compensation takes the form of multi-year government payments for design and construction services. In effect, the contractor agrees to finance the project through the design and

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<sup>16</sup> Office of Legislative Oversight. *An Overview of Public-Private Partnerships in Road, Parking, and Transit Projects*, January 26, 2010, <http://www.montgomerycountymd.gov/olo/resources/files/2010-6.pdf>.

construction phases in exchange for a promise of future year payments. These payments constitute an annual operating expense for the government rather than debt.<sup>17</sup>

The DBF method allows a government to defer payment for a public facility until after completion of the construction phase. Public officials may prefer to defer payment either to preserve capital cash reserves or to create an incentive for the contractor to accelerate the construction of the project. In entering into a contract with a deferred payment, the contractor assumes the risk that the government will fail to appropriate operating funds in future years to pay for the completed facility.<sup>18</sup>

Private firms that enter into DBF contracts may elect to either self-finance the project or borrow funds using commercial lending markets. The contract amount paid by the government is affected by the contractor's financing cost as well as the repayment risk assumed by the contractor.<sup>19</sup>

### **2.A.2. DBF Case Study: I-90 Innerbelt (George V. Voinovich Bridge) Bridge**

The Ohio Department of the Transportation (ODOT) elected to employ the DBF procurement method for a project to build a new bridge over the Cuyahoga River in a section of Interstate 90 known as the Cleveland "Innerbelt." ODOT assessed several alternative approaches to finance the project and ultimately chose the DBF method. In preparing the solicitation, ODOT expected the contractor to privately finance the project and to design and construct the bridge on an accelerated schedule. The State would make payments to the contractor based on the project's un-accelerated schedule.<sup>20</sup> An ODOT analysis cited an advantage of DBF for the Innerbelt Bridge project:

Unlike traditional public-private partnerships, which achieve efficiencies and risk transfer by combining financing, design and construction with long-term operations and maintenance responsibilities, DBF contracts primarily provide a means to advance construction in the face of short term funding constraints.<sup>21</sup>

The ODOT analysis compared expected project costs of a DBF contract versus the more traditional method of public financing. The analysis concluded that:

A DBF would allow ODOT to build now and pay later without incurring much, if any, higher cost in the future compared to a delayed traditional procurement approach. This is because expected financing costs do not exceed ODOT's forecast construction inflation. ... The Department would not be advised to use private financing if it were bridging to a subsequent financing in FY 2016-2019,

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<sup>17</sup> Federal Highway Administration, Office of Innovative Program Delivery, *P3 Defined, Design Build Finance*, [http://www.fhwa.dot.gov/ipd/p3/defined/design\\_build\\_finance.aspx](http://www.fhwa.dot.gov/ipd/p3/defined/design_build_finance.aspx).

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Ohio Department of Transportation, *CUY-Innerbelt CCG2 EB Bridge and CUY-90-15.24 Demo, CCG2 Alternative Delivery Analysis Findings and Recommendations Memo*, August 2012,

[http://www.dot.state.oh.us/Divisions/InnovativeDelivery/Innerbelt%20%20DBF%20Analysis/2012-Aug\\_CCG2.pdf](http://www.dot.state.oh.us/Divisions/InnovativeDelivery/Innerbelt%20%20DBF%20Analysis/2012-Aug_CCG2.pdf).

<sup>21</sup> Ibid.

rather than cash, to meet the DBF contract payments. This is because interest rates are at historic lows, and the future cost of ODOT issuing its own long-term debt will likely be higher than it is today.<sup>22</sup>

Nonetheless, the ODOT analysis identified challenges that will arise from employing the DBF process. ODOT recognized that some contractors with experience in building public facilities may be unfamiliar with DBF procurement. ODOT concluded that the “DBF procurement process would need to include sufficient opportunities for interaction with proposers, and procurement documents will need to be clear about financing requirements to help proposers understand the DBF approach.”<sup>23</sup>

ODOT awarded a \$273 million contract to design and build the I-90 Innerbelt Bridge (renamed the George V. Voinovich Bridge) in the fall of 2013. The project is expected to be completed by the fall of 2016.<sup>24</sup>

## **2.B. Design-Build-Finance-Operate-Maintain Projects**

In the design-build-finance-operate-maintain (DBFOM) procurement method, the government enters into concession agreements with private vendor(s) for the design, construction, financing, and long-term operation and maintenance of a public facility.

### **2.B.1. Characteristics of DBFOM Contracting**

DBFOM project financing relies either partially or entirely on debt leveraging of future designated revenue streams. The most common form of DBFOM financing revenue is direct user fees, such as highway tolls. The private sector assumes the right to collect the tolls during the concession period but also bears the risk that toll revenue may not meet projections. In some DBFOM agreements for tolled facilities, the concession agreement includes a public-private revenue sharing provision to take effect should toll revenue generation exceed projections. For non-tolled DBFOM projects, financing may come in the form of availability payments, that is, a fixed set of future year payments from the government to compensate the private concession holder for design, construction, operation, and maintenance services. In either case, the private sector partner leverages anticipated future revenue streams to borrow funds for the capital project. The type and risk exposure of the revenue source can affect the cost of government payments to the private sector partner.<sup>25</sup>

DBFOM concessions can provide public agencies with access to new sources of equity and financing. State and local government agencies have entered into DBFOM concessions for both

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<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Ohio Department of Transportation, *George V. Voinovich Bridge Project History*, <http://www.dot.state.oh.us/projects/ClevelandUrbanCoreProjects/Innerbelt/InnerbeltBridge/NewsInformation/Pages/ProjectHistory.aspx>.

<sup>25</sup> Federal Highway Administration, Office of Innovative Program Delivery, *P3 Defined, Design Build Finance Operate Maintain Concession*, [http://www.fhwa.dot.gov/ipd/p3/defined/design\\_build\\_finance\\_operate.aspx](http://www.fhwa.dot.gov/ipd/p3/defined/design_build_finance_operate.aspx).

new facility construction and for the upgrade or expansion of an existing facility. DBFOM concessions are awarded through a competitive bidding process. In some cases, the public sector contributes to project development, for example, through donation of land or a right-of-way.<sup>26</sup>

DBFOM agreements commonly extend for a period of 30 to 50 years. In most DBFOM agreements, the public agency retains ownership of the facility while the private sector assumes responsibility for facility development, operations, and maintenance. The concession agreement stipulates required maintenance and operations standards and benchmarks.<sup>27</sup>

The desirability of using the DBFOM method depends on multiple project-specific variables including government borrowing costs, the ability of the facility to generate revenue, project schedule, facility operation and maintenance requirements, and public policy goals. The Federal Highway Administration Office of Innovative Program Delivery presents the following summary of the central financial consideration for a government agency considering use of the DBFOM method:

Given the ability of public sector agencies in the United States to issue low-interest tax-free debt, it is often more cost-effective for public project sponsors to issue debt than their private sector partners. Federal financing tools such as private activity bonds, however, help lower the borrowing costs for the private partner.... Ultimately, any cost premium from privately financing a project must be offset by other project execution efficiencies derived from the private partner's participation, such as design or construction innovations or lifecycle operations and maintenance cost savings.<sup>28</sup>

### **2.B.2. DBFOM Case Study: Capital Beltway HOT Lanes**

The Virginia Public Private Transportation Act enables the Virginia Department of Transportation (VDOT) to enter into agreements with private entities to develop and/or operate transportation facilities. The Capital Beltway High Occupancy Toll (HOT) Lanes project (also known as the “495 Express Lanes”) is a public-private partnership between VDOT and a joint private venture (called “95 Express Lanes, LLC”) of Transurban and Fluor Virginia, Inc. The central element of the project was the construction of 14 miles of HOT lanes<sup>29</sup> from the Springfield Interchange to just north of the Dulles Toll Road. The project also included replacement of more than 50 bridges and overpasses.<sup>30</sup>

The total cost to design and construct the Capital Beltway HOT Lanes project was about \$2 billion. Project funding came from multiple public and private sources. The Commonwealth of

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<sup>26</sup> Ibid.

<sup>27</sup> Ibid.

<sup>28</sup> Ibid.

<sup>29</sup> High Occupancy Toll (HOT) lanes are limited-access lanes that provide access to toll-paying single occupant vehicles as well as free or reduced cost access to high occupancy vehicles.

<sup>30</sup> Federal Highway Administration, Office of Innovative Program Delivery, *I-495 Capital Beltway HOT Lanes*, [http://www.fhwa.dot.gov/ipd/project\\_profiles/va\\_capital\\_beltway.aspx](http://www.fhwa.dot.gov/ipd/project_profiles/va_capital_beltway.aspx).

Virginia contributed \$409 million in state funds designated primarily for completion of the Springfield Interchange between I-495, I-395, and I-95 and other interchange improvements.<sup>31</sup>

The Federal Government also provided financial assistance to the project through the Transportation Infrastructure Finance and Innovation Act (TIFIA) program. The U.S. Department of Transportation awards TIFIA loans, loan guarantees, and lines of credit to help finance surface transportation projects deemed to have national and regional significance.<sup>32</sup> For this project, the U.S. DOT granted a \$589 million low-interest TIFIA loan with a 35-year repayment schedule. The TIFIA loan holds a subordinate lien position on the project's toll revenues after operations and maintenance expenses, certain capital expenditures, and other debt service payments.<sup>33</sup>

Project financing was further supported through the issuance of a private activity bond. A private activity bond is a bond issued by a local or state government for the purpose of financing the project of a private user. Section 142 of the Internal Revenue Code grants tax-exempt status for private activity bonds issued for the construction of certain infrastructure projects.<sup>34</sup> The private entity that receives the bond revenues is responsible for servicing the debt. The private activity bond provided \$589 million in project financing. The Capital Beltway HOT Lanes project was the first project in the nation to be financed through a private activity bond combined with TIFIA financing.<sup>35</sup> The joint venture also provided private equity for project financing by contributing \$348 million toward project development.<sup>36</sup>

Under this DBFOM agreement, VDOT maintains ownership of the highway infrastructure. The private joint venture is responsible to build, operate, and maintain the facility for a 76-year concession period.<sup>37</sup> The private joint venture receives all highway user toll payments during the 76-year concession period. The concession agreement requires the joint venture to share some toll revenues with the state under certain conditions (such as debt refinancing or a higher than projected return on investment).

The Capital Beltway HOT Lanes opened in November 2012. During the first 16 months of operation, toll revenues and the number of drivers using the HOT lanes have grown steadily but remain below original projected levels.<sup>38</sup>

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<sup>31</sup> Ibid.

<sup>32</sup> Federal Highway Administration, Office of Innovative Program Delivery, *TIFIA*, <http://www.fhwa.dot.gov/ipd/tifia/>.

<sup>33</sup> Federal Highway Administration, Office of Innovative Program Delivery, *Transportation Infrastructure Finance and Innovation Act 2012 Report to Congress*, [http://www.fhwa.dot.gov/ipd/tifia/technical\\_resources/2012\\_report\\_to\\_congress.aspx](http://www.fhwa.dot.gov/ipd/tifia/technical_resources/2012_report_to_congress.aspx).

<sup>34</sup> Federal Highway Administration, Office of Innovative Program Delivery, *Tools & Programs: Federal Debt Financing Tools: Private Activity Bonds*, [http://www.fhwa.dot.gov/ipd/finance/tools\\_programs/federal\\_debt\\_financing/private\\_activity\\_bonds/#tifia](http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_debt_financing/private_activity_bonds/#tifia).

<sup>35</sup> Federal Highway Administration, Office of Innovative Program Delivery, *I-495 Capital Beltway HOT Lanes*, [http://www.fhwa.dot.gov/ipd/project\\_profiles/va\\_capital\\_beltway.aspx](http://www.fhwa.dot.gov/ipd/project_profiles/va_capital_beltway.aspx).

<sup>36</sup> Ibid.

<sup>37</sup> Transurban (USA) Operations Inc., *95 Express Lanes*, [http://95expresslanes.com/uploads/1000/32-95\\_Express\\_Lanes\\_External\\_QA.pdf](http://95expresslanes.com/uploads/1000/32-95_Express_Lanes_External_QA.pdf).

<sup>38</sup> WAMU, *Beltway Express Lanes Aren't Attracting Drivers or Money*, February 27, 2014, [http://wamu.org/news/14/02/27/beltway\\_express\\_lanes\\_arent\\_attracting\\_drivers\\_or\\_money](http://wamu.org/news/14/02/27/beltway_express_lanes_arent_attracting_drivers_or_money).

### 2.B.3. DBFOM Case Study: Colorado HOT Lanes / Bus Rapid Transit Improvements

The Colorado Department of Transportation (CDOT) has undertaken a multi-phase effort to reduce congestion on U.S. Route 36, a four-lane divided highway that connects the Cities of Denver and Boulder. The improvements, known collectively as the “U.S. 36 Managed Lane Project” are being implemented in phases. Phase 2 of the project will deliver improvements along a 15-mile stretch of U.S. Route 36 including:

- reconstruction of general use lanes;
- construction of two new HOT lanes;
- improvements to the existing bus rapid transit (BRT) infrastructure (e.g. bus priority at ramps and electronic signage to accommodate more frequent bus service);
- replacement, rehabilitation, and widening of existing bridges; and
- construction of a bikeway in the right-of-way.<sup>39</sup>

CDOT engaged in a competitive procurement process to select a private entity to finance, design, and construct Phase 2 improvements as well as to operate and maintain the U.S. Route 36 transportation corridor. In April 2013, CDOT entered into a DBFOM public-private partnership with Plenary Roads Denver (PRD) Ltd.<sup>40</sup> CDOT provided the following justification for its decision to finance the U.S. Route 36 improvements by means of a public-private partnership:

We are entering into this agreement to build much-needed improvements on a highway that was opened in 1951 two decades sooner than we could otherwise afford. Federal and state fuel taxes, which have not changed in over 20 years, cannot pay for the amount of aging infrastructure that needs repair in this state. A P3 is an innovative funding mechanism that puts the majority of the financial risk of the construction and maintenance costs, as well as the toll revenue collection on the private company; provides two thirds of the construction costs from the private sector and allows us to accelerate construction by decades.<sup>41</sup>

Under the 50-year concession agreement, the State of Colorado retains ownership of the highway. PRD will operate and maintain both the tolled and general purpose lanes (although CDOT will pay PRD for maintenance of the general purpose lanes). The Denver Regional Transportation District will operate the BRT in the Route 36 Corridor.<sup>42</sup>

<sup>39</sup> Federal Highway Administration, Office of Innovative Program Delivery, *U.S. 36 Managed Lane / Bus Rapid Transit Project: Phase 2*, [http://www.fhwa.dot.gov/ipd/project\\_profiles/co\\_us36\\_managed\\_lanes\\_phase2.aspx](http://www.fhwa.dot.gov/ipd/project_profiles/co_us36_managed_lanes_phase2.aspx).

<sup>40</sup> Ibid.

<sup>41</sup> Colorado Department of Transportation, *Update on US 36 Public-Private Partnership: Understanding the Facts*, <http://www.coloradodot.info/projects/US36ExpressLanes/update-on-us-36-public-private-partnership-understanding-the-facts>.

<sup>42</sup> Colorado Department of Transportation, *US 36 P3 FAQ 1.30.14*, <http://www.coloradodot.info/programs/high-performance-transportation-enterprise-hpte/reports/p-3/us-36-p3-faq-1-30-14.pdf/view>.

The concession agreement sets minimum operation and maintenance performance standards for the highway. Performance standards include a range of responsibilities including snow plowing and minimizing travel time delays. Under the agreement, PRD will incur financial penalties for failure to meet the specified highway performance standards.<sup>43</sup>

PRD will receive HOT lane toll revenues. The State of Colorado may receive a share of future tolls if revenues exceed minimum rate-of-return targets specified in the concession agreement. Toll rates for the highway will be set by a State Board.<sup>44</sup>

The U.S. 36 Managed Lane Project has an estimated project development and construction cost of \$208 million. The project received funding support from the Federal Government (\$2.6 million), the State of Colorado (\$57.9 million), and local governments (\$14.8 million). The private partner, PRD, contributed \$20.6 million in private equity and incurred \$20.6 million in subordinated debt. In addition, PRD also secured a \$60.0 million TIFIA loan and \$20.0 million in private activity bond revenues.<sup>45</sup>

Project construction is scheduled to be completed in December 2015.

#### **2.B.4. Proposed DBFOM Project: Purple Line**

Last year, the Maryland General Assembly approved, and the Governor signed, the Transportation Infrastructure Investment Act of 2013. The central feature of the legislation was to increase the gasoline tax for the purpose of funding transportation improvements. In addition, the Act directed the Maryland Department of Transportation (MDOT) to evaluate alternative strategies for funding transportation infrastructure. The Act listed specific projects for MDOT to evaluate the suitability of alternative financing. This list included the Purple Line, a planned 16.2-mile light rail transit line extending from Bethesda to New Carrollton.<sup>46</sup>

As detailed in a recent report to the Governor and the General Assembly, MDOT had considered various project delivery options for the Purple Line and determined that the DBFOM method offers the potential for long-term savings compared to other approaches. MDOT compared DBFOM against the traditional Design-Bid-Build approach to estimate risk-adjusted project costs over a three-decade period. MDOT concluded that:

financial value could be derived from operational benefits, risk transfer efficiencies, lifecycle planning, schedule discipline, and innovative opportunities. Moreover, as a stand-alone operation, the use of single contract accountability will increase the likelihood of consistently excellent, highly responsive service,

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<sup>43</sup> Ibid.

<sup>44</sup> Ibid.

<sup>45</sup> Federal Highway Administration, Office of Innovative Program Delivery, *U.S. 36 Managed Lane / Bus Rapid Transit Project: Phase 2*, [http://www.fhwa.dot.gov/ipd/project\\_profiles/co\\_us36\\_managed\\_lanes\\_phase2.aspx](http://www.fhwa.dot.gov/ipd/project_profiles/co_us36_managed_lanes_phase2.aspx).

<sup>46</sup> Maryland General Assembly Department of Legislative Services, Fiscal and Policy Note for House Bill 1515, <http://mgaleg.maryland.gov/webmga/firmMain.aspx?pid=billpage&stab=01&id=hb1515&tab=subject3&ys=2013RS>.

including reliable on-time performance, safe and clean vehicles and stations, and improved customer service.<sup>47</sup>

The proposed DBFOM structure for the Purple Line would involve a long-term, performance-based agreement with a private sector entity. The private sector partner would design, construct, and finance the project. In addition, the private partner would be responsible for operating and maintaining the rail line over a period of approximately 30 years. As proposed, the DBFOM agreement would obligate the State to make availability payments to the private sector partner. Funding for the availability payments would come from the Maryland Transportation Trust Fund, Federal grants, and local government contributions. The State would retain ownership of the facility and would set rail line fares.<sup>48</sup>

In November 2013, the Board of Public Works approved MDOT's proposal to issue a competitive DBFOM solicitation to select a concession holder for Purple Line design, construction, financing, operations, and maintenance. Soon thereafter, MDOT issued a Request for Qualifications to solicit potential private sector partners for the project. In January 2014, MDOT selected a shortlist of four qualified private teams to compete for the DBFOM procurement. MDOT soon will issue a Request for Proposals to the shortlisted teams and expects to select a preferred private sector partner and recommend a DBFOM agreement to the Board of Public Works either in late 2014 or early 2015.<sup>49</sup>

MDOT estimates the total cost of the Purple Line project at \$2.2 billion with funding coming from a combination of Federal, State, local and private sector sources. The State of Maryland's FY14-19 Capital Budget includes \$711 million in funding for Purple Line design and construction. MDOT expects that the private sector entity selected for the DBFOM agreement will invest between \$500 million and \$900 million in the project.<sup>50</sup>

## **2.C. Design-Build-Finance-Maintain Projects**

In the design-build-finance-maintain (DBFM) method, the single private entity that designs, constructs, and finances a project also assumes responsibility for on-going facility maintenance.

### **2.C.1. Characteristics of DBFM Contracting**

In most cases, public-private partnerships that obligate the private entity to perform long-term facility maintenance also include a provision for private operation of the facility (the DBFOM model). In a few recent cases, public agencies have entered into agreements wherein the government partner operates a facility that is maintained by the private sector partner. This type

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<sup>47</sup> A Report to Governor Martin O'Malley and the Maryland General Assembly Concerning Future Alternative Funding Strategies, Secretary's Office of the Maryland Department of Transportation, January 2014, [http://dlslibrary.state.md.us/publications/exec/mdot/hb1515ch429\(7b\)\\_2013.pdf](http://dlslibrary.state.md.us/publications/exec/mdot/hb1515ch429(7b)_2013.pdf).

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

<sup>50</sup> Maryland Department of Transportation/Maryland Transit Administration Press Release, *Private-Sector Teams Shortlisted for Purple Line P3*, January 8, 2014, <http://mta.maryland.gov/private-sector-teams-shortlisted-purple-line-p3>.

of procurement, the DBFM method, requires the private partner to maintain the facility in accordance with specified performance and upkeep standards. The government agency makes multi-year payments to the private partner for delivery and maintenance of the facility over an extended period (often several decades). The maintenance provision of a DBFM contract may serve as an incentive for the private partner to provide high-quality design and construction services to complete a facility that will meet performance standards over the long-term.

### **2.C.2. Case Study: Goethals Bridge Replacement**

The Port Authority of New York and New Jersey has undertaken a project to replace the 85-year old four-lane Goethals Bridge that carries I-278 over the Arthur Kill connecting Staten Island to New Jersey. The planned new six-lane bridge will be a cable-stayed structure with a bicycle/pedestrian path and the ability to accommodate a future transit lane. The Port Authority has entered into a DBFM agreement in which the agency will retain responsibility for operating the bridge, including setting toll rates and collecting tolls.<sup>51</sup>

In April 2013, the Port Authority Board of Commissioners authorized the award of a DBFOM concession agreement to a private joint venture called the NYNJ Link Partnership. Under the agreement, the Port Authority will make annual availability payments of \$56.5 million to compensate the private sector concession holder for designing, constructing, and maintaining the new bridge for a 40-year period. The Port Authority selected the DBFM approach in order to minimize public sector risk, to incentivize high-quality performance, and to expedite project completion. The Port Authority determined that the DBFM structure would:

“Transfer substantial risk for potential construction overruns and the long-term cost and quality of maintenance to the Developer.... Should the Developer underperform or the replacement bridge develops problems during its service period, the Port Authority will be able to reduce payment. This payment scheme will align the interests of the Port Authority and of the Developer in designing and implementing a project as efficiently as possible, and in providing high-quality design, construction, upkeep and user service... The Port Authority will repay the costs of construction to the Developer over the life of the [concession agreement] ... allowing the Port Authority to commence procurement for the project today.<sup>52</sup>

The private joint venture has secured other funding sources for the Goethals Bridge project including a \$474 million TIFIA loan and \$453.3 million in private activity bond revenues. The private entity will also contribute \$107 million toward project development.<sup>53</sup> Construction of

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<sup>51</sup> Federal Highway Administration, Office of Innovative Program Delivery, *Goethals Bridge Replacement*, [http://www.fhwa.dot.gov/ipd/project\\_profiles/ny\\_goethals.aspx](http://www.fhwa.dot.gov/ipd/project_profiles/ny_goethals.aspx).

<sup>52</sup> Port Authority of New York and New Jersey, *Goethals Bridge Replacement FAQ*, <http://www.panynj.gov/goethalsbridge/>.

<sup>53</sup> Federal Highway Administration, Office of Innovative Program Delivery, *Goethals Bridge Replacement*, [http://www.fhwa.dot.gov/ipd/project\\_profiles/ny\\_goethals.aspx](http://www.fhwa.dot.gov/ipd/project_profiles/ny_goethals.aspx).

the replacement bridge is expected to begin in late 2014 with substantial completion occurring in late 2017.<sup>54</sup>

### 2.C.3. Case Study: Yonkers Public Schools

While some foreign countries have employed public-private partnerships to finance public school infrastructure development, no school system in the United States had used this approach to finance the construction or renovation of school buildings. In 2012, the Superintendent of the Yonkers (New York) Public School District proposed an initiative to fund school construction and maintenance using the DBFM model. The intent of the Superintendent's proposal was to commit future year availability payments to attract private sector investment in school facilities.

A report issued by the Superintendent suggested that entering into a DBFM agreement would allow the City to move forward with an ambitious school capital construction program at a cost (over 35 years) that is \$63.1 million less than would be achievable through traditional public financing. The Superintendent presented a plan for a \$1.7 billion public-private partnership to renovate, rebuild, and/or replace aging and over-crowded school buildings. Based on this report, the Board of Education approved retention of a team of financial, legal, and technical advisors to assess the feasibility of the plan.<sup>55</sup> Soon thereafter, KPMG International named the Yonkers initiative as one of the 100 most innovative urban infrastructure projects in the world. The KPMG study stated the project "could be a real pathfinder for American education in an era of increasingly constrained public finances."<sup>56</sup>

The previous year, the Mayor of Yonkers had established a "Commission of Inquiry into the Finances of the City" to evaluate operating budget gaps and to make recommendations for reform and improvement of the City's Budget. In 2013, the Mayor asked the Commission to review the Board of Education's plan for construction of school facilities using the DBFM model. Specifically the Mayor directed the Commission to determine whether the proposed public-private partnership was cost-effective and practical.<sup>57</sup>

The Commission requested that the Board of Education provide information on how the projected cost savings were calculated. Commission members evaluated various aspects of the cost analysis including the net present value of future year availability payments, inflation assumptions, tax revenue generation, and the value of implementing school operation and maintenance efficiencies. The Commission determined that the Board of Education's analysis

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<sup>54</sup> Port Authority of New York and New Jersey Press Release, *The Port Authority Board of Commissioners Authorizes A Historic Public-Private Partnership for Replacement of the Goethals Bridge*, April 24, 2013, [http://www.panynj.gov/press-room/press-item.cfm?headline\\_id=1774](http://www.panynj.gov/press-room/press-item.cfm?headline_id=1774).

*Goethals Bridge Replacement FAQ*, <http://www.panynj.gov/goethalsbridge/>.

<sup>55</sup> Yonkers Public Schools, *Yonkers Public Schools P3 Named Among World's Most Innovative Urban Infrastructure Programs*, <http://yonkerspublicschools.org/1213news-3P-Honor-070312.php>.

<sup>56</sup> KPMG International, *Infrastructure 100: World Cities Edition*, 2012, <http://www.kpmg.com/AU/en/IssuesAndInsights/ArticlesPublications/Documents/infrastructure-100-world-cities-edition.pdf>.

<sup>57</sup> Commission of Inquiry into the Finances of the City of Yonkers, *Report on the "PRIDE" Proposal of the Yonkers School Board*, July 10, 2013, <http://yonkerstribune.typepad.com/files/yonkers-ps-pride-proposal-report-7.10.13.pdf>.

included significant flaws that inflated the savings of the DBFM proposal by at least \$200 million. In a report to the Mayor, the Commission concluded that:

We find that ... the methodology, the facts and the assumptions used to reach this conclusion are unreliable and replete with errors. These include arbitrary assertions unsupported by fact, and unsupported assumptions that are favorable to the P3 model.... [T]here is no rational basis for the assertion that the P3 model will generate \$63.1 million in savings. Rather, it is likely that the conventional financing and construction model will be less expensive.<sup>58</sup>

The Commission report did not suggest that public-private partnerships in concept were not feasible. Rather, the report found fault with the assumptions and analysis in the proposal prepared by the Board of Education.

After release of the Commission's report, the school construction DBFM proposal was put on hold. In January 2014, an audit found that the Yonkers School District mismanaged spending of State aid resulting in a \$55 million budget deficit. Later that month, the Superintendent who had championed the DBFM proposal abruptly announced that he would retire with three years remaining on his contract.<sup>59</sup>

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<sup>58</sup> Ibid.

<sup>59</sup> Journal News Media Group, *Yonkers Mayor Wants Control of Schools; Schools \$55M Short; Superintendent Retires*, January 17, 2014, <http://www.lohud.com/story/news/2014/01/17/yonkers-school-superintendent-bernard-pierorazio-to-retire-mayor-seeks-more-power/4591499/>.

## SECTION 3: INFRASTRUCTURE BANKS

An infrastructure bank is a government-established entity that provides loans, loan guarantees, and lines of credit to help fund infrastructure projects. As with a traditional commercial bank, infrastructure bank borrowers repay loans with interest. Unlike a commercial bank, an infrastructure bank takes no deposits and conducts no other “over-the-counter” transactions.<sup>60</sup>

An infrastructure bank may be capitalized by various means including direct appropriation of government funds, dedicated revenue streams, bond sales, and private sector investment. The capital assets in an infrastructure bank serve as a revolving fund with loan repayments replenishing the bank’s fund balance.<sup>61</sup> Infrastructure banks provide financial assistance to public (and in some cases, private) entities that seek advantageous interest rates and repayment schedules as well as access to private capital.

This section discusses proposed and existing infrastructure banks at the Federal, State, and local levels. Multiple proposals have been floated to create a national infrastructure bank (see Section 3.A.). State-level infrastructure banks have been in existence for several decades in many states but not Maryland (Section 3.B.). In recent years, a few municipalities have established local infrastructure banks (Section 3.C.).

### 3.A. Proposals to Create a National Infrastructure Bank

Legislation to create a national infrastructure bank bill was first introduced in Congress in 2007 and similar legislation has been proposed in every Congress since.<sup>62</sup> A Congressional Research Service (CRS) report identifies possible advantages of a national infrastructure bank over traditional funding approaches, including that the bank could:

- increase the total amount of investment in infrastructure by leveraging state, local, and private resources;
- accelerate construction of projects that may be slowed by the current need to await annual allocations of federal funds; and
- promote the distribution of federal spending on the basis of anticipated returns to investment, rather than according to traditional allocation methods such as formulas, discretionary programs, and earmarking.<sup>63</sup>

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<sup>60</sup> Mallett, William J., Maguire, Steven, and Kosar, Kevin R., *National Infrastructure Bank: Overview and Current Legislation*, Congressional Research Service, 2011, <http://www.fas.org/sgp/crs/misc/R42115.pdf>.

<sup>61</sup> Montgomery County has established several local revolving funds. For example, the Advance Land Acquisition Revolving Fund (ALARF) supports implementation of County’s Capital Improvements Program. The Council annually appropriates the unencumbered ALARF fund balance for use to acquire land in advance of facility construction. The revolving fund is reimbursed at a later date by appropriations to the specific facility project account.

<sup>62</sup> Lytton, Dennis, “The National Infrastructure Bank: A Cure-All for America’s Infrastructure Woes?” Georgetown Public Policy Review, February 16, 2014, <http://gppreview.com/2014/02/26/the-national-infrastructure-bank-a-cure-all-for-americas-infrastructure-woes/>.

<sup>63</sup> Mallett, Maguire and Kosar.

The CRS also cites possible disadvantages of a national infrastructure bank including that such an institution might:

- direct financing to projects that are the most viable financially rather than those with greatest social benefits;
- exclude small urban and rural areas because large, expensive projects tend to be located in major urban centers; and
- may shift some decision-making from the state and local level to the federal level.<sup>64</sup>

Three separate bills – two in the Senate and one in the House of Representatives – to create a national infrastructure bank were introduced in the previous Congressional term (the 112<sup>th</sup> Congress). Although the three bills differed in details, each would have created a national lending organization to support private and public investment in infrastructure projects.<sup>65</sup> None of the three bills were enacted by Congress. In the current (113<sup>th</sup>) Congress, three infrastructure bank bills have been introduced to date.

- H.R. 2553: H.R. 2553, the National Infrastructure Development Bank Act of 2013, sponsored by Rep. Rosa L. DeLaurio (D-Connecticut) would establish a “National Infrastructure Development Bank” (NIDB) as a wholly owned government corporation. The NIDB would provide financial assistance for transportation, energy, environmental, and telecommunications infrastructure projects through loans and loan guarantees. In addition, the NIDB would pay an interest subsidy for a new type of Government bond called an American Infrastructure Bond. H.R. 2553 was referred to the House Subcommittee on Water Resources and Environment. To date, the Subcommittee has taken no action on the proposed legislation.<sup>66</sup>
- H.R. 2084: H.R. 2084, the Partnership to Build America Act of 2013, sponsored by Rep. John K. Delaney (D-Maryland) would establish the American Infrastructure Fund (AIF) as a wholly-owned government corporation to provide bond guarantees and make loans to state and local governments for transportation, energy, water, communications, and educational facility infrastructure projects. The proposed legislation directs the Secretary of the Treasury to issue American Infrastructure Bonds with an aggregate value of \$50 billion. Proceeds from the bond sales would be deposited into the AIF. The bill further would allow U.S. corporations to deduct the value of AIF bond purchases from certain taxable dividends earned from foreign-controlled corporations. H.R. 2084 was referred to the House Subcommittee on Water Resources and Environment. To date, the Subcommittee has taken no action on the proposed legislation.<sup>67</sup>
- S. 387: S. 387, the American Infrastructure Investment Fund Act, sponsored by Sen. John D. Rockefeller (D-West Virginia) would establish the American Infrastructure

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<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>66</sup> Library of Congress, Bill Summary & Status 113th Congress (2013 - 2014), H.R.2553 CRS Summary, <http://thomas.loc.gov/cgi-bin/bdquery/z?d113:h.r.02553:>

<sup>67</sup> Library of Congress, Bill Summary & Status 113th Congress (2013 - 2014), H.R.2084 CRS Summary, <http://thomas.loc.gov/cgi-bin/bdquery/z?d113:h.r.02084:>

Investment Fund in the U. S. Department of Transportation. The purpose of the fund would be to provide loans and loan guarantees to: (1) invest in infrastructure projects that improve U.S. economic output, productivity, or competitive commercial advantage; (2) support projects that face funding barriers because of the need to combine resources across multiple jurisdictions or modes of transportation; and (3) improve the efficiency or throughput, the safety, and the environmental sustainability of a national or regional transportation network. S. 387 was referred to the Senate Committee on Commerce, Science, and Transportation. To date, the Committee has taken no action on the proposed legislation.<sup>68</sup>

### **3.B. State Infrastructure Banks**

Infrastructure banks have existed at the State level for more than two decades. As described below, the Federal Government provided grants to initially capitalize many State infrastructure banks. In addition, a few states have established infrastructure banks funded without an initial infusion of Federal dollars.

#### **3.B.1. Federally Capitalized Banks**

Most state infrastructure banks (SIBs) originated from a pilot program established by the Federal government in 1995. The National Highway System Designation Act allowed ten selected states to use a portion of their Federal transportation aid as seed money to initially capitalize new State-level infrastructure banks. The program required the states to match the Federal contribution. The SIBs were created as revolving funds to provide resources for investment in highway and transit infrastructure. Participating could leverage SIB assets to secure low-cost debt financing for transportation projects either through capital markets or by attracting new public or private investment.<sup>69</sup>

In 1997, Congress appropriated an additional \$150 million for SIB capitalization and expanded the pilot to 23 states. The 1998 Transportation Equity Act for the 21st Century (TEA-21) expanded the pilot program to four additional states and authorized capitalization of the SIBs through additional Federal grant programs. The 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) made all states and territories eligible to establish SIBs.<sup>70</sup> The 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21) funded surface transportation programs and continued the national SIB program. However, MAP-21 does not allow states to capitalize their SIB with FY13 or FY14 Federal highway funding nor does it authorize states to capitalize a SIB using post-SAFETEA-LU Federal funding.<sup>71</sup>

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<sup>68</sup> Library of Congress, Bill Summary & Status 113th Congress (2013 - 2014), S.387 CRS Summary, <http://thomas.loc.gov/cgi-bin/bdquery/z?d113:s.00387>.

<sup>69</sup> Puentes, Robert and Thompson, Jennifer, *Banking of Infrastructure, Enhancing State Revolving Funds for Transportation*, Brookings-Rockefeller Project on State and Metropolitan Innovation, September 2012, <http://www.brookings.edu/~media/research/files/papers/2012/9/12%20state%20infrastructure%20investment%20puentes/12%20state%20infrastructure%20investment%20puentes.pdf>.

<sup>70</sup> Ibid.

<sup>71</sup> Federal Highway Administration, MAP-21 - Moving Ahead for Progress in the 21st Century, *Project Finance/P3 Questions & Answers*, 2013 <http://www.fhwa.dot.gov/map21/qandas/qap3.cfm>.

At present, Federally capitalized SIBs exist in 33 states.<sup>72</sup> The Federal program allows each state to determine SIB lending policies including the loan application process, interest rates, and the length of loans. The Federal Highway Administration reports that, as of the end of FY13, states and territories had entered into an estimated 980 SIB loan agreements with a total value of \$6.19 billion.<sup>73</sup> Maryland has not established an infrastructure bank (see Section 3.B. below).

SIB activity has slowed in recent years. No state has created a new SIB since the enactment of SAFETEA-LU in 2005 and ten existing SIBs currently are inactive.<sup>74</sup> A report by the Brookings-Rockefeller Project on State and Metropolitan Innovation suggests that lack of recent SIB activity may be a product of the favorable credit environment that has existed since SAFETEA-LU was passed which allowed state governments agencies to borrow at very low rates in the municipal bond markets. The report further asserts that some states may seek to avoid the Federal regulatory requirements for contracting, environmental assessment, and project eligibility mandated by participation in the Federal program.<sup>75</sup>

### **3.B.2. State Capitalized Banks**

Some states have provided funds to capitalized infrastructure banks without an infusion of Federal dollars as illustrated in the two following case studies.

#### **3.B.2.a. California I-Bank Infrastructure State Revolving Fund**

The California Infrastructure and Economic Development Bank, commonly referred to as the “I-Bank,” was created in 1994 as a general purpose government financing agency. California law authorizes the I-Bank to issue revenue bonds, make loans, and provide credit enhancements to support infrastructure improvement, economic development, and other government purposes. The I-Bank’s Infrastructure State Revolving Fund (ISRF) provides low-cost, long-term financing for infrastructure projects.

The California State Legislature initially capitalized the ISRF with a \$50 million General Fund appropriation in the 1998/1999 State Budget. The following year, the State Legislature appropriated an additional \$425 million into the ISRF. However, the State Legislature transferred \$293 million from the revolving fund back into the General Fund to help address budget deficits in budget years 2001/2002 and 2002/2003. Subsequent to the initial capitalization, the ISRF fund is replenished by loan repayments, proceeds of revenue bonds issued by the I-Bank, fee revenue, and investment income.<sup>76</sup>

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<sup>72</sup> Puentes and Thompson.

<sup>73</sup> Data provided via email from Prabhat Diksit, FHWA Office of Innovative Program Delivery Transportation Industry Analysis & Monitoring Program Manager.

<sup>74</sup> Puentes and Thompson.

<sup>75</sup> Ibid.

<sup>76</sup> California Infrastructure and Economic Development Bank, *Request for Qualifications Arbitrage Compliance Services*, October 15, 2012 (Amended October 25, 2012), [http://www.ibank.ca.gov/res/docs/pdfs/rfq/Arbitrage%20Compliance%20RFO%20\(Amended\).pdf](http://www.ibank.ca.gov/res/docs/pdfs/rfq/Arbitrage%20Compliance%20RFO%20(Amended).pdf).

California cities, counties, special taxing districts, and certain non-profit corporations are eligible to receive ISRF assistance. The ISRF offers financial support for the design, land acquisition, planning, permitting, construction, and renovation of a variety of public improvements. Eligible projects include streets and highways, transit facilities, libraries, parks and recreation centers, water supply, sewage and water treatment facilities, and flood control improvements. Approved applicants receive subsidized low-interest ISRF loans ranging from \$50,000 to \$25 million. Loans have an amortization period of up to 30 years or the useful life of the asset being financed, whichever is less. In addition, the I-Bank charges a one-time origination fee of 1% of the financing amount or \$10,000, whichever is greater. The borrowing jurisdiction is not required to provide matching funds.<sup>77</sup>

A government entity seeking an ISRF loan submits a detailed application to the I-Bank. I-Bank professional staff evaluate the applicants' ability to repay the loan and the impact of loan repayments on the borrower's operating budget. I-Bank staff provide this analysis as well as a recommendation to the I-Bank Board of Directors. The Board of Directors – a five-member body consisting of the State department directors and Governor's appointees – has authority to approve ISRF loan agreements.<sup>78</sup>

In Budget Year 2012/2103, the Board of Directors approved three ISRF loans totaling \$12.1 million. The largest loan was a \$7.5 million loan to the Phelan Piñon Hills Community Services District for land acquisition and development of water supply infrastructure to support planned development in an unincorporated area of San Bernardino County. The other loans supported construction of a transit center parking lot and development of sewage collection and treatment facilities. The same year, the Board of Directors disapproved loan applications for five other projects.<sup>79</sup>

### **3.B.2.b. Virginia Transportation Infrastructure Bank**

In 2011, the Virginia General Assembly approved legislation establishing the Virginia Transportation Infrastructure Bank (VTIB). The VTIB is a revolving loan fund intended to encourage public and private investment in the development of transportation projects.

The State of Virginia created the VTIB “for the purpose of making loans and other financial assistance to localities, certain private entities and other eligible borrowers and grants to localities to finance transportation projects.”<sup>80</sup> The Virginia General Assembly provided \$282.7 million in initial capitalization for the VTIB. Of this total capitalization, \$250.0 million came

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<sup>77</sup> California Infrastructure and Economic Development Bank, *Infrastructure State Revolving Fund Program*, [http://www.ibank.ca.gov/infrastructure\\_loans.htm](http://www.ibank.ca.gov/infrastructure_loans.htm).

<sup>78</sup> California Infrastructure and Economic Development Bank, Amended and Restated Criteria, Priorities, and Guidelines for the Selection of Projects for Financing under the Infrastructure State Revolving Fund Program, October 29, 2013, <http://www.ibank.ca.gov/res/docs/pdfs/ISRF%20Criteria%20Priorities%20and%20Guidelines%20-%20Adopted%2010-29-13.pdf>.

<sup>79</sup> California Infrastructure and Economic Development Bank, *Annual Activity Report Fiscal Year 2012/2013*, [http://ibank.ca.gov/res/docs/Reports/Annual\\_Activity\\_Report\\_web\\_version.pdf](http://ibank.ca.gov/res/docs/Reports/Annual_Activity_Report_web_version.pdf).

<sup>80</sup> Virginia Department of Transportation, *Virginia Transportation Infrastructure Bank*, [http://www.virginiadot.org/projects/virginia\\_transportation\\_infrastructure\\_bank.asp](http://www.virginiadot.org/projects/virginia_transportation_infrastructure_bank.asp).

from the Commonwealth Transportation Fund and the remaining \$32.7 million were a transfer of surplus end-of-FY10 General Fund resources.<sup>81</sup>

The VTIB is overseen by the “Commonwealth Transportation Board” (hereafter, the “Board”). The Board is an 18-member body appointed by the Governor. The Board is responsible for administering all VTIB policies and programs. Public and private entities seeking financial assistance from the VTIB submit detailed proposals including project specifications and financing information. The Board scores applications on a maximum 37-point scale based on a variety of criteria including:

- project readiness;
- percent of total project funding provided by applicant;
- economic benefits of the project;
- traffic congestion relief or air quality improvement; and
- soundness of project financing plan.<sup>82</sup>

The Board may disperse funds from the VTIB in the form of loans or grants. The VTIB may issue loans to private or public entities to build or improve toll roads, mass transit, rail, port, and airport facilities. Monies loaned from the VTIB must be repaid with interest. By law, VTIB loans require repayment to begin within five years after substantial completion of a project with final payment of all principal and interest within 35 years of substantial completion.

The VTIB may also provide grants to government agencies to help finance transportation projects. A government agency applying for a VTIB grant must demonstrate that the project cannot be financed on reasonable terms or would otherwise be financially infeasible without the grant. The enabling VTIB legislation limits the total amount available for grants to no more than 20% of the bank’s capitalization.<sup>83</sup>

To date, the VTIB has provided financial assistance for three projects. The Board approved two loans totaling \$188 million as well as an \$80 million line of credit. The largest approved VTIB award was a \$152 million loan to the City of Chesapeake to fund the replacement of a bridge over the Elizabeth River and to convert a local highway, Dominion Boulevard, into a 4-lane limited access toll facility.<sup>84</sup>

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<sup>81</sup> Virginia Department of Transportation, *Virginia Transportation Infrastructure Bank Program Overview, Guidelines and Selection Criteria*, October 2011, [http://www.virginiadot.org/VDOT/Projects/asset\\_upload\\_file109\\_55087.pdf](http://www.virginiadot.org/VDOT/Projects/asset_upload_file109_55087.pdf).

<sup>82</sup> Ibid.

<sup>83</sup> Ibid.

<sup>84</sup> Commonwealth Transportation Board, Resolution of the Commonwealth Transportation Board, January 18, 2012, [http://www.ctb.virginia.gov/resources/2012/jan/resol/Agenda\\_Item\\_1\\_VTIIB\\_Chesapeake.pdf](http://www.ctb.virginia.gov/resources/2012/jan/resol/Agenda_Item_1_VTIIB_Chesapeake.pdf).

### 3.B.3. Possible Maryland Infrastructure Bank

As mentioned above, Maryland currently does not have a state infrastructure bank. However, the possibility of establishing such a bank in Maryland has been raised in recent years as presented below.

#### 3.B.3.a. Blue Ribbon Commission on Transportation Funding

In 2010, the Maryland General Assembly adopted SB 229/HB which established a Blue Ribbon Commission on Transportation Funding. The Blue Ribbon Commission issued its final report in November 2011. The report notes that state infrastructure banks or other types of revolving loan funds (RLF) “can give states the capacity to make more efficient use of transportation funds and leverage resources” and that the “benefit of providing loans to projects is that loan repayments are recycled for future generations of projects.”<sup>85</sup> The report further states that a national infrastructure bank could provide the State of Maryland “a source of flexible financing for projects of national interest.”<sup>86</sup> The Final Report of the Blue Ribbon Commission includes the following two recommendations:

- *Assess the Feasibility of Loaning State Funds to Localities and to Private Project Sponsors in Order to Facilitate Transportation Investment.* The Commission recommends that ... the State should engage local and private sector stakeholders and fiscal leaders in the General Assembly to determine if there is market demand for loans. ... This assessment should include the identification of potential capitalization sources (federal, state, local, and private) to provide the initial infusion of funding to the bank or loan fund. .... If changes to the SIB program are enacted at the federal level, such as the ability to capitalize with additional federal funds, Maryland should have the State legislative authority in place to establish a SIB and receive any provided capitalization.
- *Prepare to Take Advantage of Any National Infrastructure Bank Legislation (NIB).* The Commission recommends that as Congress debates federal transportation funding legislation, Maryland should prepare itself to best take advantage of any proposals that are enacted. If a NIB is enacted, Maryland should be ready with projects that would be candidates for such loans.<sup>87</sup>

#### 3.B.3.b. MCDOT Report on Alternative Infrastructure Financing

The Transportation Infrastructure Investment Act of 2013 required the Maryland Department of Transportation (MDOT) to prepare a report that addresses alternative infrastructure financing strategies. In January 2014, MDOT Secretary James T. Smith, Jr. submitted the Department’s

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<sup>85</sup> *Final Report to the Governor and Maryland General Assembly by the Blue Ribbon Commission on Transportation Funding*, November 1, 2011, [http://www.mdot.maryland.gov/Office\\_of\\_Planning\\_and\\_Capital\\_Programming/Blue\\_Ribbon/Documents/BRC\\_Final\\_Report\\_Nov\\_01\\_2011.pdf](http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/Blue_Ribbon/Documents/BRC_Final_Report_Nov_01_2011.pdf).

<sup>86</sup> *Ibid.*

<sup>87</sup> *Ibid.*

report to the Governor and the General Assembly. The report notes that the topic of establishing a Maryland SIB has been discussed intermittently over the past decade. The report summarizes the Department's current perspective on the topic:

MDOT is engaged in ongoing discussions with stakeholders to gauge interest in using a SIB to finance transportation capital projects and to consider opportunities and challenges, including identification of an initial capitalization source. Overall, representatives from local jurisdictions indicated a preference for increased funding for local maintenance and showed limited interest in establishing a SIB for capital projects, unless the SIB could offer below market rates or more favorable financing terms than currently available. However, more competitive lending rates may jeopardize the SIB's ability to maintain levels of capitalization for projects over the long term and compromise the SIB's ability to sustain itself. Local jurisdictions did not identify a capitalization source, but would likely oppose any effort to capitalize a SIB with Transportation Trust Fund (TTF) dollars.<sup>88</sup>

### **3.B.3.c. Maryland House Bill 1123**

During the 2014 Regular Session of the General Assembly, Delegate Galen Clagett (D-Frederick County) sponsored HB1123, the Maryland Economic Development Act of 2014. This bill would reduce the corporate income tax (CIT) rate incrementally through 2019. In addition, the legislature would establish a Transportation Infrastructure Bank and would require the Comptroller to distribute a portion of CIT revenue to the bank. The Transportation Infrastructure Bank would function as a revolving fund to provide loans and other financial assistance for transportation projects.<sup>89</sup>

The Transportation Infrastructure Bank would be governed by a board consisting of: the Secretary of Business and Economic Development (or designee), three MDOT employees designated by the Secretary of Transportation, one member designated by the Maryland Association of Counties, and two members representing private industry appointed by the Governor. The Board would have authority to provide loans or other financial assistance based on criteria specified in the legislation, including the creditworthiness of the borrowing entity and its ability to repay the loan. In addition, the Board would evaluate whether the applicant has demonstrated that the proposed project:

- is of local, regional, or statewide significance; and
- meets the goal of generating economic benefits, improving air quality, reducing congestion, or improving safety through enhancement of the state transportation network.<sup>90</sup>

HB1123 had a first reading in the House Ways and Means Committee. No further action was taken on the bill during the 2014 General Assembly session.

<sup>88</sup> A Report to Governor Martin O'Malley and the Maryland General Assembly Concerning Future Alternative Funding Strategies, Secretary's Office of the Maryland Department of Transportation, January 2014, [http://dlslibrary.state.md.us/publications/exec/mdot/hb1515ch429\(7b\)\\_2013.pdf](http://dlslibrary.state.md.us/publications/exec/mdot/hb1515ch429(7b)_2013.pdf).

<sup>89</sup> Fiscal and Policy Note for HB1123, Department of Legislative Services, [http://mgaleg.maryland.gov/2014RS/fnotes/bil\\_0003/hb1123.pdf](http://mgaleg.maryland.gov/2014RS/fnotes/bil_0003/hb1123.pdf).

<sup>90</sup> House Bill 1123, [http://mgaleg.maryland.gov/2014rs/bills\\_noln/hb/fhb1123.pdf](http://mgaleg.maryland.gov/2014rs/bills_noln/hb/fhb1123.pdf).

### **3. C. Municipal Infrastructure Banks**

State infrastructure banks are designed primarily to finance large, regional projects. Few local governments have established infrastructure banks for municipal-level projects. The paragraphs below highlight a city and a county that have undertaken infrastructure financing initiatives.

#### **3.C.1. Chicago Infrastructure Trust**

The Chicago Infrastructure Trust was created in April 2012 through an executive order of Mayor Rahm Emanuel and a City Council resolution. The purpose of the Trust is “to assist the people of the City of Chicago, the City government and its sister agencies in providing alternative financing and project delivery options for transformative infrastructure projects.”<sup>91</sup> The Trust will provide a customized financing structure for specific projects using taxable or tax-exempt debt, equity investments, and other forms of support. A five-member Board of Directors oversees the Trust assisted by a six-person advisory panel and professional staff.

Unlike State infrastructure banks, the Chicago Infrastructure Trust is not capitalized with public dollars. Rather, the Trust will pursue projects that “leverage private sector resources through alternate financing and procurement methodologies.”<sup>92</sup> When he announced the creation of the Trust in 2012, Mayor Emanuel indicated that five financial organizations – Citibank, N.A., Citi Infrastructure Investors, Macquarie Infrastructure and Real Assets Inc., J.P. Morgan Asset Management Infrastructure Investment Group and Ullico – had each agreed to consider the projects that the Trust is undertaking and evaluate them for investment. Projects receiving assistance will repay the Trust and the private sector investors depending on the structure of the financing package.

The Trust awards financial assistance through a competitive bidding process. To solicit private sector interest in a project, the Trust issues a Request for Proposals, a Request for Qualification or a Request for Information. In January 2013, the Trust issued its first solicitation, a Request for Qualification for a project called “Retrofit One.”

The Retrofit One project is an effort to reduce energy consumption at 104 City and Chicago Public Schools facilities through retrofit and improvements of building lighting, windows, and HVAC units. Through the Retrofit One project, the Trust sought to identify investors to finance \$200 - \$225 million in energy conservation improvements. The City originally estimated that the project would reduce electricity and natural gas costs by more than \$20 million annually.<sup>93</sup> The Trust would repay the investors through savings generated from the retrofit efforts.

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<sup>91</sup> Chicago Infrastructure Trust Web Site, <http://shapechicago.org/>.

<sup>92</sup> Ibid.

<sup>93</sup> City of Chicago website, Mayor Emanuel Announces Chicago Infrastructure Trust to Invest in Transformative Projects, March 1, 2012, [http://www.cityofchicago.org/city/en/depts/mayor/press\\_room/press\\_releases/2012/march\\_2012/mayor\\_emanuel\\_announceschicagoinfrastructuretrusttoinvestintrans.html](http://www.cityofchicago.org/city/en/depts/mayor/press_room/press_releases/2012/march_2012/mayor_emanuel_announceschicagoinfrastructuretrusttoinvestintrans.html).

The Trust received 13 responses to the Retrofit One Request for Qualification. Based on the input received from the respondents, the Board authorized the issuance of a Request for Proposals in August 2013 followed by two addenda in September 2013. The Trust received seven responses to the amended RFP. Based on the input received from potential investors, the Trust significantly scaled back the scope of the project to include \$25 million in energy efficiency improvements in 75 buildings. Chicago's Chief Financial Officer attributed the project downsizing to investment market conditions stating that: "The pool winnowed down very quickly, because there are not a lot of people who are excited about getting very little incremental yield for quite a bit of additional risk."<sup>94</sup>

In November 2013, the Board approved a resolution authorizing the Trust's Executive Director to enter into a 15-year "Energy Services Agreement" (ESA) to finance the Retrofit One project.<sup>95</sup> This method involves the issuance of financial instruments backed by an agreement and savings guarantee intended to provide a consistent annuity stream for the investors. The ESA would establish a contingent payment obligation per unit of energy savings generated by the retrofit improvements. The terms of the agreement provided that the lender, the Bank of America Public Capital Corporation, would earn 4.95% interest on its investment for 15 years. This interest rate compared favorably to the cost of general obligation borrowing available to the City given its bond ratings. If the improvements fail to achieve cost savings, the City would not be obligated to repay the lender. The City would be required to secure a bond to protect the lender in case of default on proven savings.<sup>96</sup>

In early 2014, the Chicago City Council reviewed the proposed project agreement. The City Council gave approval for the Trust to enter into an agreement to finance \$13 million in energy efficiency improvements in 62 buildings. The Trust finalized the Retrofit One financing agreement in April 2014.

The Trust recently began the solicitation process for its second project, energy efficiency upgrades for 141 pools managed by Chicago Public Schools and the Chicago Park District.

### **3.C.2. Dauphin County Infrastructure Bank**

Pennsylvania distributes a portion of state gas tax revenue to counties. Pennsylvania counties use the gas tax revenue to maintain transportation infrastructure such as bridges. Last year, the County Commissioners in Dauphin County, Pennsylvania, re-evaluated how to spend its share of gas tax revenue. Dauphin County recently had completed a program to replace or repair structurally deficient bridges. However, many roads in the County required repair and improvement. Most of these roads are owned and maintained by municipalities.

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<sup>94</sup> Chicago Tribune, *First Emanuel Infrastructure Trust Project Approved after Delays*, January 15, 2014, [http://articles.chicagotribune.com/2014-01-15/news/chi-first-emanuel-infrastructure-trust-approved-after-delays-20140115\\_1\\_75-city-buildings-stephen-beitler-chicago-infrastructure-trust](http://articles.chicagotribune.com/2014-01-15/news/chi-first-emanuel-infrastructure-trust-approved-after-delays-20140115_1_75-city-buildings-stephen-beitler-chicago-infrastructure-trust).

<sup>95</sup> Chicago Infrastructure Trust Resolution of the Board of the Directors, November 12, 2013, <http://shapechicago.org/wp-content/uploads/2013/04/Board-Resolutions-Version-2.pdf>.

<sup>96</sup> Memorandum from Phoenix Capital Partners to Chicago Infrastructure Trust, December 26, 2013, <http://shapechicago.org/wp-content/uploads/2013/05/CIT-Assesment-Memo-dated-122613.pdf>.

The County Commission originally considered distributing gas tax revenue among the 40 municipalities within its boundaries. However, the Commission determined that dividing the annual gas tax proceeds among all the municipalities would yield 40 awards that each would be too small to have a meaningful impact on road maintenance. Instead, the County Commission decided to use its share of state gas tax revenue to establish one of the first county-level infrastructure banks in the United States.<sup>97</sup>

The intent of the infrastructure bank is to promote important infrastructure improvements by providing low cost loans to municipalities that have limited borrowing capacity. Dauphin County municipalities will be eligible to borrow a total of \$30 million for surface transportation improvements including road widening and resurfacing, sidewalk construction, and installation of traffic signals. Initial capitalization of the infrastructure bank will come from the County's share of state gas tax revenue supplemented by money from the Pennsylvania Infrastructure Bank.<sup>98</sup>

Through the infrastructure bank program, municipalities (as well as non-profit and private sector entities) will be eligible to submit loan applications for recommended projects. Government-sponsored projects selected by the Commission would be eligible to borrow at a 0.5 percent rate (non-profits and private-sector could borrow at a 1.0 percent rate). The maximum loan repayment period will be ten years.<sup>99</sup>

The Dauphin County's Gaming Advisory Board -- which makes recommendations about how to allocate the County's portion of casino revenue -- will review applications and make funding recommendations to the County Commission. Projects will be evaluated based on pre-established criteria including:

- level of non-County funds secured and available to the project;
- support of major economic development projects and tourism initiatives;
- reduction of traffic through high congestion areas; and
- safety and mobility improvement.<sup>100</sup>

In March 2014, the Dauphin County Commission awarded the first infrastructure bank loans. The Commissioners approved a total of \$3.9 million in loans to support five projects. The largest loan, \$1.5 million, was awarded to Middletown Township for streetscape improvements. Other loans will support roadway reconstruction, realignment of an intersection, bridge improvements, and installation of traffic signals.<sup>101</sup>

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<sup>97</sup> Governing, *Dauphin County Launches Infrastructure Bank*, May 30, 2013, <http://www.governing.com/blogs/view/gov-pennsylvania-county-debuts-infrastructure-bank.html>.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Dauphin County, *Dauphin County Infrastructure Bank Program Guidelines*, <http://www.dauphincounty.org/government/Community-Economic-Development/Documents/Program%20Guidelines%20and%20Application.pdf>.

<sup>101</sup> Dauphin County Press Release, *Dauphin County Commissioners Award \$3.9 Million in Low-Interest Loans to Five Local Projects through New County Infrastructure Bank*, March 12, 2014, <http://www.dauphincounty.org/government/About-the-County/Pages/News.aspx?NewsID=371>.

## SECTION 4: CONCLUSIONS

OLO offers the following three overall conclusions based on the information presented in this memorandum report.

**Conclusion #1** *Alternative infrastructure financing methods should be assessed in the context of the County's current AAA borrowing costs.*

State and local governments often pursue alternative infrastructure financing methods in an effort to secure lower financing costs than those available through traditional means. Alternative financing methods – including private sector financing and infrastructure bank borrowing – are particularly attractive when public sector general obligation borrowing costs are relatively high. As detailed in Section 1 of this report, Montgomery County general obligation bonds have the highest possible credit rating possible for a local government. The County's AAA bond ratings provide ready access to borrowing markets at the lowest available interest rates for municipal debt. In addition, the County has further benefited from the favorable credit environment that has existed in recent years. When determining the optimal financing strategy for a project, alternative methods must be evaluated in comparison with bond market financing available to the County at the present time.

**Conclusion #2** *Private financing of capital projects offers certain advantages over traditional methods for certain types of public facilities but comes with financial and policy tradeoffs.*

Partnerships in which the private sector finances all or part of public infrastructure development can offer advantages over traditional government-backed bond financing. As illustrated in Section 2 of this report, private financing may expand total investment dollars, accelerate project delivery, and reduce a government's debt burden as compared to traditional financing. These advantages justify government consideration of private financing as a possible funding strategy for a subset of the capital improvements program.

However, private sector financing has not proven a viable option for many types of public facilities. Private interests only will finance projects that offer a potential for significant returns on their investment. Most successful public private partnerships have involved large transportation facilities capable of generating significant revenue streams through tolls or fees. Non-transportation government functions (such as education and public safety) and smaller transportation projects have no or limited capacity for revenue generation, and so, are unlikely to attract private investment interest.

Public-private partnerships do not come without cost to the government. These agreements typically involve some type of public sector contribution in the form of direct payments, land donation, or the concession of future revenue streams. In addition, in some cases, private investment requires the public partner to cede control over policy considerations such as fee structures and facility access. In sum, governments must accept fiscal and policy tradeoffs to attract private participation.

**Conclusion #3**    *Infrastructure banks are a financing mechanism for larger governmental units to assist smaller governmental units that lack the revenue streams, cash flow, or credit status to fund infrastructure improvements.*

Infrastructure banks are government revolving funds that provide loans and other financial assistance to help fund infrastructure projects. Most commonly, a larger governmental unit provides resources to support the development of capital improvements by a smaller governmental unit. As discussed in Section 3, the Federal government capitalized multiple state-level infrastructure banks. Similarly, some states have funded infrastructure banks to support local-level capital projects and at least one county has dedicated revenues for municipal-level transportation improvements. In each case, the larger unit of government assists the smaller unit by offering ready access to capital at advantageous interest rates that otherwise may not be available through the commercial lending market.

Creation and capitalization of a Federal infrastructure bank could assist in the financing of large regional capital projects that might benefit Montgomery County residents and businesses. (Projects funded by a possible future Federal infrastructure bank likely would be of a scale significantly larger than any project in the County's Capital Improvements Program.) Moreover, the creation and capitalization of a Maryland infrastructure bank could provide financing assistance for County capital projects. The County Council may also wish to consider whether to establish an infrastructure bank grant or loan program to assist municipal infrastructure improvements.

Finally, OLO offers the following comments regarding the Chicago Infrastructure Trust (see Section 3). The Trust more resembles a public-private partnership program than an infrastructure bank. Unlike an infrastructure bank, the Trust is not capitalized by public funds. Rather, the Trust solicits private investment in projects that have the potential to generate a return on investment but which the City has been unable to finance through traditional methods such as tax-exempt bonds. The Trust model may be less attractive for a jurisdiction such as Montgomery County that enjoys lower general obligation borrowing costs than Chicago.