

Financing Major Street Improvements 3rd DRAFT 1/3/2014

The City of Columbia receives funding for transportation from several sources. After deducting allocations for street maintenance, transit, airport and other facilities, about \$4.6 million remains for street improvements from these four main sources: ½ cent Transportation Sales Tax – \$0.4 million; ¼ cent Capital Improvement Sales Tax - \$1.0 million; County Road Tax Rebate - \$1.7 million; and Development Charge for new construction - \$1.5 million. Sales taxes of one kind or another contribute about \$3.1 million or 67% of the total. The City also receives \$0.4 million from the Federal Highway Administration STP allocation. This brings total annual capital funding for streets to \$5.0 million.

Using the Major Roadway Plan and the Long-Range Transportation Plan, the City has identified 53 major street and sidewalk projects for inclusion in the Capital Improvement Program (CIP). To address the needs resulting from increased population and employment, projects include new construction, capacity expansion and the reconstruction of formerly county roads that have not been improved to current standards. It excludes streets on the MoDOT system (non-freeway routes like Hwy 63, 740 and I-70) and major maintenance work. The costs and revenues for 2013 and 2014 projects have also been excluded because they are already approved and financed. The cost to complete all remaining CIP projects over the next 10 years or from 2015 to 2025 totals \$236 million.

With revenues over this period only totaling \$50 million, this leaves a funding gap of \$186 million. The gap could increase as some funding sources may lapse or be withdrawn. The Federal Highway Trust Fund has large shortfalls between revenues and outlays. In October 2013, Congress transferred \$10.4 billion from the General Fund to replenish the HTF. The federal 18.4 cents/gallon gas tax produces insufficient funds yet it has not been increased since 1993. MoDOT funds are also becoming scarce. The state gas tax of 17 cents/gallon and has not increased since 1996. In the future, federal and state revenues may only be available for highway projects on their own system. As for the City, the ¼ cent Capital Improvement Sales Tax expires on December 31, 2015. The recession and internet purchases have also diminished local sales tax collections. Finally, recent increases in the sales tax for the 911 center, child mental health services, and the numerous TDD's may also be making voters tax weary.

With this as background, two principle funding sources are available for addressing the financial needs which new development imposes on the street and sidewalk network – impact fees and excise taxes.

Impact Fees

An impact fee is a monetary exaction imposed on new development as a part of the development approval process. Like planning and zoning laws, authority for impact fees is derived from the city's police power. A substantial body of case law has developed a legal test to establish the validity of impacts fees. The case law invariably applies a "relationship" analysis, wherein the court closely scrutinizes the relationship between the amount of the fee imposed on and the benefit received by the payer of the fee. The cost imposed must be "roughly proportional" to the benefit received.

Generally speaking, all fees collected from an individual fee payer must be spent for improvements to the street network that benefit that fee payer. The amount of the fee collected with respect to each development cannot exceed an amount that reflects the cost of constructing those improvements that are caused by the development. To ensure this legal requirement is met, separate zones or service areas must be created throughout the city. The configuration of these service areas is established by determining an area within which all owners of undeveloped or redeveloped property will benefit from any street improvements made in the area.

A comprehensive study is required to support the fee calculation methodology. In addition, fees paid by developers within the area must be accounted for separately from fees collected in other areas and if they are not expended within a reasonable time (generally considered to be six years) the fees must be reimbursed to the fee payer. A system of credits against the fee for improvements completed by the developer is also generally required to protect against double payment toward project costs.

In 1985, the City adopted by ordinance an impact fee system. In 1988, a lawsuit was filed challenging the validity of the fee. The fee system was also difficult to administer because of the complicated calculations, accounting, spending and reimbursement requirements that must be complied with for development fees based on the City's police power. Consequently, in 1989 the impact fee ordinance was repealed and an excise tax or development charge for street improvements was approved by the voters.

Excise Taxes

Initially, an excise tax of 10 cents per square foot of floor area was adopted. In 2005, voters approved an increase in the tax and now when a building permit is issued for new construction, a development charge of 50 cents/sq ft is collected. Because this charge is imposed under the City's taxing power, rather than its police power, it is in effect an excise tax. The \$1.5 million generated annually by this charge falls far short of covering the major street improvement needs created by new development.

The reason for this, other than the modest amount charged, is that there is little, if any, relationship between the impact the specific type of new construction will have on the street network and the amount charged. For instance, a new house pays the same rate per square foot as a new fast-food restaurant even though there is a vast difference (roughly 18 to 1) in their impact on the street system. Many cities employ a trip generation methodology to calculate excise taxes. In such systems, the key factor is the number of new vehicle trips generated by the development which consumes existing street capacity.

Revenue Needed From New Development

Whether new funding would come from impact fees or an excise tax, the total amount that new development should provide ought to be determined. By dividing the total cost of needed street improvements by the total number of new vehicular trips created by new development, the cost to serve each new vehicle trip can be calculated over the next 10 years. Then, by using the trip generation for each specific type of land use, a new development's share of the costs to pay for the major street improvements needed to serve the traffic it generates can be determined.

According to CATSO, the population of the Metro Area is projected to grow from 134,572 in 2010 to 169,600 in 2025. CATSO also projects a total of 22,024 new employees will be added during this period. To estimate the potential revenue received from an excise tax, growth projections in Columbia Imagined, the new comprehensive plan, are utilized. The Plan projects the number of new dwelling units needed to house the growth in population and the amount of new non-residential development needed to provide working space for the growth in employment. The traffic generated by this new development results in new vehicle trips being added to the street network. Deducted from the number of vehicle trips are work trips made by bus, walking, biking, and those working at home. According to the 2008-2012 American Household Survey for Columbia, these add up to 13%. After deducting for these alternative modes, the resulting number of vehicle trips made during the PM peak hour by broad type of land use is presented in Table 1.

Table 1

SF Homes	+ 6,872 units x trip generation rate of 1.01 PM peak hour trips/unit	= 6,038 trips	13%
MF Units	+ 4,266 units x " " " " 0.62 " " " " " "	= 2,301 "	5%
Commercial	+ 250 acres (5.45 million sf*) x " " " " 6.0** " " " " /1,000sf	= 28,423 "	64%
Office	+ 260 " (5.67 ") x " " " " 1.5 " " " " /1,000 "	= 7,390 "	17%
Industrial	+ 44 " (960,000 sf) x " " " " 0.5** " " " " /1,000 "	= 418 "	1%
Total***		44,570 "	100%

* Assumes site coverage by buildings of 50% of land area

** Average rate for all commercial and industrial uses

*** Trips have been reduced by 13% to reflect non-auto travel

Trips made by transit and non-motorized methods eliminate vehicular traffic and thus diminishes or postpones needed major street improvements. This reduces capital costs from \$236 to \$205 million and thereby reduces the funding gap to \$155 million (\$205 less the \$50 million in local and federal funds). Using this data, the charge per trip to produce sufficient revenue to cover the funding gap can be calculated. Assuming the existing 50 cent/sf development charge is repealed and replaced by a trip based development charge, the total funding gap would be \$170 million (\$155 plus \$15 from the current development charge). Thus, a charge of \$3,814 per trip in 2013 dollars would be necessary (\$170 million /44,570 trips). The distribution of total charges by type of land use based on the amount of traffic they generate is shown above by percent of total trips.

Table 2 shows the amount of revenue produced if the existing 50 cents/sf development charge were to continue. As indicated, only about \$15 million of total needed funding would be collected over the next 10 years leaving a funding gap of \$155 million. In addition, the relative cost burden would continue to fall much heavier on residential uses and much lighter on commercial uses which reflect exactly the reverse of the actual demand placed on the street system from the traffic these uses generate.

Table 2

SF Homes	+ 6,872 units x 2,000 sf on average x 50 cents/ sf	= \$6.87 million	46%
MF Units	+ 4,266 units x 1,000 sf on average x 50 cents/sf	= 2.13 "	14%
Commercial	+ 5.45 million sf* x 50 cents/sf	= 2.73 "	18%
Office	+ 5.67 " x 50 cents/sf	= 2.84 "	19%
Industrial	+ 960,000 sf x 50 cents/sf	= 0.48 "	3%
Total		\$15.05 "	100%

* Assumes site coverage by buildings of 50% of land area

To determine the charge for a specific development, added vehicle trips are calculated during the afternoon time period or "PM peak hour" when traffic volume on adjacent streets is highest. The trip rate is determined by classifying the land use for the development using the Institute of Traffic Engineers Trip Generation Manual which covers the all common types of uses (see Appendix A). The charge is calculated by multiplying the number of units (dwelling units or 1,000 sq. ft. of floor area) times the trip rate to determine the total number of trips generated. The number of trips is then multiplied by the dollar amount per trip to determine the charge for a specific development.

$$\begin{aligned}\text{Number of Units} \times \text{Trip Rate} &= \text{Total Trips} \\ \text{Total Trips} \times \text{Dollar Amount Per Trip} &= \text{Total Charge}\end{aligned}$$

Table 3 illustrates the application of a charge of \$3,814 per trip for several types of land uses.

Table 3

Single Family Dwelling	-	1 du x 1.01 x \$3,814	=	\$ 3,852
Multi- Family Dwelling (30 units)	-	30 du's x 0.62 x \$3,814	=	\$ 70,940
Fast Food Rest w/ Drive-thru (2,000 sf)	-	2 x 17.94 x \$3,814	=	\$136,846
Office Building (30,000 sf)	-	30 x 1.37 x \$3,814	=	\$156,755
Manufacturing Facility (30,000 sf)	-	30 x 0.67 x \$3,814	=	\$ 76,661

Some alternatives could also be considered. One option would be to phase the costs in over a few years. A second option would be to share the funding gap between new development and the city-at-large. If split equally, the charge per trip would be \$1,907 and the above charges by use would decrease by half. A third option, although somewhat subjective, would be to set a different charge per trip for certain land uses as some other cities have done (see Appendix B). This does however, raise the question of fairness as it would change the financial contribution made by various land uses from the actual impact their traffic has on the street system.

To contrast the difference between a vehicle trip based model and a flat charge based on building size, the cost for several types of uses under the existing 50 cents/sq. ft. development charge is shown in Table 4. The amount paid and the relative cost burden is much lighter on commercial uses but heavier on residential and industrial uses, again reflecting the reverse of the actual traffic impact placed on the street system. For instance, 15 homes now pay the same as 15 fast-food restaurants.

Table 4

Single Family Dwelling	-1 du x 2,000 sf x 50 cents/sf	=	\$ 1,000
Multi- Family Dwelling (30 units)	- 30 du's x 1,000 x " " "	=	\$15,000
Fast Food Rest w/ Drive-thru (2,000 sf)	- 2,000 sf x " " "	=	\$ 1,000
Office Building (30,000 sf)	- 30,000 sf x " " "	=	\$15,000
Manufacturing Facility (30,000 sf)	- 30,000 sf x " " "	=	\$15,000

Conclusion

New growth and development has resulted, and will continue to result in increased vehicular use, greater daily traffic burden and higher peak hour demand being placed on the existing major street system of the City. This will require many improvements to add capacity and to complete the future roadway network as identified in the Major Roadway Plan and Capital Improvement Program. The cost to complete all identified capital improvements totals \$205 million after deducting the trips made by transit, walking, and biking, and for working at home. Over the next 10 years, there will be a \$155 million funding gap between capital improvement needs and the \$50 million of funds available from all known sources. If the existing 50 cent development charge remains in place, only about \$15 million of needed funding would be collected. This would leave a funding gap of over \$15 million per year.

The fairest way to pay for these needed capital improvements is to allocate the cost to the new developments that cause their need. The most rational way to do this is by setting a traffic based charge per trip at a sufficient level to produce enough revenue to fully or substantially cover the funding gap. Based on the projected number of afternoon peak hour trips, this cost would be \$3, 814 per trip. The cost to new development could be lessened by phasing it in over a few years, sharing the funding responsibility with the city-at-large or setting a different charge per trip. However, the City must assume the responsibility for, and be committed to, collecting sufficient revenue to enable the construction of an adequate street system to properly and safely serve the residents, businesses and institutions of the community. This task should be carried out by using all legally available and financially feasible revenue sources.

Because of the administrative complexity, the strict requirements of case law and the City's history, an impact fee may not be the best choice of funding to address the needs generated by new development. Therefore, continuation of an excise tax but with replacement of the flat development charge per sq. ft. with one based on vehicle trip generation by land use appears to be the most feasible and equitable method. This matter should be placed on the ballot for voter consideration as soon as possible.

APPENDIX A

ITE: TRIP GENERATION RATES

Land Use Category	ITE Land Use Codes	Land Use	Unit of Measure	Adjusted Peak Trips*
Residential	210	Single Family Detached/Modular Home	Dwelling Unit	1.01
Residential	220	Multi-Family Residential	Dwelling Unit	0.62
Residential	230	Condo/Townhouse	Dwelling Unit	0.54
Commercial	320	Hotel/Motel	1000 sq ft**	0.49
Commercial	444	Movie Theater	1000 sq ft	3.23
Commercial	493	Health Club	1000 sq ft	4.30
Commercial	560	Church/Synagogue	1000 sq ft	0.59
Commercial	565	Daycare Center	1000 sq ft	9.77
Commercial	610	Hospital	1000 sq ft	0.71
Commercial	620	Nursing Home	1000 sq ft	0.27
Commercial	812	Bldg Materials/Lumber Store	1000 sq ft	3.27
Commercial	813	Free Standing Discount Superstore	1000 sq ft	2.33
Commercial	814	Specialty Retail Store	1000 sq ft	1.27
Commercial	815	Discount Store	1000 sq ft	2.59
Commercial	816	Hardware/Paint Store	1000 sq ft	1.77
Commercial	817	Nursery/Garden Center	1000 sq ft	3.08
Commercial	820	Shopping Center	1000 sq ft	2.36
Commercial	831	Quality Restaurant	1000 sq ft	6.14
Commercial	832	High-Turnover Restaurant	1000 sq ft	6.52
Commercial	834	Fast Food Restaurant w/drive-thru	1000 sq ft	17.74
Commercial	840	Auto Care Center	1000 sq ft	2.81
Commercial	841	Car Dealership	1000 sq ft	2.21
Commercial	843	Automotive Parts Sales	1000 sq ft	5.98
Commercial	845	Service Station with Conven. Mkt.	1000 sq ft	46.26
Commercial	848	Tire Store	1000 sq ft	3.42
Commercial	850	Supermarket	1000 sq ft	6.68
Commercial	851	Convenience Store-24 hours w/o pumps	1000 sq ft	21.49
Commercial	853	Convenience Store w/pumps	1000 sq ft	29.09
Commercial	860	Wholesale	1000 sq ft	0.19
Commercial	861	Discount Club	1000 sq ft	2.32
Commercial	862	Home Improvement Superstore	1000 sq ft	2.32
Commercial	880	Pharmacy/Drugstore w/o drive thru	1000 sq ft	4.65
Commercial	881	Pharmacy/Drugstore w/drive thru	1000 sq ft	6.34
Commercial	890	Furniture Store	1000 sq ft	0.36
Commercial	896	Video Rental Store	1000 sq ft	8.30
Commercial	911	Walk-in Bank	1000 sq ft	26.52
Commercial	912	Drive-thru Bank	1000 sq ft	33.41
Office	710	Office Building	1000 sq ft	1.37
Office	720	Medical-Dental Offices	1000 sq ft	2.82
Office	760	Research & Development Bldg.	1000 sq ft	0.99
Office	770	Business Park Building	1000 sq ft	1.19
Industrial	110	Light Industrial Manufacturing	1000 sq ft	0.99
Industrial	140	Manufacturing (Heavy)	1000 sq ft	0.68
Warehouse	150	Warehouse Storage	1000 sq ft	0.47
Warehouse	151	Mini-Warehouse	1000 sq ft	0.24

* Based on weekday p.m. peak hour of the adjacent road, one hour between 4 and 6 p.m.

** Based on .6 trips per occupied room, at 80% average occupancy and 600 sq ft per room.

Appendix B

City Excise Taxes for Street Improvements

Lee's Summit

A Road Excise Tax was approved by the voters of Lee's Summit on November 4, 1997. The road tax is an excise tax, in the form of a license tax on building contractors, for streets, roads, bridges, and related improvements. The license tax is applicable to development requiring a building permit and resulting in additional vehicle trips. Additional vehicle trips are calculated during the afternoon time period when traffic volume on adjacent streets is highest.

Lee's Summit adopted the ITE Trip Generation Manual to determine the number of new trips generated by land use. Traffic studies may also be conducted to determine the number of trips created by specific uses. Applicants can submit data for consideration as well. Residential uses are based on trips per number of dwelling units while commercial, office and industrial uses are based on trips per 1,000 square feet of building area. The tax rate for each land use is also provided on the table provided.

The license tax for residential uses is paid when the building permit is issued. Non-residential uses may defer payment until a certificate of occupancy is issued, or until tenants finish permits on a shell building, or placed on a four (4) year payment plan. Applicants may request a tax credit for certain types of uses: a public body for governmental use, a school district of the state, tax exempt entities, damaged or underutilized facilities, changes in use, and redevelopment projects.

Examples of the Road Excise Tax:	Single Family Dwelling	-	1 du x 1.01 x \$1,031	=	\$1,031
	Multi- Family Dwelling (30 units)	-	30 du's x 0.62 x \$1,031	=	\$19,177
	Fast Food Rest w/ Drive-thru (2,000 sf)	-	2 x 17.94 x \$619	=	\$22,209
	Office Building (30,000 sf)	-	30 x 1.37 x \$619	=	\$25,441
	Manufacturing Facility (30,000 sf)	-	30 x 0.67 x \$825	=	\$16,583

Independence

A Construction License Surcharge excise tax was approved by the voters of Independence in November, 2000. The tax operates very much like Lee's Summit with regards to land use classifications, unit measurements, and trip generation rates. The program includes credits for the types of projects listed for Lee's Summit plus an additional one for projects locating on property targeted for redevelopment or infill development, which consists of the built-up portion of the city where street infrastructure generally has capacity for these types of development. A review committee was also created to monitor the license surcharge and to make annual recommendations to the City Council regarding any needed amendments to the ordinance, the trip generation rates and license surcharge rates, the streets to be constructed as specified in the Excise Tax Capital Improvement Plan, and any other matters.

Examples of the Construction License Surcharge:	Single Family Dwelling	-	1 du x 1.01 x \$1,400	=	\$ 1,400
	Multi- Family Dwelling (30 units)	-	30 du's x 0.62 x \$1,400	=	\$26,040
	Fast Food Rest w/ Drive-thru (2,000 sf)	-	2 x 17.94 x \$1,400	=	\$50,232
	Office Building (30,000 sf)	-	30 x 1.37 x \$450	=	\$18,495
	Manufacturing Facility (30,000 sf)	-	30 x 0.67 x \$450	=	\$ 9,045

The License Surcharge tax program has been used to fund or leverage other sources of funding to complete 11 street projects since its inception. However, due to the unusual length of the current economic down-turn, a moratorium of the tax on new construction for commercial, office, warehouse and industrial uses began on October 1, 2012 and has recently been continued until October 31, 2014. The tax will still be applied to residential uses. If a permit is applied for during this period and the project subsequently does not progress or the permit becomes invalid, the moratorium will not apply and the project will subsequently be subject to the License Surcharge tax. The city believes the long-term benefits will outweigh the short-term moratorium, and will not undermine the community's future roadway system.

Liberty

On November 13, 2001, the City of Liberty adopted a License Tax Surcharge or excise tax on new buildings that increase the use, burden and demand on arterial roadways so as to provide funds for roadway improvements that add capacity and complete the roadway network. In taking this action, the city stated it was exercising its constitutional home rule power pursuant to Article VI, Sec. 19 (a) of the Constitution of the State of Missouri, and including, but not limited to, the authority granted in Article III of the Special Charter of the City. Included in the ordinance was a statement that the city does not intend to impose a regulatory fee or other exaction pursuant to the general police powers of the city.

The terms and provisions are similar to the excise taxes of Lee's Summit and Independence, except a full credit may be granted for certain additional types of projects as follows: an existing development agreement contains a specific clause that provides that the person shall not be subject to further financial participation towards ultimate major street costs, other than as specifically provided for in the development agreement; a developer is required to construct any arterial street to comply with the city's Adequate Public Facilities Ordinance, provided that such credit does not exceed the projected total roadway development tax that would be assessed for the entire development; a development requiring a building permit and resulting in additional vehicle trips, that is constructed on a lot for which a final plat was approved and recorded on or before January 1, 2002, and for which a complete building permit application is submitted on or before January 1, 2004.

In addition, a 75% credit may be granted for a new manufacturing or industrial business of a certain magnitude in terms of dollars invested, number of new employees hired and wages paid to those employees; and a 100% credit may be granted for a new science, research technology, or engineering based business that is related to agricultural, biological, life sciences, informational technology, engineering research, or any business in a class A office building of at least three (3) or more stories located within a designated priority development area of the city. The tax rates are also somewhat different, as shown below:

Examples	Single Family Dwelling	-	1 du x 1.01 x \$1,514	=	\$1,514
of the	Multi- Family Dwelling (30 units)	-	30 du's x 0.62 x \$1,514	=	\$28,160
License	Fast Food Rest w/ Drive-thru (2,000 sf)	-	2 x 17.94 x \$798	=	\$28,632
Tax	Office Building (30,000 sf)	-	30 x 1.37 x \$752	=	\$30,907
Surcharge:	Manufacturing Facility (30,000 sf)	-	30 x 0.67 x \$1,075	=	\$21,608