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MEMORANDUM

To: **53/120 Core Team**

From: CMAP Staff

Date: March 8, 2012

Re: Route 53/120 Value Capture Analysis

The 53/120 Blue Ribbon Advisory Council recently made several important decisions about the design of the proposed 53/120 facility at a design workshop held on February 9, 2012. However, significant analysis needs to be completed on the financing of the proposed facility. While the costs and revenues of the road are not fully fleshed out, it is likely that there will be a gap in between bondable revenues from tolls and the cost to construct the facility. Traditionally, transportation implementers, counties, and municipalities have looked to federal and state sources to fill these funding gaps. However, these sources are primarily driven by gasoline taxes and have lost considerable purchasing power over the last twenty years. Moreover, these scarce resources must be used to maintain the existing system rather than construct new roadways. In this environment, other more innovative sources of funding must be evaluated. This memo provides background information on and case studies regarding *value capture*, a mechanism to provide local contributions for funding transportation projects. An analysis of the value capture potential of the 53/120 Corridor is also provided. Finally, the second section of the memo describes the methodology for the value capture analysis and underlying analyses.

What is Value Capture?

In a limited transportation funding environment, value capture offers one option for providing local contributions toward the cost of a new facility. Value capture assumes that nearby property owners will benefit from the construction of a new road through increased rents, sales, and land values. Some portion of these benefits is utilized to pay for the cost of the road. Value capture mechanisms are varied and can include tax increment finance (TIF) districts, special assessment (SA) districts, impact fees, land value taxes, and special local taxes such as sales or hotel taxes.

In Illinois, value capture can be accomplished through several existing mechanisms: Special Service Areas (SSAs), TIF districts, and Business Districts (BDs). A Special Service Area is a type of special assessment district and allows for levying of an additional property tax on area to pay for added services and infrastructure. TIFs divert increases in property tax revenues above a defined base to pay for infrastructure or redevelopment. Business Districts offer the option of creating an additional sales or hotel tax to fund infrastructure improvements and tourism initiatives. All of these districts require that the funded services or infrastructure provide unique benefits to the district area and, therefore, would be used to pay for only a portion of the cost of a larger facility like a new roadway.

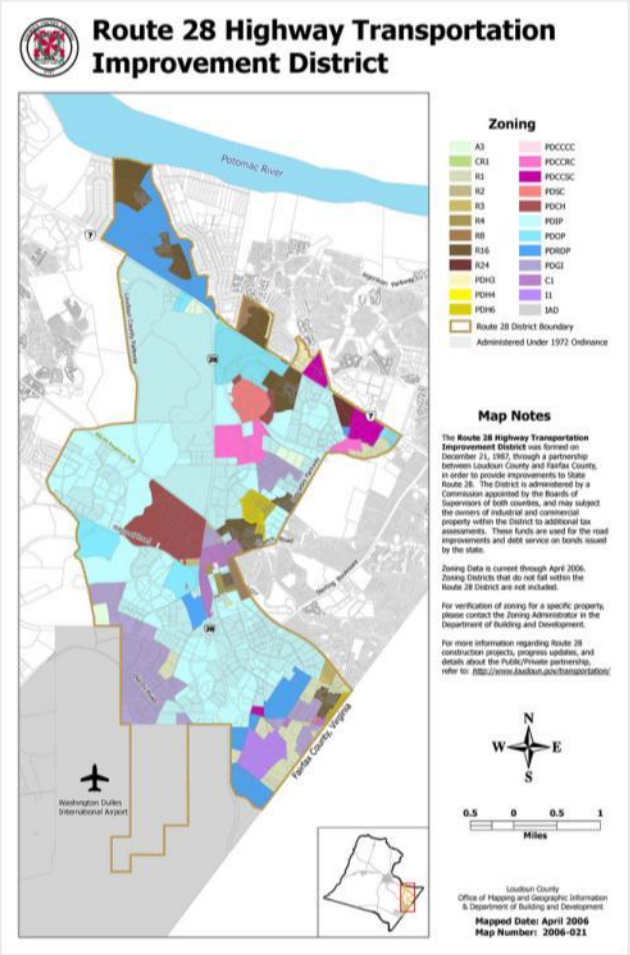
Value Capture in Other States

Several other states have established special districts to fund major transportation improvements. These include Virginia, which has used special assessment districts, and Georgia and Texas, which have utilized TIF districts. These states provide some insight into the advantages and pitfalls of value capture districts. A summary of each State's program and usage of value capture tools is provided below.

Transportation Improvement Districts in Virginia

Virginia allows for the creation of Transportation Improvement Districts to fund both roadway and transit facilities. Virginia TIDs use a Special Assessment, or added property tax, mechanism and may only include land zoned for industrial and commercial uses. The strongest example of a Virginia TID is focused on Route 28 in Virginia. This TID was created in 1987 to fund the conversion of Route 28 from a two-lane local road to a six-lane, limited-access facility. The TID was created jointly by Loudon and Fairfax Counties, after a required local taxpayer petition of at least 51% of property owners was successfully signed. The district was established with a maximum tax rate of $0.20 per $100 of assessed value, and the State of Virginia agreed to make up deficits in bond payments. General Obligation Bonds for $138.5 million, or 75% of the project cost, were issued by the state in 1988, and the initial project was completed in 1991. Due to the tax cap and countywide downzoning in Fairfax County, the Virginia State Highway Allocation had to pay for a portion of the debt service payments in the early years of the TID. In 2002, the district was restructured and extended to allow for construction of 10 additional interchanges and widening of a portion of the facility from six to eight lanes.

Figure 1. Route 28 Transportation Improvement District



The scale bar on the right reads 1 mile.
Source: Loudon County Office of Mapping, http://www.flickr.com/photos/omagi/4265877377/

Tax Allocation Districts in Georgia

A Tax Allocation District (TAD) acts similarly to an Illinois TIF district, where revenues are created not by an additional tax but by the incremental increase in property value and the resulting tax revenues. Georgia TADs may fund a broad array of redevelopment and infrastructure projects, and establishment areas must be found to be "economically and socially depressed" by meeting preset criteria and benchmarks. TADs may cross multiple jurisdictions, require the permission of any overlapping jurisdictions, and may not contain property that comprises more than ten percent of any single jurisdiction's assessed value.

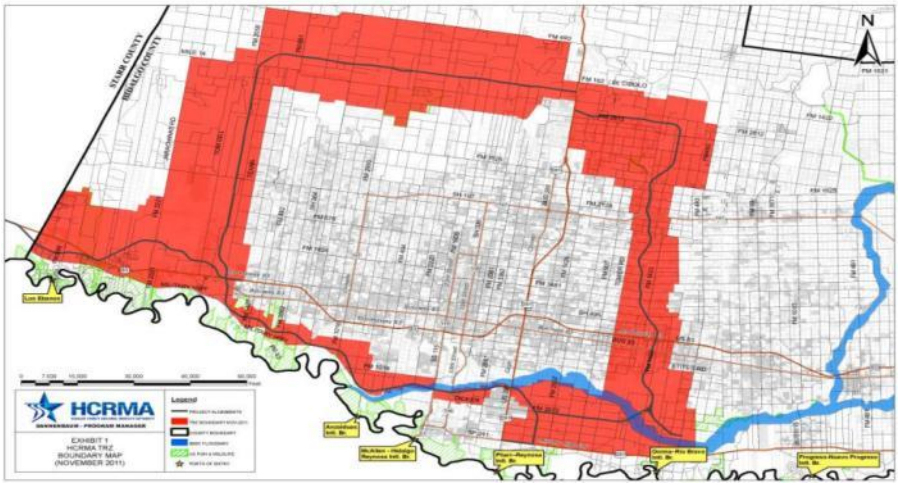
In 2006, Atlanta, Georgia established a TAD to fund the Atlanta Beltline, which is a repurposing of an existing 22-mile railroad right of way around Atlanta to a light rail line with transit-oriented development. TAD-eligible improvements include transit, pedestrian, and roadway improvements, school construction, affordable housing, greenways and development assistance. The total project cost is estimated at $2.9 billion, approximately $1.7 billion of which

is anticipated to be funded by the TAD. The TAD follows the railroad right of way, and its area extends to include non-residential development within walking distance that is likely to redevelop or require significant infrastructure upgrades to support redevelopment. The total land area is equivalent to approximately 8 percent of the City, and the assessed value is approximately 2.7 percent of the City's total assessed value. Only two other districts are overlapped by the Beltline TAD – Fulton County and Atlanta Public Schools. All three districts passed consent resolutions agreeing to participation in the TAD and limiting of their revenues from the TAD to 2005 levels over the 25-year lifespan of the district.

Transportation Reinvestment Zones in Texas

Texas statute has two types of TIF districts, one of which is focused specifically on funding roadway improvements. Transportation Reinvestment Zones (TRZs) may be created by counties or municipalities, although counties must create an additional taxing district called a Road Utility District (RUD) to pass the funds through due to limitations on County authority to utilize tax increment financing. As with Illinois and Georgia, a finding of district distress is required; as a whole the TRZ must be "unproductive and underdeveloped." Inclusion in the TRZ is limited to properties within 1 mile of the transportation improvement. TRZs can be established for 20 years or more, depending upon the length of time required for financing, and automatically expire at the end of the year in which the debt is completely repaid. TRZ funding is paired with the Texas Department of Transportation's pass-through tolling mechanism, which provides repayment on a per-vehicle basis to public and private entities that provide up-front funding for transportation improvement costs. Therefore, TRZ projects have two sources of revenues to issue bonds on – the TRZ increment and the pass-through tolling payments. Finally, TRZ establishment requires negotiation of increment sharing with underlying taxing districts and formal approval of those sharing agreements.

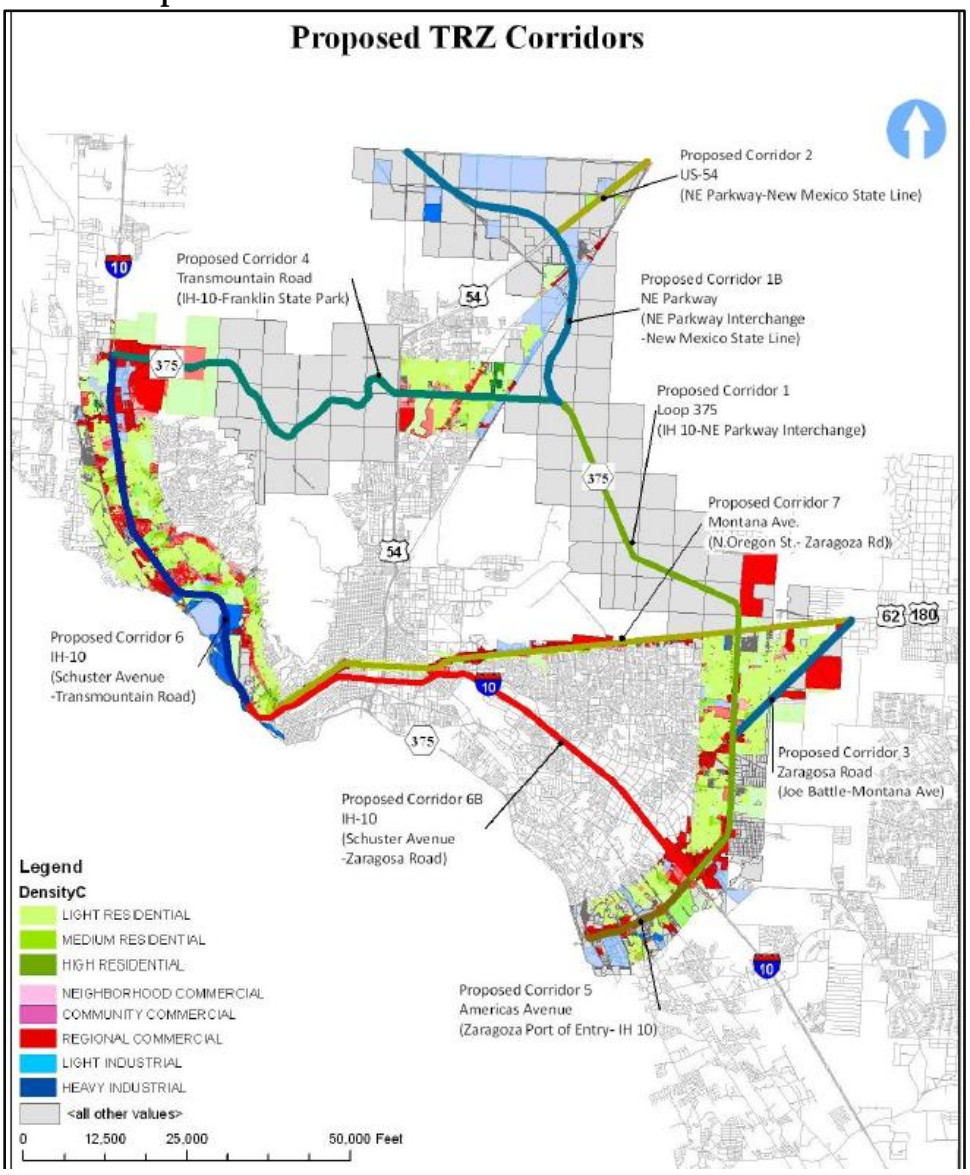
Figure 2. Hidalgo County Transportation Reinvestment Zone



The scale bar in the bottom-left reads 60,000 feet. The east-west distance is approximately 35 miles and the north-south distance approximately 20 miles.
Source: Hidalgo County, Google Earth

Since TRZs were authorized in 2007, TRZs have been created for major highway projects in the City of El Paso, Hidalgo County, and the City of Forney. El Paso has created two TRZs encompassing 10,000 acres to repay $70 million in debt related to improvements on five highway corridors. Hidalgo County created a 175,000 acre district to assist in funding a proposed $700 million loop road around the urbanized area of the county. The City of Forney created a smaller TRZ in 2008 to fund creation of a new interchange on the existing US-80. However, the City dissolved the district at its October 11, 2011 council meeting.

Figure 3. El Paso Transportation Reinvestment Corridors



The scale bar in the bottom-left reads 50,000 feet. The study area is roughly 20 by 20 miles.
Source: El Paso Mobility Program website at http://www.elpasomobility.org/pdf/trz-map.pdf

Route 53/120 Corridor Value Capture Potential

CMAP has constructed a planning-level analysis of the value capture potential of the proposed 53/120 corridor. This analysis is meant to provide an order of magnitude estimate of the amount that TIF and SSA value capture mechanisms could contribute to the cost of the project. Growth in property value is based on a conservative analysis of market potential for the Corridor, which estimated the potential for 4.2 million square feet of office development, 6.0 million square feet of industrial development, and 2.6 million square feet of retail development within the corridor through 2040. The market analysis included analysis of historical development trends and population and employment forecasts for Lake County. Please see the methodology section for more detail. A map of the value capture district is provided on the following page. The district includes all assessor blocks within 1 mile of the proposed ROW, and largely non-residential assessor blocks fronting major arterials within two miles of the interchanges proposed in the LCTIP process. It is assumed that, were a value capture district to be created for the corridor, a more precise boundary would be defined to reflect significant community input, assessments of which areas experience a higher magnitude of future benefits, and other policy considerations. Significant discussions will likely take place regarding which areas are most likely to benefit from the road and how they should contribute to its cost.

Figure 5 provides SSA and TIF-based bonding capacity estimates for a 53/120 Value Capture district with and without utilization of existing residential property value. These estimates were created using several key assumptions:

- Increased property value is derived from:
    - Inflation of existing equalized assessed property value (EAV) at 2% and 3%. These bracket a normal range of property value inflation over long periods of time.
    - EAV from new development square footage within the Corridor as determined by a Corridor-wide market analysis
- TIF bonding capacity estimates include an automatic set-aside of 50% of increment to underlying districts. In an actual value capture bonding scenario, the set-aside would be determined annually based on the bonding amount required to finance the road, the debt service payments required to repay that amount, and actual available increment. Therefore, the funds available to underlying jurisdictions would vary substantially through the life of the TIF and may be more or less than the 50% set-aside.
- An SSA tax rate of 0.50% is assumed. This is the current average SSA tax rate in the County, is equivalent to a rate of $0.21 per $100 of market value, and represents a 6% increase over the existing average property tax rate in the Corridor of 8.39%.
- The standard bonding interest rates, debt coverage, and bonding term assumptions for the Illinois State Toll Authority have been used. Significantly, a bond repayment period of 25 years is assumed, which extends beyond the standard 23-year life of a TIF district

but is within the extension period allowed by statute. The Tollway also utilizes high debt coverage ratios, which reduces bonding capacity but minimizes risk.

Figure 4: Potential 53/120 Value Capture District

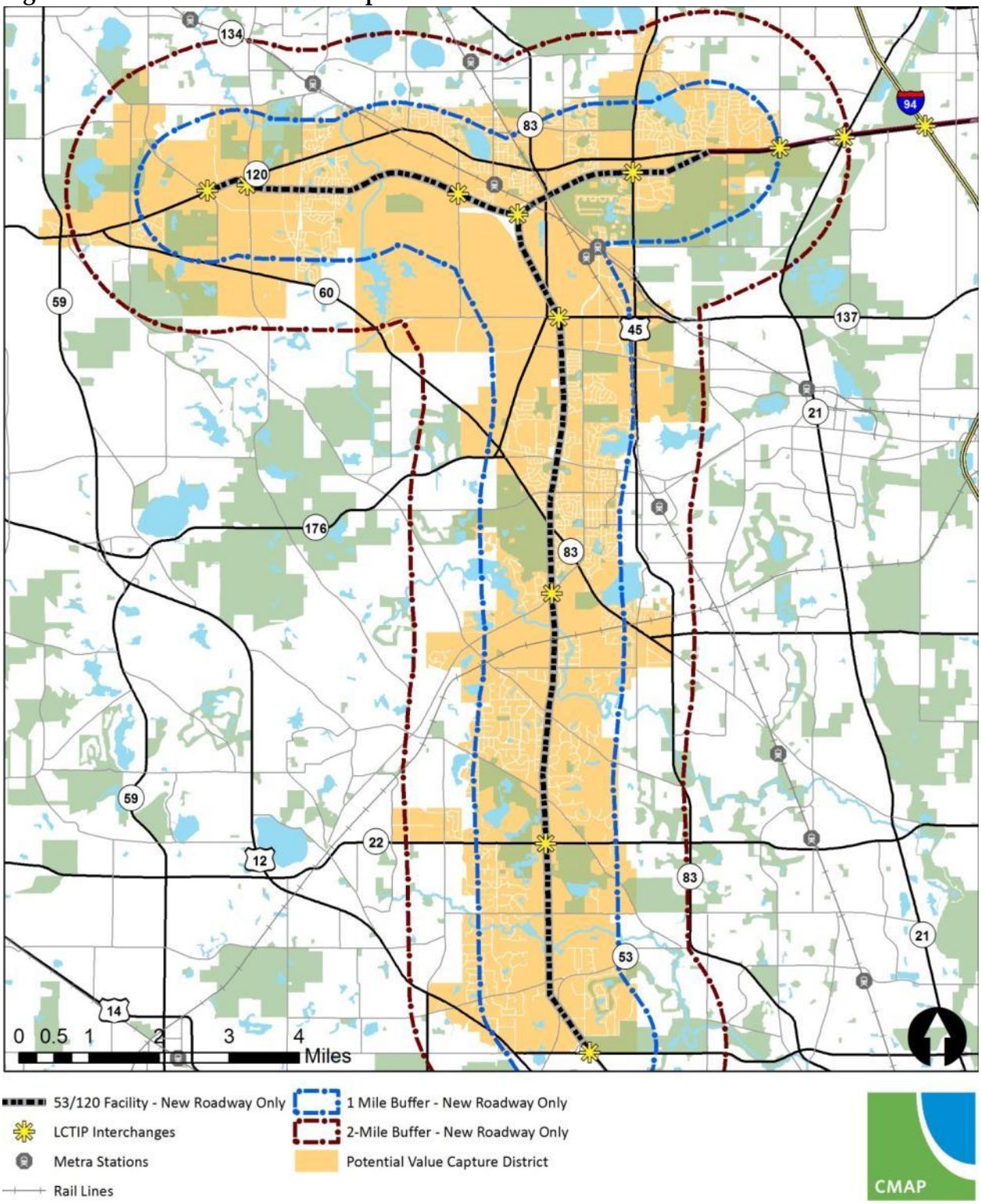


Figure 5: Estimated Value Capture Bonding Capacity for SSA and TIF-based Value Capture Districts on the 53/120 Corridor

Bonding Scenario	SSA***	TIF***
Excludes existing residential EAV		
Existing EAV Only*	$20 MM to $21 MM	$35 MM to $71 MM
New Development EAV + Existing EAV**	$37 MM to $46 MM	$131 MM to $179 MM
Includes existing residential EAV		
Existing EAV Only*	$109 MM to $118 MM	$196 MM to $391 MM
New Development EAV + Existing EAV**	$148 MM to $179 MM	$291 MM to $458 MM

*Existing EAV projections for an SSA assumed no EAV growth. Because a TIF requires EAV growth, a 2.0% to 3.0% annual growth rate of existing EAV was assumed.
** Growth Scenario projections assumed development of approximately 4.2 million square feet of Office, 6.0 million square feet of Industrial, and 2.6 million SF of Retail within the Corridor by 2040.
*** An SSA tax rate of 0.50% has been assumed. TIF bonding estimates assume a diversion of 50% of TIF revenues to underlying jurisdictions. All districts are established in 2018. Bonding term is 25 years.
Sources: CMAP analysis of Lake County Assessor data

As with prior value capture analyses for the Route 120 Corridor, an SSA district produces significantly less bonding capacity than a TIF district. This is due to the nature of TIF, which applies the area's existing property tax rate to growth in EAV. The average Corridor property tax rate is currently 8.39%, more than 15 times the proposed SSA tax rate. Even with minimal inflation and significant diversion of revenue to underlying districts, the incremental TIF EAV produces more annual revenues than an SSA within five to ten years of district establishment. However, as described below, a TIF district encompassing an area as large as the value capture district described above faces significant statutory and political limitations.

The inclusion of residential property also has a significant impact on the value generation potential of the Value Capture District. Nationally, value capture districts focused on roadway improvements either wholly exclude residential property or exclude it wherever feasible within statutory limitations. This is not the case with value capture districts created to fund transit improvements, since transit provides well-documented property value increases to residential property. However, residential property comprises more than 80% of the Corridor's current EAV and represents a significant potential source of value capture revenue.

Finally, the "Existing EAV Only" and "New Development EAV + Existing EAV" scenarios generate a broad range of value capture potential and a broad range of risk for the Tollway or other bonding authority. The existing EAV scenario represents standard bonding practices wherein SSA and TIF revenues are generated based on the existing property value base with zero or minimal inflation assumptions. This minimizes risk to the bonding authority but also does not recognize the development potential generated by the facility. The development scenario reflects an assumption of significant growth and, therefore, presents more risk that the value capture district will not generate revenues sufficient to cover debt service. Therefore,

understanding the value capture potential of the Corridor will also require understanding the risk level that the Tollway, state, or other bonding authority is willing to take on.

Statutory Limitations in Illinois

Value capture in Illinois faces two significant statutory obstacles. The first involves the local nature of the special districts used to generate value capture revenues. TIF and SSA districts may only be created by individual municipalities (counties may create SSAs, but must obtain the consent of underlying municipalities). However, transportation improvements like the proposed Route 53 extension and Route 120 bypass cross multiple communities. For example, twelve municipalities touch the proposed Facility, and twenty are located within two miles of the Facility. Under current statute, each of these individual municipalities and Lake County would have to create and manage a district of its choosing to provide funding for the proposed Facility. Alternatively, Lake County could create an SSA with the consent of underlying municipalities. While this has the benefit of allowing local choice in the type of district and funding source used for a local contribution, it creates a cumbersome structure that may be difficult to issue bonds for. Furthermore, this piecemeal district establishment may require a larger entity such as the Tollway or IDOT to issue bonds and take on the risk and task of repayment from individual municipalities. Other states allow the establishment of multi-jurisdictional districts to fund transportation improvements, with the requirement that underlying jurisdictions and/or affected taxpayers formally consent to the creation of the district. A similar district type focused on transportation improvements may be desirable in Illinois.

Additionally, both TIF and Business districts require a finding of blight as a condition of establishment. While some areas of the corridor are likely to meet some of the blight criteria, most are not. These areas will only be able to utilize an SSA mechanism or a community-wide revenue source such as sales tax. In 2011, an amendment was proposed to the Illinois TIF statute that would have allowed TIFs to be established in areas where transit-oriented development is needed and to fund TOD improvement costs. However, the initiative stalled due to concerns about broadening the scope of TIF. As described in the case studies, other states have created TIF-like mechanisms to fund transportation improvements, with limitations on funding uses and/or amounts that address concerns about the scope of TIF.

Political and Equity Considerations

Potential value capture funds are likely to be limited by several equity and policy considerations. First, jurisdictions that utilize property tax as a major revenue source often have concerns about the amount of property taxes that are diverted to TIF districts over their lifespan. To address this, many municipalities in the region create increment sharing agreements with school, park, fire and other districts when a TIF is established to ensure that all

parties receive a set additional share of TIF revenues. To utilize TIF as a value capture mechanism, these issues will have to be addressed. Some states require set-asides to underlying districts or limit tax increment to that produced by the establishing district. If a Transportation TIF mechanism is created, it is likely that local jurisdictions would need some statutory assurance that they will receive a portion of the revenue from the district.

Additionally, the impact of expressways on residential property value is unclear. Unlike commercial and industrial properties that directly benefit from the visibility, access, and reduced travel times provided by a new expressway, residential property can both benefit from and be harmed by expressway adjacency. Some analyses have shown that the value of residential properties directly adjacent to the expressway is lower than homes further from the expressway but with similar access. While the design recommendations of the BRAC thus far have sought to minimize the noise, light, and visual impacts of the expressway, the impacts of these decisions on residential property values are not definitive. For this reason, other expressway projects that have utilized value capture funding from an added tax such as a special assessment have excluded residential property from that tax. Residential property cannot be excluded wholly from a TIF district, but examples in Texas and Georgia indicate that boundaries have been set to exclude residential properties wherever feasible.

Conclusions

Value capture has the potential to generate significant revenue to assist in paying for the proposed 53/120 Facility. However, statutory changes are required to make value capture work in Illinois and policy decisions are required to better define the scope of the value capture district revenue base. Most significantly, the ability to create multijurisdictional districts focused on providing funding for transportation improvements does not exist in Illinois today. Current special districts can be adapted to provide funding in some situations, but are not likely to provide a strong option for a facility like the proposed 53/120 extension and bypass. Additionally, policy considerations remain about the inclusion of residential property in the proposed value capture districts and the sharing of tax increment revenues with underlying jurisdictions. If the Council decides that local contributions via value capture are a desirable funding mechanism for the 53/120 facility, the following next steps are recommended:

1) Further research into statutory solutions for a value capture districts in Illinois
2) Assessment of policies in other states and regions regarding increment sharing and the property tax base for value capture districts
3) Analysis of the impact of value capture tools on development economics

Methodology

This section of the memo provides a summary of the methods and assumptions used to structure the value capture analysis. Creation of a value capture analysis requires three distinct steps: compilation of the future land use plans of local communities, analysis of market potential for the major real estate development types, and projection of growth in property values as a result of potential development. The analysis of future land use plans and the market analysis provide a picture of future development in the corridor, feeding into the projection of property value growth and value capture revenues. This section provides a high-level summary of the methodology used for each.

Analysis of Community Plans

The compilation of community comprehensive plans was completed and summarized in a memo titled "Route 53/120 Future Land Use Change Analysis and Impacts" and distributed to the BRAC on February 27, 2012. The proposed future land use change derived from this analysis indicated that communities are actively planning for the future of the Route 53/120 Corridor. Figure 6 below summarizes the total new development by land use for the corridor.

Figure 6. Future Land Use Change within 2 miles of the Proposed 53/120 Corridor

	Future Added Acres by Land Use		Estimated Development	
Future Land Use Change	**From****	**To****	**From****	**To****
Residential	5,200	6,510	8,220 Units	12,450 Units
Retail/Commercial	2,420	3,050	31,210,000 SF	38,300,000 SF
Open Space	1,720	1,420	1,720 Acres	1,420 Acres
Industrial	1,670	2,360	19,700,000 SF	21,920,000 SF
Office	840	1,350	14,510,000 SF	26,340,000 SF
Mixed Use *	120	120	1,190 Units	1,190 Units
			1,350,000 SF	1,350,000 SF
Government & Institutional	90	130	No Data	No Data
Utility/Waste Facilities	20	20	No Data	No Data
Agricultural Land***	2,890	N/A	N/A	N/A

* Mixed use refers to downtown or transit-oriented developments. Mixed Use Housing Unit and Retail/Commercial SF totals are not included in the Residential and Retail/Commercial SF totals in Figure 1. All areas proposed for future mixed use had no other proposed land uses, so there is no difference between the scenarios.
** The "From" and "To" scenarios represent the sum of acreage and estimated square footage when the least and most intensive proposed land uses are chosen for all areas. Multiple proposed land uses occurred only in unincorporated areas where the planning areas of two or more municipalities overlapped.
*** Agricultural land does not represent a new or added land use, but instead is a total of existing agricultural acres that are not converted to developed acres in the most intensive scenario.
Sources: CMAP analysis of CoStar Data, municipal and county Comprehensive Plans and approved major developments.

The figures above represent a "full buildout" of all land within two miles of the corridor that municipalities have designated for future development. It has not been constrained by market potential, but is instead a reflection of the sum total of the separate future development plans of individual municipalities. Municipalities proposed development near the 53/120 interchange areas from the LCTIP process and in areas with significant existing undeveloped land. Depending upon the scenario, 55% to 70% of the proposed non-residential land use change is found in the area adjacent to the proposed Route 53 ROW north of Winchester and on the proposed Route 120 bypass and improvements from Route 83 on the east to the McHenry County line on the west. The amount of land designated for future development is substantial and, if developed at the densities prevalent indicated in comprehensive plans, would substantially change the character of central Lake County. Furthermore, the scale of proposed development is on par with that found on Interstate 94 through Lake County. Figure 7 compares the developable SF derived from the future land use change analysis to the existing square footage today within all of Lake County and in the I-94 corridor.

Figure 7. Existing Lake County Development and Estimated 53/120 Corridor Proposed Development

Land Use	Existing Development - All of Lake County	Existing Dev – I-94 Corridor in Lake County***	Estimated New Development within 2 Miles of the 53/120 Corridor, per Comp Plans****		Increase over Existing Dev in Lake County
			From	To	
Office (SF)	34,745,869	22,510,254	12,890,000	26,260,000	37% to 76%
Industrial/Flex (SF)	82,849,019	28,226,296	18,650,000	21,840,000	23% to 26%
Retail (SF)*	33,564,300	10,994,823	32,560,000	39,650,000	97% to 118%
Housing Units**	260,310	No Data	9,410	13,640	4% to 5%
Population**	703,462	No Data	29,060	41,200	4% to 6%

* Retail square footage includes first-floor retail in mixed use developments.
**Housing units and population in the "2011" column are 2010 US Decennial Census figures.
***The I-94 Corridor was roughly defined by Milwaukee Ave and Hunt Club Rd on the west and Skokie Blvd and Delaney Rd on the east.
****Future development has been estimated from the future land use change indicated in the Route 120 Unified Vision and comp plans via municipal/county density regulations and CMAP's Futureview metrics for FAR, jobs, population, and households by land use. Resulting FARs were checked against average new construction FARs in Lake County for non-residential buildings constructed since 2000.
Sources: CMAP analysis of municipal and county comprehensive and strategic plans, site plans of recently approved major developments, CoStar Data and US Decennial Census data.

Market Analysis

CMAP performed a high-level analysis of the market potential for office, industrial, and retail space within the Lake County corridor. The Corridor was defined as the area generally within 2 miles of the proposed right of way and overlaps portions of existing office and industrial centers in Lake Zurich and on Lake Street in Libertyville and Mundelein. Office and industrial

market potential were projected from regional and county economic forecasts and historic office and industrial development capture rates. Retail market potential was projected based on forecasted new households, existing retail leakage rates, and new worker spending. The following provides a brief overview of the process.

Office and Industrial Market Analysis

Office and Industrial market potential were derived from analysis of office and industrial development trends within the County and its major corridors and from future employment forecasts provided by Woods & Poole (W&P) and Economic Modeling Specialists, Inc (EMSI). Employment and the resulting square footage projections were reduced to reflect returns to pre-recession employment and occupancy levels. Projected new development square footage for the 53/120 corridor through 2040 was approximately 4.2 million square feet of office and 6.0 million square feet of industrial square footage. This development is expected to concentrate in the area north of Winchester Road at Route 53 and west of Route 83 at the Route 120 bypass, with some infill of existing business and office parks in other areas and development of commercial nodes near interchanges. Figure 8 below outlines the net new office and industrial employment and square footage for the Corridor.

Figure 8. New Industrial and Office Employment in the 53/120 Corridor and Resulting Development Square Footage

	Net New Employment	New Square Footage
Office	10,400	4,170,000
Industrial and Flex	5,900	6,000,000

Source: CMAP Analysis of Woods & Poole, EMSI, and CoStar data

To construct this analysis, data on office and industrial development within the County were analyzed to assess development trends. Figure 9 provides the countywide office and industrial square footage developed over time as well as current vacancy rates. The data indicates that development of office and industrial space has slowed over the last decade, with a halving of office space development and a significant reduction of industrial development. Vacancy rates are comparable to regional averages. According to CoStar data, office and industrial vacancy rates in Lake County have generally been at or below regional averages since recordkeeping began in 1997.

Figure 9: Lake County Office and Industrial Square Footage Development Over Time

Year Constructed	Office	Industrial
Before 1950	610,000	4,500,000
1950 to 1980	7,970,000	30,000,000
1980 to 1990	7,130,000	16,790,000
1990 to 2000	10,690,000	16,350,000

2000 to present	5,470,000	9,930,000
Current Vacancy Rate		
Lake County	14.4%	10.9%
7-County CMAP Region	14.9%	11.0%

Source: CMAP analysis of CoStar Data

To estimate a reasonable rate of capture of countywide office and industrial employment growth within the 53/120 corridor through 2040, CoStar data on office and industrial square footage in Lake County and on key corridors was collected and analyzed. Figure 10 provides a breakdown of office and industrial square footage constructed within the county and on major corridors since 1980. The last entry provides square footage developed within the 53/120 corridor since 1980, but has been treated separately because it overlaps the Route 83/45/Lake Street corridor.

Figure 10. Office and Industrial Square Footage Constructed in Lake County since 1980

	Office**	**Industrial****
Lake County	31,266,000	38,346,000
Milwaukee Corridor (Lake-Cook Road to Route 137)		
SF	6,144,000	11,829,000
Capture Rate	20%	31%
Route 83/45 Corridor (Lake Street cluster to Washington Street)		
SF	858,000	6,548,000
Capture Rate	3%	17%
I-94 Corridor (Lake-Cook Road to Wadsworth, Skokie Blvd to Milwaukee Ave*)		
SF	12,313,000	13,478,000
Capture Rate	39%	35%
Total % of Lake County SF	**62%**	**83%**
Route 53/120 Corridor (overlaps significant portions of the Route 83/45 Corridor)***		
SF	2,552,000	7,317,000
Capture Rate	8%	19%

* To avoid overlap in this table, properties in both the Milwaukee Corridor and the I-94 Corridor were excluded from the I-94 totals. Without this exclusion, total Office SF in the I-94 Corridor constructed since 1980 is approximately 16.4 M SF and total Industrial SF is approximately 15.4 M SF.

**Not all CoStar records include a year constructed. To minimize this loss, decade of construction was researched via aerials for the largest properties in each analysis area, to reach a maximum of 10% of total SF missing a year built.

*** The Route 53/120 Corridor includes a 2-mile buffer on either side of the proposed Route 53 extension and Route 120 bypass. Existing portions of Route 120 east of Hunt Club Road have been excluded.

Source: CMAP Analysis of CoStar data

As shown above, the study area has attracted a significant percentage of the industrial development in the county since 1980. This development has been located in Lake Zurich near Quentin Road, within the Lake Street industrial area in Libertyville, and in several nodes along the existing Route 120. The proposed facility is likely to increase the potential of the study area

to attract new industrial development, possibly to the level of the Milwaukee Avenue Corridor. To remain conservative and reflect lower preferred development densities in the Corridor, an average 24% capture rate has been chosen for the Corridor.

In contrast to industrial capture rates, the study area has attracted a lesser percentage of the county's office development. Vacancy rates are also significantly higher than regional and county averages, generally due to high vacancy rates at Kemper Lakes in Long Grove and Pine Meadows in Libertyville. The new facility will substantially improve the ability of the study area to attract office development and maintain normal vacancy rates, since most large new office development in the region locates on or near to expressways for the accessibility and visibility they provide. While the proposed facility is not an expressway, it will still be a limited-access roadway with comparatively higher traffic volumes and visibility than arterial roads. Therefore, it possesses many of the locational advantages of higher-volume expressways and can be expected to attract office development. Additionally, proposed office areas near Peterson and Alleghany Roads are located near to three existing Metra stations on two separate Metra lines, adding to the accessibility of these areas.

The most available land in the Corridor is located on the western portion of Route 120, which is somewhat distant from existing office and employment centers. However, the Cornerstone development, which has received key approvals from the Village of Grayslake and includes plans for up to 3.6 million square feet of office and industrial space, may spur interest in the Route 120 area as an office center. Build-out of this type of park will take some time and may extend beyond the 2040 planning horizon. For example, the Conway Parks development in Lake Forest has been open since 1991, still has several development sites available, and total office square footage today is approximately 2 million square feet. Given the significant new accessibility provided by the proposed facility, the large areas of developable land along Route 120, and the pre-existing development proposals, a 20% capture rate of countywide office development has been chosen the Corridor. This is equivalent to the capture rate that the Milwaukee Avenue corridor achieved over the last 30 years, but well below that of the I-94 Corridor.

Once analysis of existing square footage and trends was complete, EMSI and W&P projections of future employment in Lake County were analyzed. EMSI projections are only provided through 2021, and were projected out to 2040 using compound annual growth rates from 2015 through 2021. Only sectors that typically occupy office or industrial space were utilized for this analysis, with partial assignment of some sectors (for-profit education, for-profit healthcare, and admin/waste mgmt) based on current business and employment data by NAICS sector from InfoUSA. Future employment for public sector or institutional workers in healthcare, education, the military and general government was not analyzed because these sectors less frequently occupy office or industrial space.

While EMSI and W&P both project a return to pre-recession employment levels in both the region and Lake County by 2015, they provide divergent future scenarios for Lake County

through 2040. W&P forecasts significant growth in the County and a capture of new regional employment that increases its share of regional employment from 7.5% to 9.5%. Employment in sectors that occupy office and industrial space is projected to increase considerably; there is a doubling of employment in office worker sectors and an increase in transportation, warehouse and wholesale employees that eclipses a projected decline in manufacturing workers. Utilizing current worker per square foot metrics and reducing growth for backfill of existing vacant square footage, the W&P employment projection would generate more new office square footage than has been developed in the county over the past 30 years. Given the decreasing availability of vacant land and the height and density restrictions in the remaining undeveloped portions of the County, this seems unlikely. However, new industrial and flex square footage is projected to be generated at significantly slower rate than the past 30 years.

In contrast, EMSI forecasts slower rates of growth for the region and an employment capture for Lake County that maintains its current share of regional employment. Like W&P, EMSI forecasts the highest growth in office-related sectors, but at a lesser 50% increase from the current levels. Manufacturing employment is expected to maintain its current levels and transportation, warehousing, and wholesale employment is expected to grow. EMSI employment projections would lead to new office square footage generation within the County that is in line with averages over the last several decades. As with W&P, industrial square footage development is projected to increase at a lesser rate than in prior decades. For this analysis, the EMSI office employment projections have been utilized rather than the W&P projections in order to provide a more conservative estimate of future development for the value capture projections. For industrial employment, EMSI and W&P projections projected similar, slower rates of new development and were averaged.

Retail Market Analysis

The retail market analysis was based on three key variables: Future office employment as projected above, capture of leakage of retail sales from the Route 53/120 Corridor, and the spending potential of new households. It is assumed that Gurnee Mills to the northeast and the Woodfield cluster to the south will continue to provide major regional retail and entertainment destinations, and that new retail within the corridor will primarily serve the day-to-day demand generated by households and workers. Overall, the analysis projected capacity for approximately 2.6 million square feet of new retail development within the Corridor. As with office and industrial, much of this development is expected to concentrate in the northwestern portions of the Corridor, with some infill in existing areas and new development near interchanges. Figure 11 summarizes the major drivers of new retail demand in the corridor.

Figure 11. New Retail Demand and Square Footage by Demand Source

	Net New Demand	Retail SF
Worker Spending	$ 29,300,000	110,000
Capture of Existing Retail Leakage	$ 133,200,000	480,000

New Household Spending	$ 545,400,000	1,980,000
Total	**$ 841,100,000**	**2,570,000**

Source: CMAP analysis of Urban Land Institute, Woods & Poole and ESRI Business Analyst data

New employment generates the smallest amount of demand for new retail square footage, and that demand is likely to be concentrated in the Food Services and Drinking Places category. The employment analysis above indicated that the Corridor will house approximately 8,900 new office workers by 2040. Office workers spend near their place of work in several ways – buying lunch, eating out after work, and shopping. An Urban Land Institute metric of $3,300 in retail spending near to their place of work per office worker per year was utilized in this analysis to estimate demand for new retail square footage.[1] This metric implies a capture rate of approximately 50% of office worker spending.

Attraction of current retail sales leakage, based on data provided by ESRI Business Analyst, also provides a smaller contribution to the projected new retail square footage for the corridor. Initial analyses of the Corridor as a whole indicate that the corridor is balanced in terms of retail sales, drawing slightly more sales than demand within the Corridor should generate. However, there is sales leakage of 40% in the Food Services and Drinking Places spending category. A different picture emerges when the Route 120 portion of the facility is analyzed separately from Route 53 section. In this case, Route 53 captures 25% more sales than it generates demand for, and Route 120 makes 65% of its purchases, or $266 million in sales, to other areas of the County and region. This points to a significant spatial mismatch in the location of retail and housing in the Corridor, indicating a market opportunity for some new retail in the Route 120 portion of the corridor. Also, all areas have a significant leakage in the Food Services and Drinking Places category, indicating a need for dining and entertainment options in the Corridor. It was assumed that, with the development of the new facility, retail would develop along Route 120 to serve new workers and households and capitalize on the new access. At the same time, it is likely that some of the Route 53 retail will transition to other uses or draw customers from new housing to the west. Overall, it was estimated that the Study Area as a whole could capture 50% of the retail leakage from Route 120 area, with most new retail square footage being built in the Route 120 portion of the Corridor.

Finally, the largest demand for new retail sales is projected to come from new households in the corridor. The Future Land Use analysis projected some capacity for few new households within the corridor – 8,200 to 12,450 units. However, the CMAP GO TO 2040 scenario-based forecasts and the Woods & Poole population forecasts indicate significantly higher new households for the Corridor, or 18,000 and 25,000 new households, respectively. However, the Future Land Use analysis only utilized the most and least intensive development densities for a given area. In many cases, residential development was proposed for areas that also had more and less intensive future uses proposed (a less intensive use would be agriculture or open space), and that proposed development was therefore not included in the analysis. For the purposes of this

[1] Urban Land Institute, cited in: University of Wisconsin Extension, "Downtown Economics" Issue 25, January 2007. Accessed on February 27, 2012 at http://www.uwex.edu/ces/cced/downtowns/ltb/documents/DE0107.pdf

analysis, it was assumed that some of the land designated for non-residential development in the FLU Change analysis would be developed with residential as the market demanded. To provide a new estimate and reflect the lower densities preferred in current community plans, an average of the Woods & Poole and the minimum Future Land Use projections was created to estimate new households. This produced an estimate of approximately 19,400 new households in the Corridor by 2040. Average household spending on local retail goods was derived from ESRI Business Analyst reports on local spending patterns, and a capture of 75% of demand was assumed.

Taken together, these three factors produce approximately $700 million in net new retail sales for the Corridor by 2040. Industry average sales per square foot and normal vacancy rates were applied to this sales estimate, generating net new retail square footage within the corridor of approximately 2.6 million square feet.

Value Capture Projections

Value capture projections for the corridor were structured using standard TIF and SSA revenue projection methodologies. This section provides a high-level summary of the steps involved and the key assumptions driving the analysis results. Figure 12 summarizes the results of the value capture analysis for the Corridor.

Figure 12. Estimated Value Capture Bonding Capacity for SSA and TIF-based Value Capture Districts on the 53/120 Corridor

Bonding Scenario	SSA***	TIF***
Excludes existing residential EAV		
Existing EAV Only*	$20 MM to $21 MM	$35 MM to $71 MM
New Development EAV + Existing EAV**	$37 MM to $46 MM	$131 MM to $179 MM
Includes existing residential EAV		
Existing EAV Only*	$109 MM to $118 MM	$196 MM to $391 MM
New Development EAV + Existing EAV**	$148 MM to $179 MM	$291 MM to $458 MM

*Existing EAV projections for an SSA assumed no EAV growth. Because a TIF requires EAV growth, a 2.0% to 3.0% annual growth rate of existing EAV was assumed.
** Growth Scenario projections assumed development of approximately 4.2 million square feet of Office, 6.0 million square feet of Industrial, and 2.6 million SF of Retail within the Corridor by 2040.
*** An SSA tax rate of 0.50% has been assumed. TIF bonding estimates assume a diversion of 50% of TIF revenues to underlying jurisdictions. All districts are established in 2018. Bonding term is 25 years.
Sources: CMAP analysis of Lake County Assessor data

EAV Growth and Inflation

The major driver of the bonding capacity of SSA and TIF revenues over time is growth in Equalized Assessed Value (EAV), or the assessor's measure of a property's value. In Illinois, EAV should equal approximately one third of a property's market value. To estimate EAV growth from new development, this analysis utilized the projected square footage by development type from the market analysis. The EAV and square footage of comparable recently constructed, well-occupied office, industrial, and retail buildings within Lake County was compiled to provide an estimated EAV per square foot for new development. This EAV per square foot was then applied to the new development square footage projections to reach a "new development" EAV for the corridor. This new development EAV was then phased in over the next thirty years, with the highest growth rates between 2025 and 2030 to reflect immediate development spurred by construction of the Facility. New development EAV was not assigned to specific parcels or future land use change areas, but was instead analyzed on a Corridor-wide basis.

EAV growth also occurs from inflation of the value of existing EAV over time. For this analysis, an industry standard low growth rate of 2% and a high growth rate of 3% were applied to create a range of EAV growth from inflation. For comparison, the compound annual growth rate in EAV for all of Lake County has been 5.5% since 1999. This reflects both high-development and recessionary periods. For all TIF scenarios and for the "New Development +Existing EAV" SSA scenarios, these inflation rates were applied throughout the life of the taxing district. However, the SSA "Existing EAV" scenarios utilize these inflation rates only up to 2018, or the year of district establishment. The 2018 EAV is then held flat through the life of the district. This is consistent with current industry practice regarding SSA-based bonding issuances.

SSA Assumptions

While Lake County has a strong tradition of utilizing SSAs to fund infrastructure improvements, these districts are generally limited to improvements that benefit a single development. There are approximately 75 special service areas in Lake County today, 42 of which have an "Ad-Valorem," or EAV-based, tax rate. In these ad-valorem districts, the weighted average tax rate is 0.48%. Therefore, a rate of 0.50% reflects the current SSA trends within the County. Further analysis is needed to calibrate this rate and determine its impact on businesses.

TIF Assumptions

TIF districts generate revenue from an increase in property value above a defined base. This analysis assumes that the "base EAV" year for a TIF district would be 2017, based on a district establishment year of 2018 and standard property assessment timelines. As with an SSA, the current district EAV was inflated from 2011 through 2017 using the 2% and 3% annual inflation rates.

Additionally, the TIF district bonding revenues assume a 50% diversion of funds to underlying districts. Given the size of the value capture area, it is unlikely that the district will receive 100% of its increment. Instead, a TIF would be utilized to make a debt service payment that targets a specific bond amount. The 50% set-aside provides a rough allocation of what might be available to underlying districts in a given year. In reality, remaining increment to share with underlying jurisdictions will vary considerably based on the targeted bond amount, the annual debt service payments required to meet that amount, and the total increment in a given year.

Finally, TIF revenues have been assumed to be captured for 25 years, which is the standard bonding term for the Tollway. This is two years beyond the lifetime of a normal TIF district, and requires statutory approval. The General Assembly has authorized a number of TIF districts to extend their lifespan up to 35 years. However, to make these value capture TIF revenues bondable, it is likely that statutory confirmation of the district's longer time period would need to be obtained before the district is created rather than near the end of the standard 23 years.

Bonding Assumptions

Bonds for major roadway projects are generally issued by a state, toll authority, or, in some cases, individual cases. Since this analysis assumes that the Tollway would construct this Facility, the Tollway's bonding assumptions have been utilized. These include a 6.0% interest rate, a 1.5 debt coverage ratio (DCR), and 25-year term. Additionally, it is assumed that the districts would be created in 2018, with initial revenues available by 2020. It may be beneficial to create a TIF prior to 2018 to capture increases in property values after construction of the facility is officially announced but before construction begins. However, this would prevent additional issues with the statutory lifespan of TIF districts.

Finally, the Tollway or other entity issuing the bonds will need to consider what level of risk they are willing to assume. The "Existing EAV Only" projections of bonding capacity represent conservative scenarios that meet standard binding guidelines. However, these projections do not recognize the significant development potential generated by a new facility and therefore provide a limited bonding capacity. The "New Development EAV + Existing EAV" projections represent an assumption of significant growth within the value capture district and, therefore, present more risk that the value capture revenues may not be sufficient to meet debt service payments. Therefore, assessing the final contribution that value capture can provide will involve negotiating the level of risk that is acceptable to the Tollway or other bonding authority.