

IL ROUTE 53/120

Blue Ribbon Advisory Council

Mobility & Finance Working Group

March 12, 2012

Lake County Department of Transportation, Libertyville





MOBILITY & FINANCE AGENDA

- Meeting Goals
- Cost Estimates
- Revenue Estimates
 - Congestion Pricing
- Funding & Financing Options
- Additional Options
 - Value Capture
 - Local Taxes
- Group Discussion



REMAINING SCENARIOS

- All estimates based on three scenarios developed during design workshop
- All are 4-lane, 45mph
 - **Scenario B** (Table 1)
Short Grayslake bypass connecting to existing 120
 - **Scenario C** (Table 2)
Full 120 bypass
 - **Hybrid Scenario** (Table 3)
Longer Grayslake bypass





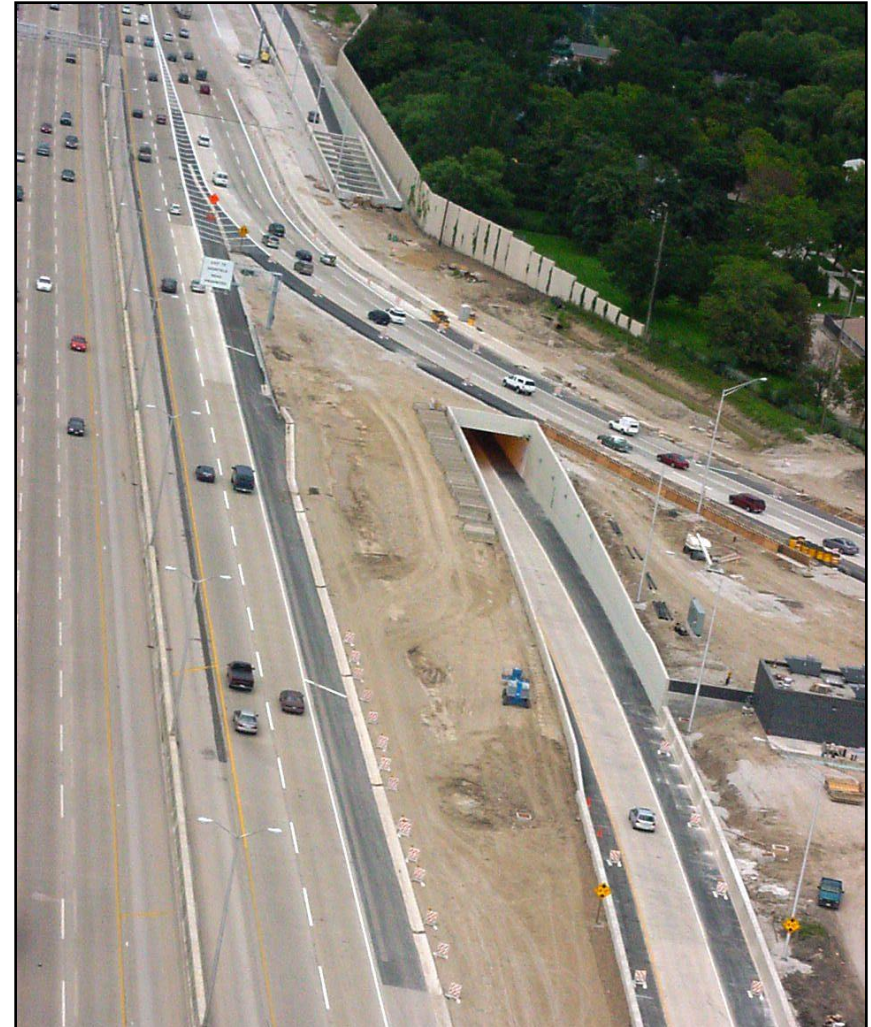
BASELINE FEATURES

- Depressed roadway/tunnel at 83/137/Metra
- Depressed roadway at many locations
- Various interchange designs
 - Depressed
 - Tight footprint
- Environmental enhancements more than double I-355



DEPRESSED ROADWAY

- Cost for depressed roadway/tunnel at 83/137/Metra (rather than bridge) = +\$115 to \$168M
- Additional M&O costs above the beyond typical interchange maintenance should be expected
- Example shown: Deerfield Underpass (construction cost \$21.75M for 585')



INTERCHANGES

- Typical single point urban interchange (SPUI) included in baseline estimate (except where mainline is depressed)
- Example shows mainline under the elevated crossroad
- Two options for depressing road: crossroad under mainline, or mainline under crossroad
- Can be “tight” footprint or wider to allow for green
- About \$80M each





BASELINE COST ESTIMATE

	Scenario B	Hybrid Scenario	Scenario C
Baseline Cost Estimate (includes construction and engineering costs. ROW and maintenance yard not included)	\$1,925 M to \$2,068 M	\$2,246 M to \$2,414 M	\$2,322 M to \$2,496 M

- Costs estimated at mid-point of construction (2020)
- Environmental costs are estimated at 4% of construction cost, and include construction contingencies
- Baseline cost includes a total of approximately \$325M for depressed roadway sections. This includes roadway under IL 83/IL 137/Metra, extending to east of US 45, through residential areas in Mundelein, and at select interchange locations along the corridor
- Baseline cost assumes single-point urban interchanges (SPUI)



REVENUE ESTIMATE METHODOLOGY

- Refined traffic model for Scenarios B, C and Hybrid
- Conducted detailed evaluation of peak period model results
 - How much speed reduction is observed in the peak?
- Analyzed toll rates needed to manage demand (maintain free flow) in the peak periods
- Developed 2025-2040 revenue streams
- Provided to Tollway Finance Department for evaluation



2025 REVENUE ESTIMATES - SUMMARY

Passenger Car Toll Rate (per mile) ¹	Tolling Type	Scenario B	Hybrid Scenario	Scenario C
\$0.20	Base	\$30 M To \$45 M	\$45 M To \$70 M	\$55 M To \$80 M
\$0.40 Peak, \$0.20 Off-Peak	Congestion Pricing	\$40 M To \$60 M	\$55 M To \$85 M	\$65 M To \$95 M

DRAFT for planning purposes only

¹Commercial vehicle toll rates for the IL-53/120 project were set at projected 2025 I-355 extension commercial vehicle toll rates. For congestion pricing the passenger car toll rate necessary to manage congestion in the peak periods (7-9am, 4-6pm) was analyzed. This was found to be around \$0.40/mile in 2025. Peak commercial vehicle (truck) rates were kept at as "base" levels in the congestion pricing analysis. Off peak tolls were kept at \$0.20/mile PC.





2025 REVENUE ESTIMATES – .20 per mile

Year	Base \$0.20/Mile Passenger Car Pricing								
	Scenario B			Hybrid Scenario			Scenario C		
	Low	Mid	High	Low	Mid	High	Low	Mid	High
2025 ¹	\$ 30	\$ 40	\$ 45	\$ 45	\$ 60	\$ 70	\$ 55	\$ 65	\$ 80
2026 ¹	35	40	50	50	60	75	55	70	85
2027 ¹	35	45	55	50	65	80	60	75	90
2028	40	50	55	55	70	85	65	80	95
2029	40	50	60	60	75	85	65	80	100
2030	40	50	60	60	75	90	65	85	100
2031	40	50	60	60	75	90	70	85	105
2032	40	55	65	65	80	95	70	90	105
2033	45	55	65	65	80	95	70	90	110
2034	45	55	65	65	80	100	75	95	110
2035	45	55	70	65	85	100	75	95	115
2036	45	60	70	70	85	105	80	95	115
2037	50	60	70	70	90	105	80	100	120
2038	50	60	75	70	90	110	80	100	120
2039	50	65	75	75	90	110	85	105	125
2040	50	65	75	75	95	115	85	105	130

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¹Commercial vehicle rates set at projected I-355 extension commercial vehicle rates





2025 REVENUE ESTIMATES – Congestion Pricing

Year	Congestion Pricing								
	Scenario B			Hybrid Scenario			Scenario C		
	Low	Mid	High	Low	Mid	High	Low	Mid	High
2025 ¹	\$ 40	\$ 50	\$ 60	\$ 55	\$ 70	\$ 85	\$ 65	\$ 80	\$ 95
2026 ¹	40	50	60	60	75	90	70	85	105
2027 ¹	45	55	65	65	80	95	70	90	110
2028	45	60	70	70	85	105	80	100	115
2029	50	60	75	70	90	105	80	100	120
2030	50	60	75	70	90	110	80	105	125
2031	50	65	75	75	95	110	85	105	125
2032	55	65	80	75	95	115	85	110	130
2033	55	70	80	80	100	115	90	110	135
2034	55	70	85	80	100	120	90	115	135
2035	55	70	85	80	105	125	95	115	140
2036	60	75	90	85	105	125	95	120	145
2037	60	75	90	85	110	130	100	125	145
2038	60	80	95	90	110	135	100	125	150
2039	65	80	95	90	115	135	105	130	155
2040	65	80	100	95	115	140	105	135	160

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¹Commercial vehicle rates set at projected I-355 extension commercial vehicle rates

For congestion pricing the passenger car toll rate necessary to manage congestion in the peak periods (7-9am, 4-6pm) was analyzed. This was found to be around \$0.40/mile in 2025 and \$0.50/mile in 2040. Peak commercial vehicle (truck) rates were kept at as "base" levels in the congestion pricing analysis. Off peak tolls were kept at \$0.20/mile PC.





FUNDING & FINANCING METHODOLOGY

- 2020 dollars
 - Assumes project is financed before revenue is realized
- \$150,000 per lane mile in operating costs (4% growth)
- Assumes 6% interest
- 25 and 35 year term
- Assumes 1.5X coverage (usually 2X)
 - Provides revenue to maintain roadway



FUNDING & FINANCING ESTIMATES

.20 per mile

FINANCIALS	SCENARIOS		
	B	Hybrid	C
Annual Toll Revenue Range	\$40-\$65	\$60-\$95	\$65-\$105
Operating Cost	\$16-\$41	\$18-\$46	\$16-\$41
Debt Service	\$16-\$25	\$28-\$42	\$33-\$52
Coverage	\$8- \$12	\$14-\$21	\$16-\$26
Bonding Capacity	\$200-\$230	\$360-\$410	\$440-\$500

Revenues assumptions include the mid range of each scenario
 Bonding Capacity for 25 and 35 Years





FUNDING & FINANCING ESTIMATES

Congestion Pricing

FINANCIALS	SCENARIOS		
	B	Hybrid	C
Annual Toll Revenue Range	\$50-\$80	\$70-\$115	\$80-\$135
Operating Cost	\$16-\$41	\$18-\$46	\$16-\$41
Debt Service	\$22-\$36	\$35-\$56	\$43-\$71
Coverage	\$11-\$18	\$17-\$28	\$21-\$36
Bonding Capacity	\$295-\$335	\$475-\$545	\$585-\$680

Revenues assumptions include the mid range of each scenario
 Bonding Capacity for 25 and 35 Years





INITIAL FUNDING GAP

- Does not include consideration of other funding options

	Scenario B	Hybrid Scenario	Scenario C
Cost Estimate	\$1,925 M to \$2,068 M	\$2,246 M to \$2,414 M	\$2,322 M to \$2,496 M
.20/mile Bonding Capacity	\$200-\$230	\$360-\$410	\$440-\$500
FUNDING GAP	\$1,725M-\$1,838M	\$1,886M-\$2,004M	\$1,882-\$1,996M
Congestion Pricing Bonding Capacity	\$295-\$335	\$475-\$545	\$585-\$680
FUNDING GAP	\$1,63M-\$1,733M	\$1,771M-\$1,869M	\$1,737M-\$1,816M



FUTURE STEPS

- Fine-tune operational and life-cycle cost assumptions/estimates
- Consider other funding & financing options
- Develop detailed plan



CLOSING THE FUNDING GAP

- Funding & Financing Options (increasing revenue)
 - Value capture
 - Sales and Motor Fuel Tax
 - Tolling existing Route 53
 - Public-private partnerships
 - Others?
- Options for Reducing Cost



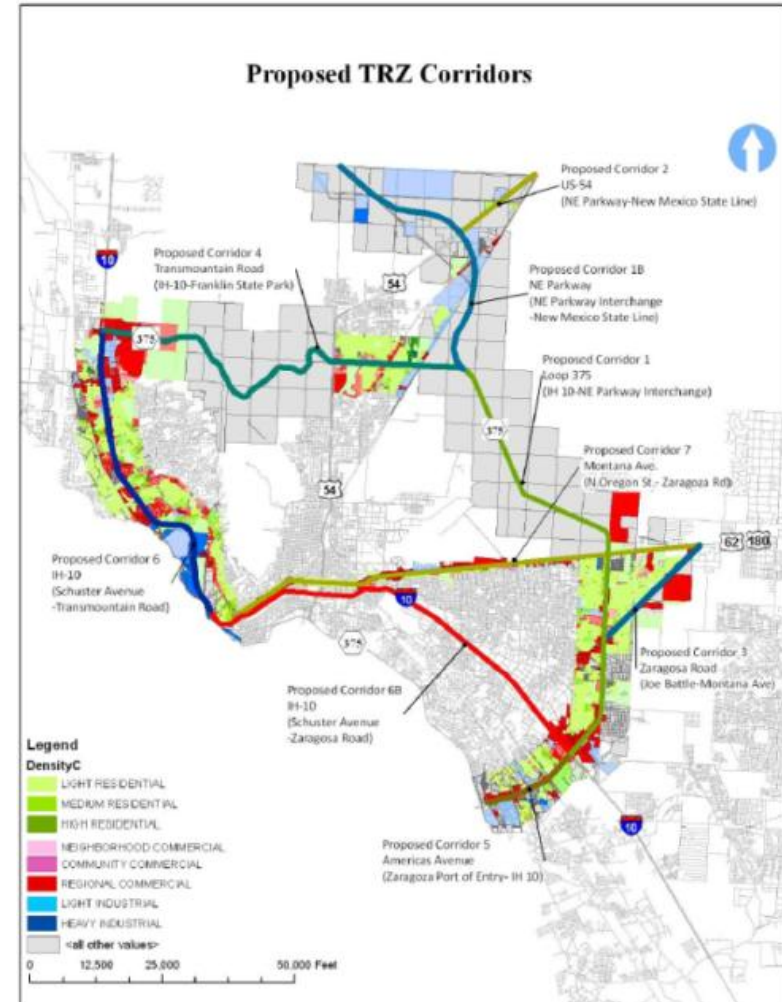
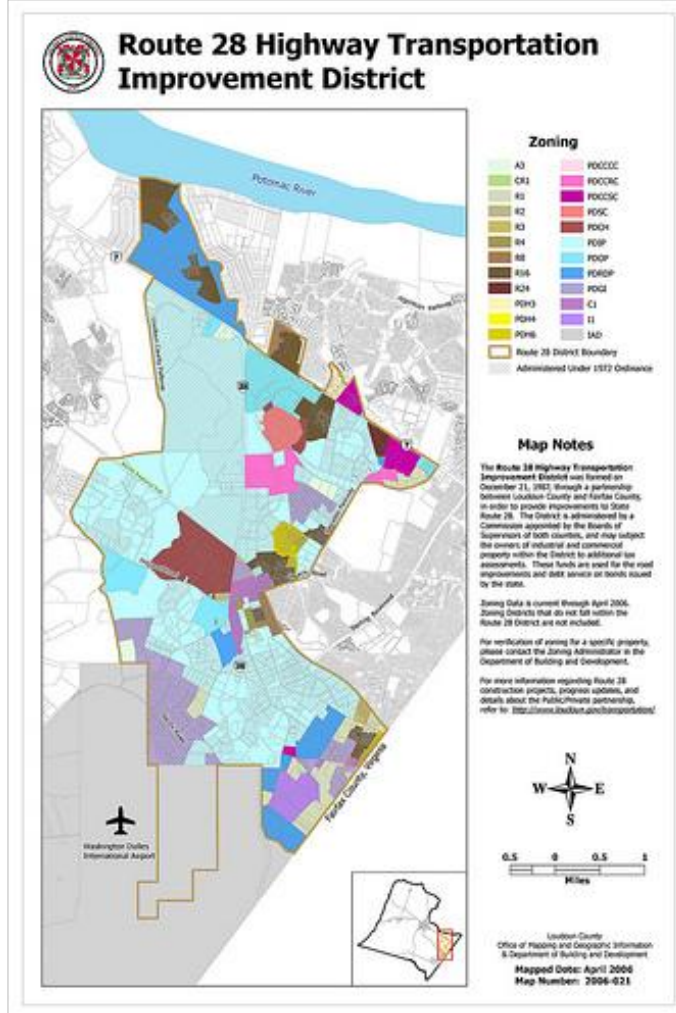
VALUE CAPTURE

- ❑ The proposed facility will increase property values and spur development
- ❑ Value capture offers an option to utilize a portion of that increased value to pay for the road
- ❑ Value capture has been used nationally to fund new transit and roadways
- ❑ Value capture has potential in Illinois, but faces some statutory and policy obstacles

VALUE CAPTURE CASE STUDIES

Virginia TID

Texas TRZ





VALUE CAPTURE IN ILLINOIS

- Illinois options include Tax Increment Finance, Special Service Area, and Business Districts
- Transportation improvements are multijurisdictional, but:
 - TIFs, SSAs and BDs must be created by individual municipalities
 - Counties can create multijurisdictional SSAs with municipal consent



VALUE CAPTURE IN ILLINOIS, cont'd

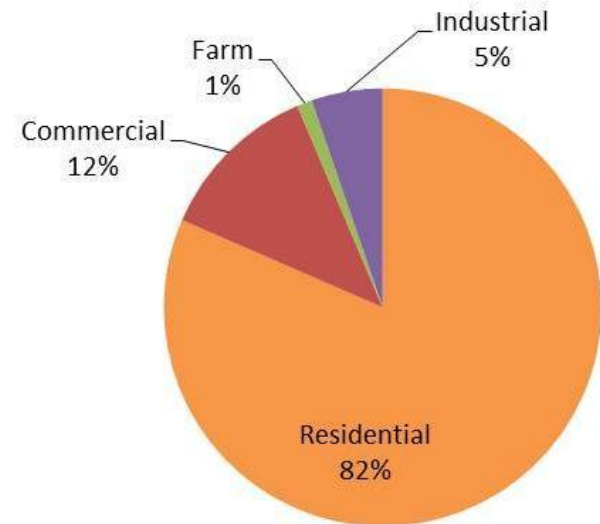
- District establishment and boundary statutory requirements limit usage for value capture
 - Findings of blight required for TIF and BD, but many areas that need new roads/transit do not meet blight criteria
 - Exclusion of residential may violate tax formula and/or reasonable boundary requirements
- Very large districts may incorporate significant proportions of the EAV in underlying districts



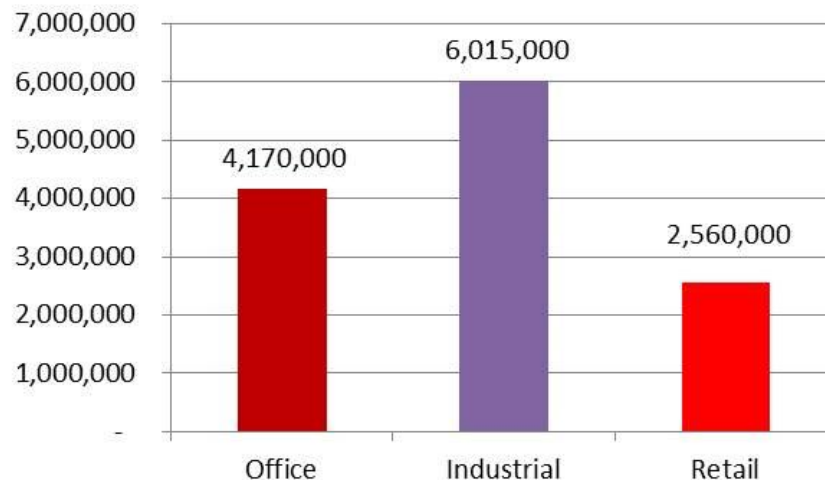
RT. 53/120 VALUE CAPTURE ANALYSIS

- Planning-level analysis
- SSA tax rate of 0.5%
- 50% set-aside of TIF revenues
- Tollway bonding assumptions

Corridor EAV Distribution by Property Class

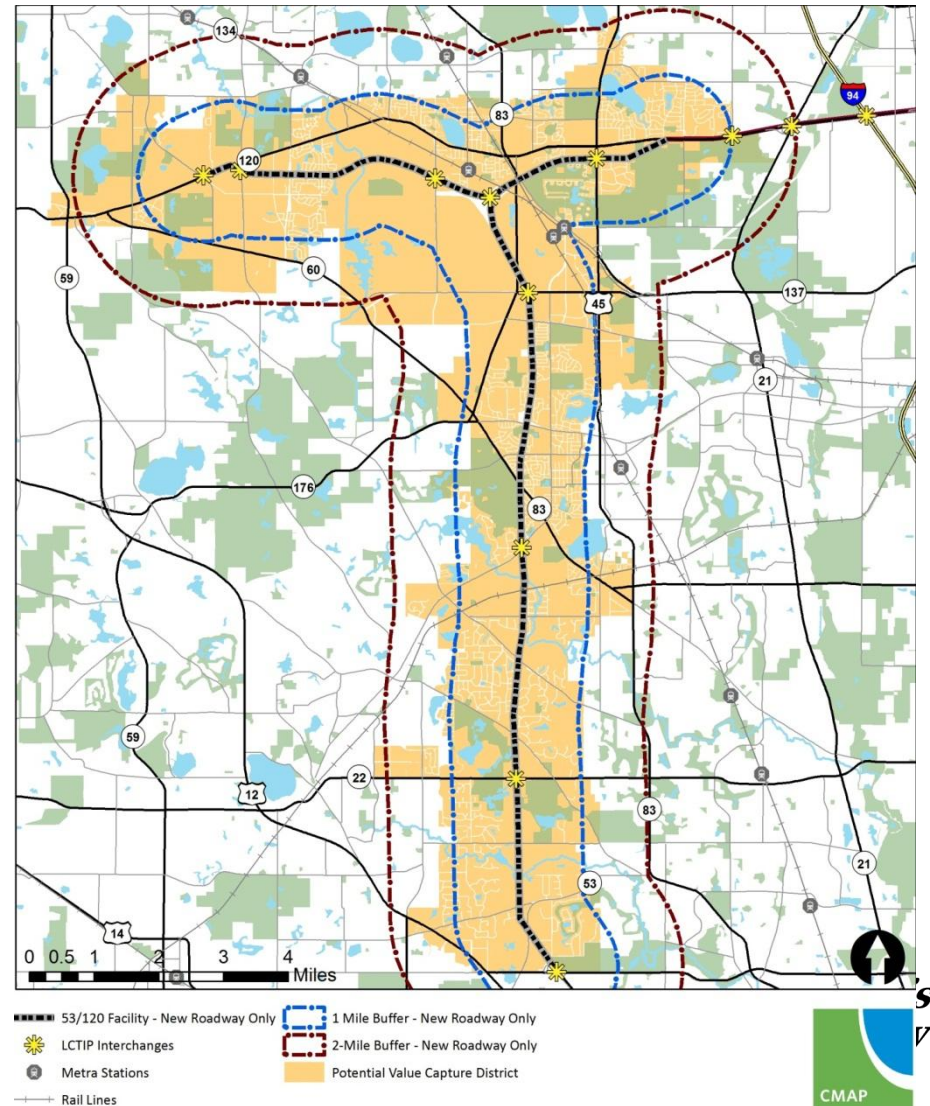



Estimated New Development (SF)



VALUE CAPTURE ANALYSIS AREA

- All blocks within 1 mile of the ROW
- Blocks within 2 miles that front arterials with interchange access
- Boundary will change based on policy decisions





VALUE CAPTURE BONDING CAPACITY ANALYSIS

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	\$131MM 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

Decisions regarding the type of district, the location of boundaries, and the inclusion of residential will have a major impact on bonding capacity

SSA SAMPLE PROPERTY IMPACTS

Industrial: Liberty Point Corporate Center

- 360,000 SF
- 2011 PTax: \$0.68/SF
- Added SSA Tax: \$0.05/SF



Small Office: Grayslake Medical Office Building

- 43,500 SF
- 2011 PTax: \$3.32/SF
- Added SSA Tax: \$0.17/SF





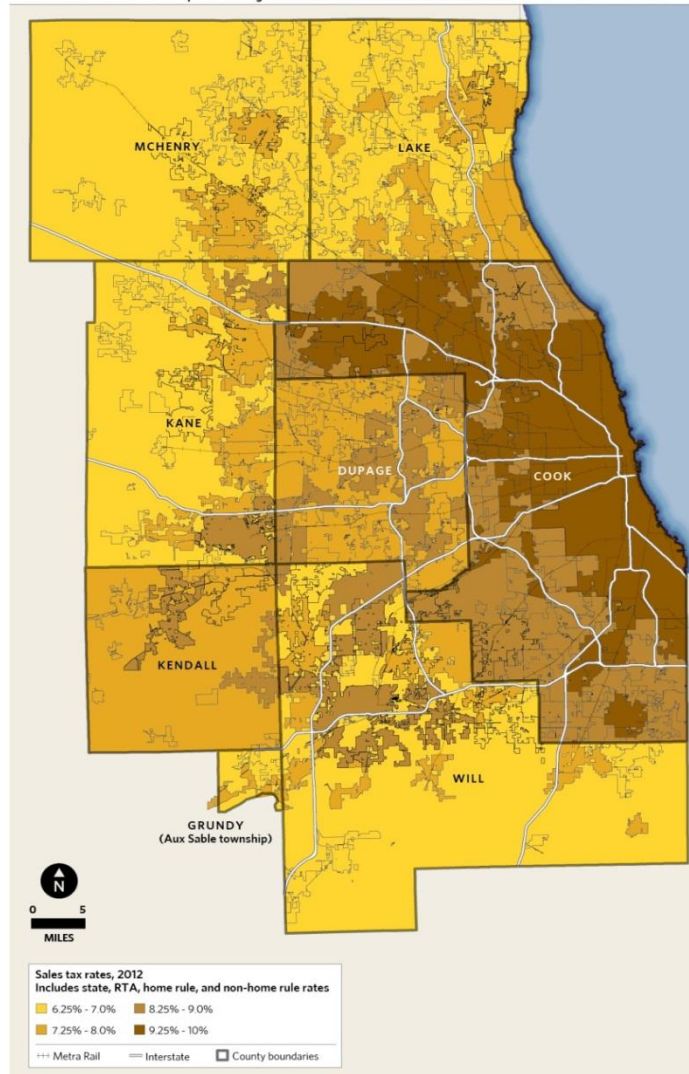
VALUE CAPTURE TAKEAWAYS

- Value capture districts have potential to provide substantive local contributions toward the cost of the facility
- There are statutory limits on the potential of existing special districts
- Policy decisions about the scope of value capture districts must be made



COUNTY SALES TAX

Combined sales tax rates in metropolitan Chicago



- ❑ Current Lake County base sales tax rate is 7%
- ❑ Cook (8.25%), DuPage (7.25%), and Kendall (7.25%) Counties impose higher base rates
- ❑ Kane, McHenry, and Will Counties also impose a 7% base rate
- ❑ Referenda to impose a Lake County sales tax failed in 2004 (transportation) and 2008 (education)





REVENUE ESTIMATES FROM IMPOSING A LAKE COUNTY SALES TAX

Assuming annual county retail sales volumes from 2000-2010, if a county sales tax for transportation was imposed in Lake County, it could generate these annual revenues:

0.25% Rate: \$19.4M-\$23.6M

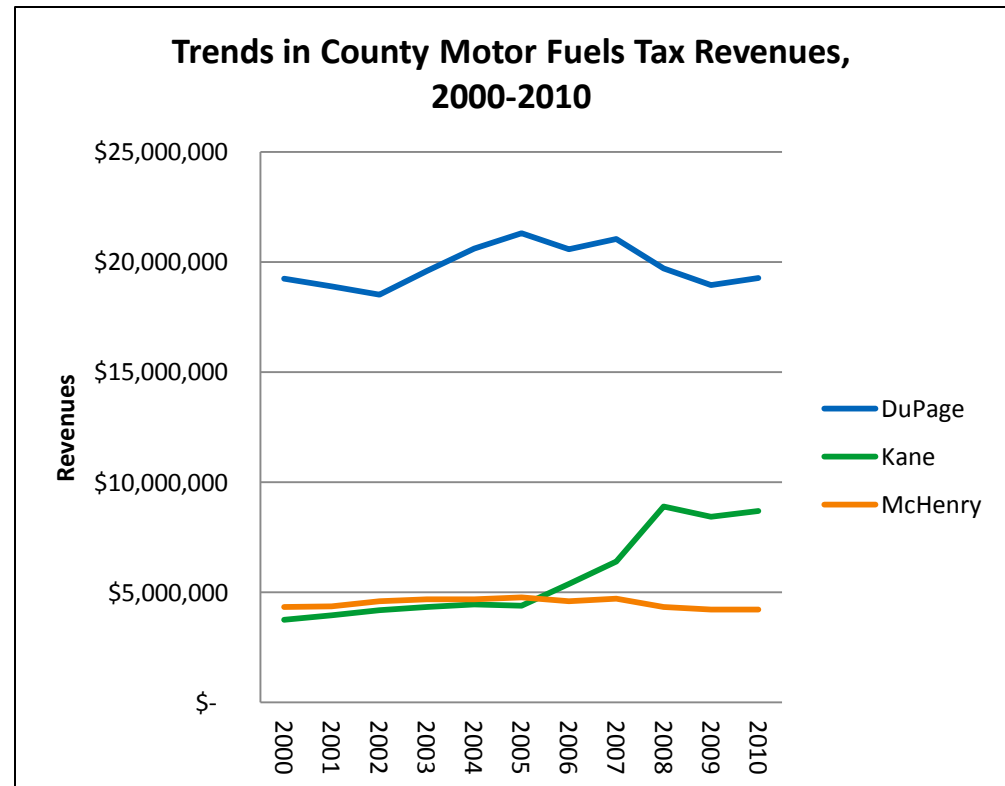
0.50% Rate: \$38.9M-\$47.2M

0.75% Rate: \$58.4M-\$70.8M

1.00% Rate: \$77.8M-\$94.5M

COUNTY MOTOR FUEL TAX

- ❑ Four counties (Cook, DuPage, Kane, McHenry) in NE IL impose local MFTs.
- ❑ Cook County imposes its MFT tax under its home rule powers, the other three under the County Motor Fuel Tax Law (55 ILCS 5/5-1035.1)
- ❑ The County Motor Fuel Tax Law limits the levy to \$0.04/gallon, and only grants this authority to DuPage, Kane, and McHenry Counties

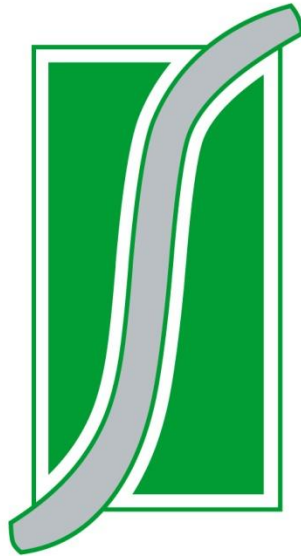




REVENUE ESTIMATES – COUNTY OPTION

MOTOR FUELS TAX

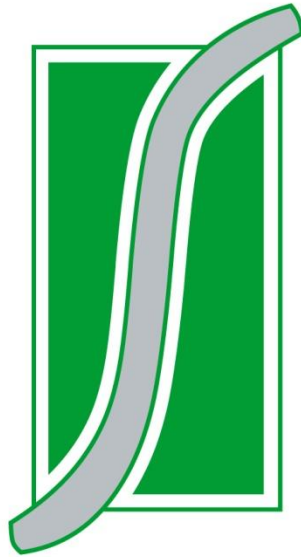
Tax Rates	Annual VMT (2010)	Estimated MPG	Estimated Gallons	Estimated Annual Revenues
0.01	5,523,208,138	18	306,844,897	\$3,068,449
0.02	5,523,208,138	18	306,844,897	\$6,136,898
0.03	5,523,208,138	18	306,844,897	\$9,205,347
0.04	5,523,208,138	18	306,844,897	\$12,273,796



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DISCUSSION



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THANK YOU