

Source:
Infrastructure Task Force
Phebe LaMar, Chair
Paula Hertwig Hopkins, Staff Liaison
FISCAL and VISION NOTES:

Agenda Item No. REP 115-11

TO: City Council
FROM: Infrastructure Task Force
DATE: 24 June 2011
RE: Infrastructure Task Force: Final Report to City Council

City Fiscal Impact Enter all that apply:	
\$0	City's current net FY cost.
\$0	Amount of Funds Already appropriated
\$0	Amount of budget amendment needed
\$0	Estimated 2 yr net costs:
\$0	One-time
\$0	Operating / On-going
Program Impact:	
N	New program/ agency (Y/N)
N	Duplicates/expands an existing program (Y/N)
N	Fiscal impact on any local political subdivision (Y/N)
Resources Required:	
N	Requires add'l FTE personnel? (Y/N)
N	Requires additional facilities? (Y/N)
N	Requires additional capital equipment? (Y/N)
Mandates:	
N	Federal or state mandated? (Y/N)
Vision Implementation Impact Enter Below All That Applies: Refer to Website:	
Y	Vision Impact? (Y/N or if N, go no farther)
Item 5.1.3	Primary Vision Statement, Goal, and/or Strategy Item#
Item 5.1.1	Secondary Vision Statement, Goal, and/or Strategy Item#
Task 15	FY10/FY11 Implementation Task#

EXECUTIVE SUMMARY:

As a follow up to discussions at Council Retreat 2010, the City Manager requested the Mayor and Council consider appointing two temporary task forces; one to work with the city's sanitary sewer rate consultant (sewer) and one to work on infrastructure financing/coordination. For background see attached memo dated July 1, 2010. The overall charge of the Infrastructure Task Force was to:

"Establish guidelines for determining fair and balanced cost allocations and funding sources among stakeholders and to ensure infrastructure implementation is aligned with the comprehensive growth plan."

The Infrastructure Task Force has deliberated for nearly a year, completed their work, and is presenting their Final Report to the Mayor and Council.

DISCUSSION:

During the citywide Vision process, the Development Topic Group developed strategies pertaining to infrastructure, most notably two:

- 1) Develop a comprehensive plan for infrastructure that coordinates with the comprehensive growth plan and:
- 2) Guidelines for determining fair and balanced cost allocation and funding sources for infrastructure.

The Infrastructure Task Force is submitting their Final Report concerning item 2) and awaiting further development of the Comprehensive Growth Plan process before "weighing in" on item 1). Their Final Report and Attachments are included for Council Review. Also attached is a Minority Report submitted by a member of the Task Force.

FISCAL IMPACT:

If Council wishes to act upon any of the Task Force recommendations that will determine the degree of fiscal impact.

VISION IMPACT:

<http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php>

5.1.3 Strategy: Use a task force representative of the citizens of Columbia that is supported by professionals to establish guidelines for determining fair and balanced cost allocations and funding sources among stakeholders

5.1.1 Strategy: Use a task force of stakeholders, supported by professionals, to develop a comprehensive plan for existing and future infrastructure needs that, 1) coordinates with a comprehensive growth plan, 2) streamlines the planning process, and 3) educates the public about the plan.

SUGGESTED COUNCIL ACTIONS:

Accept report and decide whether or not to proceed and/or act upon Task Force recommendations.

Source:
Bill Watkins

FISCAL and VISION NOTES:

Agenda Item No. REP59-10

TO: Mayor and City Council
FROM: City Manager
DATE: 7/1/10
RE: Task Force Memberships



City Fiscal Impact Enter all that apply:	
\$0	City's current net FY cost.
\$0	Amount of Funds Already appropriated
\$0	Amount of budget amendment needed
\$0	Estimated 2 yr net costs:
\$0	One-time
\$0	Operating / On-going
Program Impact:	
N	New program/ agency (Y/N)
N	Duplicates/expands an existing program (Y/N)
N	Fiscal impact on any local political subdivision (Y/N)
Resources Required:	
N	Requires add'l FTE personnel? (Y/N)
N	Requires additional facilities? (Y/N)
N	Requires additional capital equipment? (Y/N)
Mandates:	
N	Federal or state mandated? (Y/N)
Vision Implementation Impact Enter Below All That Applies: Refer to Website	
Y	Vision Impact? (Y/N or if N, go no further)
Item # 5	Primary Vision Statement, Goal, and/or Strategy Item#
Item #	Secondary Vision Statement, Goal, and/or Strategy Item#
Task #	FY10/FY11 Implementation Task#

EXECUTIVE SUMMARY:

This is to follow up our discussions at retreat. The City Manager has requested the Mayor, with input from Council; appoint two temporary task forces, one to work with the City's Sanitary Sewer Rate Consultant (sewer) and one to work on infrastructure financing/coordination (infrastructure). Both need to start working quickly.

DISCUSSION:

Sewer

This group would provide input and be the citizens' advisory group as we work towards updating our sanitary sewer rate ordinance. The discussions don't need to focus on rate base (financing) as much as implementation and structure. The suggested size would be about 7 and should represent the perspectives of the many groups of rate payers/customers (eg. single family residential, large and small rental properties, university, small commercial, institutional and industrial/large commercial). It is suggested that each Council person provide one or two recommendations to the Mayor and that the Mayor propose a roster at the July 19th Council Meeting with approval by motion.

This Task Force would disband after Council has approved a rate ordinance.

Infrastructure

During the Vision process, the Development Topic Group developed three strategies pertaining to infrastructure. Generally these cover:

1. Developing a comprehensive plan for infrastructure that coordinates with the comprehensive growth plan; and
2. Guidelines for determining fair and balanced cost allocation and funding sources for infrastructure.

These strategies are to be addressed/developed by a "task force of stakeholders", supported by professionals. The vision plan calls for two task forces – one generally "appointed by Council". The other task force more specifically is to be appointed by Council and coordinated with the Planning and Zoning Commission. The lead should be from the City Manager's office. The Vision plan's suggested membership should be 2 impartial citizens from a pool of applicants from each ward representing the most prevalent demographics of the ward, appointed by the Council person. The Mayor would then select one citizen from a demographic he believes is under-represented. (See attached pages 38 – 40 of Imagine Columbia's Future).

Due to staffing concerns, I recommend that Council combine these strategies into one task force. While I think applications should be considered, it might be expeditious to not limit appointments to just applications. Perhaps an application period with Council also suggesting other names would be more time effective. The Mayor could then make appointments to the task force, based on these recommendations with Council's public approval of the roster. I also suggest one member of the task force should be from P and Z.

FISCAL IMPACT:

No fiscal impact

VISION IMPACT: <http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php>

SUGGESTED COUNCIL ACTIONS:

Approval of proposed process; appointment of Sewer Task Force membership at July 19, 2010 Council Meeting.

Final Report to City Council

INFRASTRUCTURE TASK FORCE

June 23, 2011

The Infrastructure Task Force (ITF), was created by the City Council, to establish “guidelines for determining fair and balanced cost allocations and funding sources among stakeholders and to ensure infrastructure implementation is aligned with the comprehensive growth plan.” After reviewing a substantial amount of information from a variety of sources, and a great deal of discussion among the task force and with parties providing information to us, this task appears to require discussion in three parts. Only two of those may be completed at this time.

Until the Comprehensive Plan Committee completes the new comprehensive growth plan, this task force is not in a position to fulfill the portion of the purpose statement ensuring “infrastructure implementation is aligned with the comprehensive growth plan.” As a result, we would request and anticipate that you authorize us to meet again to fulfill the remainder of our charge once the growth plan is completed.

This task force is now addressing guidelines for determining fair and balanced cost allocations and funding sources among stakeholders. In looking at these issues, it appears that there are issues related to *specific* developments and those related to development and growth *in general*. As a result, it is our belief that we must address cost allocations as they relate to developers (rather than the City/taxpayers), and also how to allocate costs in instances where a new development isn’t the sole reason for expansion or substantial maintenance of existing roads serving a broad area composed of multiple neighborhoods (i.e. Scott Blvd.)

There are a number of aspects that fit within the parameters of the infrastructure of the City of Columbia. In varying degrees, we have reviewed and/or discussed each of them: roads, sewer, water, electricity, storm water, parks & recreation, schools, libraries, the airport, public transportation, public safety. The ITF determined not to pursue further investigation into some of these issues based on the following rationales.

- **Water and Electricity.** These enterprise funds are in a position to fund themselves, and as a result, input from us at this juncture is unnecessary.
- **Sanitary Sewer.** We recognize there may be some issues regarding sewer infrastructure at this point, but considering there is a separate Sewer Task Force charged with examining the rates of this enterprise fund, and which should have greater familiarity with the sewer infrastructure needs, we are refraining from any substantial involvement in discussions about this utility.
- **Parks & Recreation.** Since this department is primarily funded through a dedicated tax and after discussions with the Director, the ITF chose not to devote significant time to this.
- **Schools and libraries.** These are controlled by separate Boards and, as such, are outside the purview of what seemed reasonable for us to address.
- **Public Safety** is an entity that utilizes infrastructure, but is more effectively addressed by those with more specific knowledge than what we were in a position to learn.
- **Storm water.** This utility, while an Enterprise fund, is grossly underfunded not only for the day to day needs of the City but also because of major expenses looming in the state-mandated remediation of the Hinkson Creek TMDL. Due to the existence of the Storm Water Advisory Commission, the ITF feels that entity is better suited to address the short and long term needs and issues associated with this infrastructure priority.

This task force recognizes the importance to the City of public transportation and the airport, and at least in some part will address funding for them. This task force has and will concentrate on funding for roads, streets, sidewalks, etc.

Columbia has experienced rapid growth for more than fifty years. As a result, a considerable backlog of streets and sidewalks need to be built or rebuilt. The current CIP includes unfunded needs averaging \$13.8 million per year for streets and sidewalks over the next ten years. The outlook for adequate funds to meet even a substantial portion of these needs is uncertain at best. Columbia is facing major fiscal needs from several directions and limited funds to meet those needs. It will take strong actions by the Council and Columbia citizens to avoid a reduction in our high quality of life.

The ITF approved the following Assumptions and Goal as a basis for its consideration of the issues related to the City's infrastructure needs.

A S S U M P T I O N S

1. The community desires that its existing infrastructure system be upgraded, particularly the transportation infrastructure. The City's infrastructure needs are expanding, as are costs associated with such expansion. Recent funding of transportation infrastructure has been insufficient.
2. Our community wants to become more proactive rather than reactive with regard to planning infrastructure improvements and maintenance costs.
3. Our community wants a strategy to equitably distribute all capital and maintenance infrastructure costs.
4. The documents used to identify our community's projected infrastructure improvements include:
 - a. Columbia Metro 2020: A Planning Guide for Columbia's Future
 - b. *Imagine Columbia's Future* (Visioning)
 - c. The Capital Improvement Plan (CIP)
 - d. Major Roadway Plan
 - e. Sewer Utility Master Plan
 - f. Storm water Management Plan
 - g. Airport Master Plan
 - h. 2009 Water Quality Report
 - i. Integrated Resource Plan
 - j. Parks, Recreation and Open Space Master Plan
5. Our community will incur significant costs to build growth-related infrastructure and to maintain existing (road, sewer & storm water) infrastructure in order to:
 - a. Meet or adhere to adopted standards.
 - b. Meet the demands generated by projected future land uses.
 - c. Factor long-term maintenance costs into initial capital costs.
 - d. Anticipate and plan for sewer extension and maintenance.

- e. Anticipate and plan for storm water control and maintenance
- 6. It is unlikely that there will be a significant increase in sales tax revenue in the foreseeable future.

G O A L

To develop a long-term strategy to equitably distribute all capital and maintenance infrastructure costs.

RECOMMENDATIONS

After reviewing a large amount of information, the members of the task force unanimously agree that the City of Columbia is falling behind in constructing new streets, and maintaining or rebuilding existing streets, especially in the older areas of the city. The members have concluded insufficient funds are being devoted to these tasks. There have been several ballot issues (about every five years) that included funds for specific street projects, but these have not kept pace with the City's rapid growth. The City of Columbia's budget in FY 2010 and FY 2011 included a total of \$150,000 in proceeds from the Transportation Sales Tax, devoted to streets/sidewalks capital improvements, and in FY 2010, \$6,142,500 for maintenance, etc. In addition, we have \$1,491,667 going into the airport subsidy and capital projects, and \$1,681,804 into the bus system subsidy and capital projects. See Exhibits A, B, C and D.

For all of these reasons, the ITF has examined and is proposing alternative sources for enhancing revenues for streets and roads. The task force has concluded that no single new source is likely to provide enough additional funds to accomplish a major reduction in the backlog of construction and reconstruction of streets within the City. **We urge the Council to move ahead quickly on the following recommendations.**

Openness/Separation

In obtaining information regarding infrastructure funding, it became clear that the City's policy of pooling revenues into the General Fund and the subsequent budget documents make it difficult to track the true revenue sources for much of its expenditures. For example, the City received an average of \$2,300,000 over the last ten years from State gasoline tax revenues. A layman, however, would find it difficult if not impossible to determine how that revenue was spent.

Consequently, this task force is recommending that City staff implement policies to clarify financial reports so it is easier to "follow the money." In addition, it is important that the City's financial reports clearly delineate between the maintenance budget and the capital improvements budget for infrastructure expenses whenever possible.

Funding Mechanisms

►Streets/Sidewalks

The current ½% Transportation Sales Tax (TST) provides vital funding for infrastructure. Given the current lack of funding for infrastructure in the General Operating Fund, and in the interest of openness and separation,

it is this task force's belief that the funds obtained from the TST should be reserved strictly for streets and sidewalks improvement, maintenance and expansion. TST Funds typically budgeted for the airport and the bus system would instead derive from bonds, discussed in the following paragraph. By doing so in FY 2010, more than \$3,100,000 would have been added to street and sidewalk funding.

If approved, the ITF urges the Council to NOT reduce other street/sidewalk funding (i.e. the General Fund) by a corresponding amount.¹

►*Airport/Buses*

Airports are an important factor to the economic vitality of cities (i.e., job creation). A lack of direct flights to additional hubs was a significant reason Columbia finished second in the race to land Google as a major employer. The ITF strongly believes we not only continue, but also increase airport funding. It is also vital that we adequately fund the bus system. In order to ensure adequate funding for both, the ITF recommends that the City seek a new ten-year general obligation bond supported by a property tax increase of no greater than \$0.20 for capital investment. This would generate projected income of over \$3,300,000 dedicated to airport and transit expenses, compensating for such funding removed from the TST noted above.

►*Capital Improvements*

The current ¼ % Capital Improvements Tax should not only be extended, but it should also be increased by an additional ¼ %. The ITF recommends that at least 50% of the additional ¼ % should be dedicated to streets and sidewalks, a comparable ratio seen in recent allocations of the Capital Improvements Tax. The remainder may be allocated to the airport and bus system.

►*Development-Related Infrastructure*

After reviewing information regarding contributions from developers in other cities, in addition to information regarding the contributions being made, the majority of the Task Force is in agreement that developers are making sufficient contributions to infrastructure improvements/maintenance, and there should be no additional fees imposed. See Exhibits E, F and G. There has been a decrease in construction, and consequently, in development fees in recent years and that trend is likely to continue in the foreseeable future. It is important, as a result, that we not rely on development fees for funding of infrastructure, but instead that we find other mechanisms for that funding. It is our concern that especially given the fact that permit fees for single-family detached housing have increased by 280% since 2000, any additional development fees would have a detrimental impact on affordable housing, residential, and commercial development. It could be beneficial, however, to formulate a more standardized approach, rather than the current common practice of negotiating developer contributions on an inconsistent, case by case approach. This would, in turn, add some transparency and predictability to the crafting of development agreements. In the event that storm water requirements are dealt with separately in the future, as we have understood the plan to be, the structure of development fees will also have to be reconsidered at that time.

Additional Sources of Revenue for Transportation/Infrastructure:

-Use Tax: Many, if not most, of the municipalities and counties in the state of Missouri participate in the use tax, which is collected by the State, and then distributed to the participating entities. The ITF believes the City

¹ There is precedent for such action in the passage of the 2005 Parks Sales Tax. FY 2011 Adopted Budget, p. 233.

and Boone County could jointly benefit from a Use Tax, and should therefore pursue implementation simultaneously.

-Columbia Vehicle Registration fees: An annual fee of \$10 (for example) assessed on individual personal property tax bills for vehicles trailers, motorcycles, scooters, RV's, etc., would generate over \$1,325,600 annually for the City. Dedicating 100% of this revenue to street maintenance and marketing the accompanying ballot issue as a "pothole tax" would probably resonate with voters. The ITF believes the City and Boone County could jointly benefit from this fee, and should therefore pursue implementation simultaneously.

-Bicycle License/Permit: The City is, and has been, spending substantial amounts of revenue on building and maintaining bike lanes, etc. A fee imposed on the sale of bicycles seems a reasonable, though minor, source of funding for the cleaning, painting, and other maintenance of these amenities. If all bicycles were registered for \$10 each, it would generate approximately \$550,000 in annual revenue.

Suggested Items for Consideration by Council

This Task Force takes no position regarding the viability of the following possibilities, but suggests that Council may want to consider the following:

- Exploration of the possibility of selling and/or privatizing certain assets and/or functions of the City.
- Further exploration of the idea of establishing a regional airport authority.

Submitted by:

Phebe LaMar-Emig, Chair

Rex Campbell, Vice Chair

Scott Atkins

Andrew Beverley

Rhonda Carlson

Ryan Euliss

Tracy Greever-Rice

Mike Grellner

Andy Lee

Ben Londerlee

Karl Skala

Rusty Strodman

Bob Walters

Doug Wheeler

Approved by majority of those present and voting at the June 23rd, 2011 meeting.

Exhibit A

Table A: City of Columbia Budgets by Category: 2002-2011

Year	Water, Electric & Sewer	Streets & Sidewalks (& CIP)	Parks & Recreation (Gen Fd & CIP)	All Other Enterprise Operations	Internal Service Operations	All Other General Govt Operations	Total Budget - All Funds
2002	\$104,178,025	\$6,299,500	\$5,210,760	\$30,105,281	\$20,448,794	\$69,284,751	\$235,527,111
2003	\$94,595,871	\$5,707,535	\$4,906,215	\$29,109,764	\$20,244,932	\$67,527,834	\$222,092,151
2004	\$96,481,965	\$13,035,697	\$5,370,322	\$29,690,117	\$21,403,243	\$71,188,948	\$237,170,292
2005	\$122,736,033	\$13,234,343	\$4,925,153	\$35,808,908	\$24,383,006	\$78,745,317	\$279,832,760
2006	\$123,426,185	\$7,246,272	\$6,196,927	\$38,888,470	\$26,852,776	\$80,675,081	\$283,285,711
2007	\$150,120,901	\$15,337,442	\$7,214,055	\$38,199,857	\$29,654,098	\$104,582,937	\$345,109,290
2008	\$155,823,053	\$33,794,292	\$12,647,195	\$41,178,445	\$31,489,758	\$92,779,192	\$367,711,935
2009	\$191,181,227	\$26,522,633	\$7,005,473	\$39,767,477	\$34,909,629	\$98,111,287	\$397,497,726
2010	\$215,735,334	\$12,880,412	\$7,216,693	\$39,984,533	\$34,475,398	\$94,222,700	\$404,515,070
2011	\$187,567,910	\$12,071,438	\$6,074,788	\$45,190,200	\$33,630,220	\$99,157,944	\$383,692,500
Average	\$144,184,650	\$14,612,956	\$6,676,758	\$36,792,305	\$27,749,185	\$85,627,599	\$315,643,455

Percent of Overall Budget: 2002-2011

Year	Water, Electric & Sewer	Streets & Sidewalks (& CIP)	Parks & Recreation (Gen Fd & CIP)	All Other Enterprise Operations	Internal Service Operations	All Other General Govt Operations
2002	44.23%	2.67%	2.21%	12.78%	8.68%	29.43%
2003	42.59%	2.57%	2.21%	13.11%	9.12%	30.40%
2004	40.68%	5.50%	2.26%	12.52%	9.02%	30.02%
2005	43.86%	4.73%	1.76%	12.80%	8.71%	28.14%
2006	43.57%	2.56%	2.19%	13.73%	9.48%	28.47%
2007	43.50%	4.44%	2.09%	11.07%	8.59%	30.31%
2008	42.38%	9.19%	3.44%	11.20%	8.56%	25.23%
2009	48.10%	6.67%	1.76%	10.00%	8.78%	24.69%
2010	53.33%	3.18%	1.78%	9.88%	8.52%	23.31%
2011	48.88%	3.15%	1.58%	11.78%	8.76%	25.85%
Average	45.11%	4.47%	2.13%	11.89%	8.82%	27.59%

City of Columbia Transportation Sales Tax (TST)

Year	Street Lighting Engineering & Maintenance	Street Capital	Transit Subsidy	Transit Capital	Airport Subsidy	Airport Capital	Total
2002	\$ 4,432,315	\$ 218,000	\$ 1,600,000	\$ 48,574	\$ 554,000	\$ 60,000	\$ 6,912,889
2003	\$ 4,554,200	\$ 382,200	\$ 1,600,000	\$ -	\$ 569,235	\$ 151,600	\$ 7,257,235
2004	\$ 4,668,055	\$ 500,000	\$ 1,600,000	\$ -	\$ 583,465	\$ 50,000	\$ 7,401,520
2005	\$ 4,808,097	\$ 1,902,000	\$ 1,600,000	\$ -	\$ 770,970	\$ 50,000	\$ 9,131,067
2006	\$ 5,323,000	\$ 1,775,500	\$ 1,600,000	\$ -	\$ 869,000	\$ 105,800	\$ 9,673,300
2007	\$ 5,740,000	\$ 150,000	\$ 1,400,000	\$ -	\$ 1,000,000	\$ 169,000	\$ 8,459,000
2008	\$ 6,062,200	\$ 145,000	\$ 1,400,000	\$ 631,400	\$ 1,120,250	\$ 79,750	\$ 9,438,600
2009	\$ 6,142,500	\$ 150,000	\$ 1,612,500	\$ 167,118	\$ 1,120,250	\$ 227,000	\$ 9,419,368
2010	\$ 6,142,500	\$ 150,000	\$ 1,612,500	\$ 69,304	\$ 1,120,250	\$ 371,417	\$ 9,465,971
2011	\$ 6,203,925	\$ 75,000	\$ 2,079,255	\$ 650,630	\$ 1,306,195	\$ 169,695	\$ 10,484,700
Sub Total	\$ 54,076,792	\$ 5,447,700	\$ 16,104,255	\$ 1,567,026	\$ 9,013,615	\$ 1,434,262	\$ 87,643,650
Share	61.7%	6.2%	18.4%	1.8%	10.3%	1.6%	

Data from City of Columbia Annual Budget Documents

Prepared by Bob Walters February 7, 2011

Verified by City Finance June 13, 2011

City of Columbia - Average Annual CIP Needs vs. Funding

	1-2 Year Needs	3-5 Year Needs	6-10 Year Needs	Average Annual Need	Average Annual Funding over the past 10 Years	Average Annual Gap	Additional Revenue Sources to Close Gap	Comments
Streets & Sidewalks	\$48,119,050	\$68,444,055	\$114,931,750	\$23,149,486	\$9,321,169	\$13,828,316	\$4,667,362	Inc. Cap. Improvement Sales Tax from 1/4 cent to 1/2 cent
							\$504,380	Increase Property Tax rate from \$0.41 to \$0.44
							\$2,858,153	Increase Property Tax rate from \$0.44 to \$0.61
							\$5,798,421	Average Annual Gap after Additional Revenue Sources
Parks & Recreation	\$5,795,000	\$8,835,000	\$81,504,217	\$9,613,422	\$2,565,210	\$7,048,212		Includes the complete buildout of the Trails and Master plans, not necessarily the priorities.
Water	\$13,395,000	\$19,277,000	\$19,440,900	\$5,211,290	\$7,295,103	(\$2,083,813)		
Electric	\$27,590,000	\$79,005,000	\$36,550,000	\$14,314,500	\$7,110,290	\$7,204,210		Annual Need of \$80,000 for fiber optics system expansion. Future needs include funding for the purchase of CEC which will reduce the gap.
Sewer	\$17,156,950	\$19,390,050	\$11,103,000	\$4,765,000	\$9,680,839	(\$4,915,839)		Previous years funding included expansion of the WWTP.
Storm Water	\$2,227,218	\$7,096,300	\$2,865,000	\$1,218,852	\$647,889	\$570,963		Does NOT include additional funding needed for TMDL. Also, does not include full list of current stormwater projects because of lack of funding.
Total	\$114,283,218	\$202,047,405	\$266,394,867	\$58,272,549	\$36,620,499	\$21,652,050		

Streets and Sidewalks Average Annual Funding 2002 - 2011

State Funding

State Reimb.	\$200,000
MoDOT BRM	\$90,000
MoDOT	\$498,800

\$788,800

County Funding

Co Rd Tax Rebate	\$1,487,980
County Reimb.	\$94,260

\$1,582,240

Federal Funding

CDBG	\$313,073
STP Enh	\$69,774
STP	\$452,070
Non-Motorized Grant	\$1,136,111

\$1,971,028

Developer/Private Sector

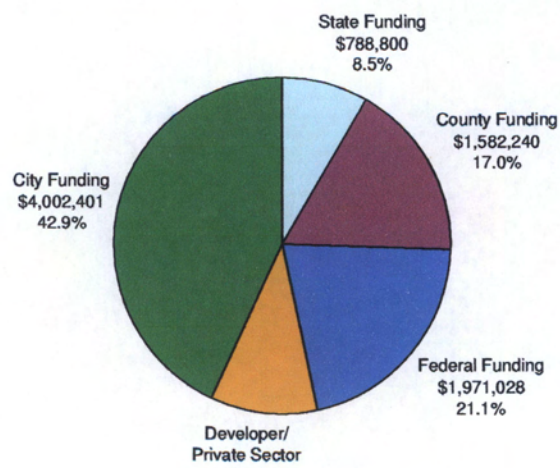
TDD	\$110,000
Tax Bill	\$101,050
Dev charge	\$178,650
Dev Fees	\$322,600
Dev Contributions	\$264,400

\$976,700

City Funding

Gen Fd/PI (4.1% of 1 cent Sales Tax)	\$16,950
Gen Fund Trnsfr	\$5,000
All (Accumulated Invest Income)	\$40,000

Streets and Sidewalks Average Annual Funding



Dedicated Transportation Funding Sources Budgeted FY 2007 - FY 2011

	2007	2008	2009	2010	2011	5 Year Average
Transportation Dedicated Funding Sources Available:						
Capital 1/4 Cent Sales Tax	\$3,040,875	\$5,022,750	\$4,435,625	\$3,682,000	\$6,000,250	\$4,436,300
Transportation 1/2 Cent Sales Tax	\$8,459,000	\$9,438,600	\$9,419,368	\$9,428,471	\$9,664,375	\$9,281,963
Public Improvement Fund **	\$1,666,780	\$1,927,970	\$2,413,247	\$745,184	\$2,051,654	\$1,760,967
Special Road District Tax Fund *	\$2,383,425	\$1,458,425	\$4,268,925	\$1,513,425	\$1,513,425	\$2,227,525
Non-Motorized Grant	\$0	\$947,385	\$305,812	\$338,140	\$217,252	\$361,718
Vehicle Registration Fees	\$550,000	\$621,000	\$375,000	\$375,000	\$370,000	\$458,200
Gasoline Tax	\$2,400,000	\$2,350,000	\$2,350,000	\$2,400,000	\$2,375,000	\$2,375,000
Total Dedicated Funding Sources Available	\$18,500,080	\$21,766,130	\$23,567,977	\$18,482,220	\$22,191,956	\$20,901,673
Uses by Department						
PW - Engineering	\$1,558,992	\$2,382,999	\$808,142	\$1,023,253	\$1,358,767	\$1,426,431
PW - Administration	\$672,334	\$0	\$0	\$0	\$0	\$134,467
PW - Parking Enforcement	\$197,298	\$0	\$0	\$0	\$0	\$39,460
Streets and Sidewalks Oper & Capital Projects	\$9,116,442	\$10,685,934	\$13,077,483	\$9,296,172	\$12,715,038	\$10,978,214
Street Lighting	\$1,262,600	\$1,437,920	\$1,427,800	\$1,575,000	\$1,213,341	\$1,383,332
General and Administrative Fees	\$35,539	\$62,742	\$105,947	\$106,684	\$39,112	\$70,005
Non-Motorized Grant Operations	\$0	\$947,385	\$305,812	\$338,140	\$231,431	\$364,554
Transit Operations & Capital Projects	\$1,400,000	\$2,031,400	\$1,779,618	\$1,681,804	\$2,079,255	\$1,794,415
Airport Operations & Capital Projects	\$1,169,000	\$1,200,000	\$1,347,250	\$1,491,667	\$1,306,195	\$1,302,822
Railroad Capital Projects	\$47,000					
Debt Payments	\$3,040,875	\$3,017,750	\$4,715,925	\$2,969,500	\$3,248,817	\$3,398,573
Total Dedicated Funding Sources Used	\$18,500,080	\$21,766,130	\$23,567,977	\$18,482,220	\$22,191,956	\$20,892,273
Uses By Category						
Operations	\$11,548,205	\$12,787,230	\$12,235,434	\$12,284,499	\$12,196,814	\$12,210,436
Capital Projects	\$3,911,000	\$5,961,150	\$6,616,618	\$3,228,221	\$6,746,325	\$5,292,663
Debt	\$3,040,875	\$3,017,750	\$4,715,925	\$2,969,500	\$3,248,817	\$3,398,573
	\$18,500,080	\$21,766,130	\$23,567,977	\$18,482,220	\$22,191,956	\$20,901,673

* Can only be used for improvement, maintenance, construction, and repair of streets and roads within the City limits that qualify per an agreement with the County.

** Includes 4.1% of the 1 cent General Sales Tax enacted in 1971 and Development Fees.

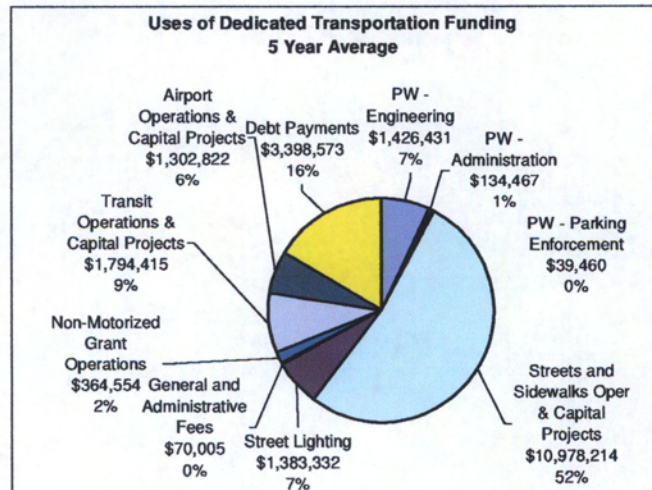
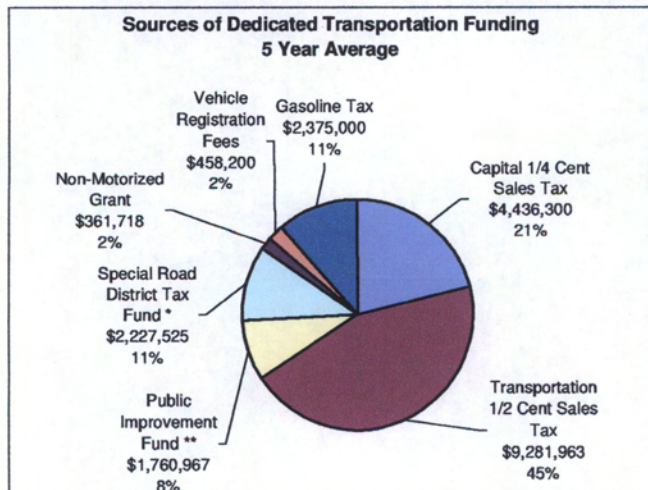


Exhibit E

**CIP Funding for Streets & Sidewalks
Average Annual Amounts 2002-2011**

State Funding		
State Reimb.	200,000	
MoDOT BRM	90,000	
MoDOT	498,800	
<i>Sub Total</i>	<i>\$ 788,800</i>	<i>8.5%</i>
County Funding		
Co Rd Tax Rebate	1,487,980	
County Reimb.	94,260	
<i>Sub Total</i>	<i>\$ 1,582,240</i>	<i>17.0%</i>
Federal Funding		
CDBG	313,073	
STP Enh	69,774	
STP	452,070	
Non-Motorized Grant	1,136,111	
<i>Sub Total</i>	<i>\$ 1,971,028</i>	<i>21.1%</i>
Developer/Private Sector		
TDD	110,000	
Tax Bill	101,050	
Dev charge	178,650	
Dev Fees	322,600	
Dev Contributions	264,400	
<i>Sub Total</i>	<i>\$ 976,700</i>	<i>10.5%</i>
City Funding		
Gen Fd/Pl	16,950	
Gen Fund Trnsfr	5,000	
All (Accumulated Invest Income)	40,000	
Capital Impr. Sales Tax	2,360,150	
Transportation Sales Tax	544,770	
Capital Project Fund Balance	1,035,531	
<i>Sub Total</i>	<i>\$ 4,002,401</i>	<i>42.9%</i>
Total	\$ 9,321,169	

Data originated from material provided to the ITF on 2-23-2011 by the City of Columbia.

Data re-formatted (state/county/federal/developer/city) by Bob Walters on 5-10-2011

Verified by City Finance June 13, 2011

***Single Family Building Permit Fees 2000 vs 2010**

Fee	2000	2010	Difference
Development Charge	\$200	\$1,000	\$800
Sewer Connection Fee	300	800	500
Residential Water Fees	353	1,348	995
Total	\$853	\$3,148	\$2,295

Based on a 2,000 square foot detached residence.

Data courtesy of John Sudduth, Building Regulations Supervisor | November 2, 2010

Re-verified by John Sudduth on June 16, 2011.

*This table does not include all the permitting and regulatory fees in the City of Columbia.

“Over a recent ten year period, local developers and builders funded an estimated \$222 million in on-site infrastructure improvements, such as streets, water, sewer, storm water and other improvements.”

Year	Permit Fees	Development Charges	Sewer Connection Fees	Storm water Development/Utility	Estimated Developer Contributions*
2000	\$451,300	\$190,707	\$286,550	\$1,141,470	\$15,207,998
2001	\$452,000	\$194,040	\$271,350	\$1,148,600	\$17,933,955
2002	\$468,457	\$197,784	\$302,050	\$1,100,861	\$24,448,450
2003	\$716,564	\$488,355	\$573,600	\$1,397,510	\$30,689,942
2004	\$509,120	\$527,045	\$775,657	\$1,389,682	\$37,460,778
2005	\$961,467	\$543,214	\$688,855	\$1,503,957	\$30,030,280
2006	\$827,362	\$676,881	\$740,668	\$1,582,718	\$30,995,440
2007	\$629,109	\$485,742	\$737,984	\$1,374,743	\$17,745,700
2008	\$450,784	\$524,511	\$336,556	\$1,385,779	\$9,742,600
2009	\$369,231	\$368,591	\$341,017	\$1,223,104	\$7,761,040
Total	\$5,835,394	\$4,196,870	\$5,054,287	\$13,248,424	\$222,016,183

**estimated based on percentage developed by Impact DataSource pursuant to a sampling of development projects.
Developer contributions are not paid directly to the City, but are donations of infrastructure improvements and other capital assets.
Research courtesy of Central Missouri Development Council (CMDC).*

Minority Report to the City Council

INFRASTRUCTURE TASK FORCE (ITF)

June 27, 2011

Executive Summary:

Most of the membership of the ITF have financial connections with the development/construction/real estate industries. It is not surprising that the majority report favored raising taxes but not development fees. We in the ITF Minority favor:

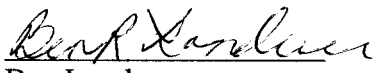
- The 1/2% Transportation Sales Tax, in the General Fund, should be reserved for road infrastructure maintenance, transportation operating expenditures, and transportation operating subsidies as distinct from capital costs.
- Extension of the 1/4% CIP sales tax and a new 1/8-1/4% CIP tax for capital road infrastructure improvement and expansion;
- Assessment of a trip generation fee based on road usage for all residential and commercial development to replace the current development fee assessment based on size. (See Appendix A: A Description of the Trip Generation Model);
- A property tax increase of no more than 20 cents to support a ten-year general obligation bond. However, property taxes do not account for non-city resident's use of roads. Further, a property tax increase should not substitute for properly assessed trip generation based fees.

Infrastructure Task Force Minority Member Recommendations


1. We agree with the majority with regard to the assumptions and goals as stated in the majority report, although we were disappointed the majority sought to defer consideration of infrastructure issues regarding sewer and storm water.
2. We believe that road and sidewalk maintenance costs have, historically, not been adequately considered and included. The recent citizen survey of road maintenance dissatisfaction is significant. Consequently, we recommend that the 1/2% Transportation Sales Tax, in the General Fund, be reserved for road infrastructure maintenance, transportation operating expenditures, and transportation operating subsidies as distinct from capital costs.
3. We agree with the majority that there are huge unfunded capital infrastructure costs for streets and sidewalks in Columbia. We recommend that the City seek dedicated capital improvement funding for capital investment regarding the Transit System, the Airport, and for new road infrastructure. We also believe, however, that separating bus and airport subsidies for an independent dedicated tax is a tax increase and these subsidies are unlikely to survive a separate ballot issue on their own.
4. We believe that a large percentage of these capital costs have accrued from a long period of growth with minimal development fees to pay for off-site streets and sidewalks that are needed to meet the needs of the growth. Consequently, we believe that development fees should be increased to help alleviate future growth needs for new streets and sidewalks.

5. We believe that development fees should have a logical nexus to new demand for streets and sidewalks. The current method of calculating the development fee based on square footage of new structures fails the nexus test. Different types of development generate different amounts of traffic relative to use and size, and have different demands for their peak flows.
6. We believe that a 4-6 pm peak flow trip generation model for determining development fees has a much more logical nexus to new demand for new streets and sidewalks. Peak flow in the 4-6 pm time period establishes the demand for new streets and sidewalks and trip generation establishes who is creating this demand. See Appendix A: A Description of the Trip Generation Model and Table 1 for some examples of use of peak flow trip generation.
7. We believe that voters, based on 2005 ballot issue results, will be hesitant to raise taxes unless the growth element increases their contribution toward their needs for new off-site streets and sidewalks and maintenance issues are adequately addressed. See Appendix A: Financial Options Discussion - Columbia's Historical Perspective.
8. We believe that all taxpayers should contribute to fixing past unmet needs. Since new residents, etc. will be paying these taxes as well as current residents, etc., development fees should be set at a level to account for this - a fixed percentage, e.g., 1/3 to 1/2, of the actual prorated cost of new streets and sidewalks to meet the needs of new growth.

Respectfully Submitted by by ITF Members Ben Londeree and Karl Skala


Ben Londeree

June 27, 2011
Date


Karl Skala

June 27, 2011
Date

Minority Report to the City Council

INFRASTRUCTURE TASK FORCE (ITF)

Appendix A

Financial Options Discussion - Columbia's Historical Perspective

All new growth infrastructure and maintenance compete for budgetary influence and the interconnectedness of all of this growth-related infrastructure must be recognized. In particular, hard infrastructure such as *Roads, Sewers, and Storm Water* compete for tax revenues (both dedicated and general fund) and user fees. Unfortunately, the ITF majority favored deferral of sewer and storm water funding issues to the Sewer Task Force and the Storm Water Advisory Commission, respectively.

In general terms, we have experienced ~\$24M in road infrastructure needs with ~\$9M of funding since the 2005 Bond Issues were placed before the voters.

In anticipation of the 2005 Bond Issue election, the City hired consultants, Development Strategies, to study financing options for roads. One aspect of their report¹ was how high could the development fee be. They reported that the national average for such fees in 2005 was about \$3,850. Londeree² reported that the prorated cost for new roads in Columbia in 2005 was about \$6,700 per new residential lot. The \$3,850 represented about 57% of the prorated cost of new roads in 2005. After further analyses, Development Strategies concluded that Columbia could reasonably charge a development fee of up to \$3,850 and they recommended a fee of at least \$3,000. Adjusting these figures for increases in the Producer Price Index for Highway Construction, the 2010 prorated cost of roads in Columbia was \$9,570; 57% of that would be \$5,500; and the \$3,000 figure would become about \$4,285.

The City appointed Transportation Finance Advisory Committee recommended a final mix of: 1) the extension of the 1/4% roads sales tax and 1/8% new roads tax (generating ~\$80 million and ~\$25 million respectively); 2) a modest property tax increase of no more than 20 cents to support a ten-year general obligation bond generating ~\$20 million in bonds; and 3) development fee/excise tax (a blended revenue source such that the increase in development fees from \$.10 to \$.50 per square foot would generate ~\$40 million, plus a phased-in flat charge per residential unit of \$1000-\$1200, generating ~\$20 million (all projections based on 10 year averages). (Reference: 2_Committee_recommendations.pdf)

Concurrently in 2005, a Minority Report was filed with the Transportation Finance Advisory Committee. This report recommended a trip generation model to make up the remaining difference in the gap between revenues and needs for new road infrastructure and maintenance Reference: (consistent with the Consultant recommendation regarding the excise tax portion of the Majority Report, and not included in their recommendation).³

¹Transportation Infrastructure Financing Options, Development Strategies, St. Louis (2005) pp. 12-13. (Reference: 4_financing_options.pdf).

²Londeree, Ben R. The effect of growth on transportation costs, Columbia Daily Tribune, March 13, 2005, p. 3D.

³Minority Report for Transportation Financing, Ben Londeree and Clyde Wison (2005) (Reference: 3_Minority_Report.pdf)

Also in 2005, the Chamber of Commerce Government Affairs Committee Street Finance Subcommittee recommended that in lieu of any increase in real estate property taxes, additional funding be derived from state reimbursements to the city for its share of annual Motor Vehicle Taxes (~\$1million in 2003) and Gasoline Taxes (\$2.3 million in 2003), to be dedicated to capital road (new) improvement projects. Further, its recommendation suggested that because of equitability and accountability considerations, the Chamber would prefer the assessment of impact fees, or a blend of impact and targeted user fees, rather than relying exclusively on general excise taxes.⁴ However, the Chamber Board of Directors offered no formal recommendation to the City.

A 1/4% Capital Improvement Projects (CIP) sales tax extension for new road construction (\$80 million) passed with only 50.5% of the vote (by 127 votes), and a 1/8% CIP additional sales tax for new road construction (\$25 million) failed with only 39.1% (by 3038 votes). The phased-in gradual increase in the road infrastructure development charge, from \$0.10 to \$0.50 per square foot of new building construction, passed with 63.6% (by 3,777 votes).

The post-election message in 2005 clearly indicated that existing CIP sales taxes were sufficient to fund new road construction and that an increased share of the cost should be shifted to phased-in charges for development.

A Description of the Trip Generation Model

The capacity of engineered roads is designed for the heaviest periods of traffic. Generally the heaviest traffic occurs during the evening commute and to a lesser extent during the morning commute. Growth adds to the demand for additional capacity. Many communities, including Columbia, charge a development fee (some use other terms such as excise tax, or impact fee) based on the idea that those who create a new need for infrastructure should pay a prorated share of the cost. Courts have consistently ruled that impact fees must have a logical nexus (connection) between the fees and demand for the cost of infrastructure generated by new development.

The current model used in Columbia charges all new construction a development fee of fifty cents per square foot under roof for the purpose of construction of off-site collector and arterial streets and sidewalks. The peak 4-6 pm hour trip generation table in the appendix shows that different types of use groups generate different amounts of traffic. Columbia's model does not account for differences between different categories of users.

An alternative model charges a fee based on typical number of trips generated by different categories of locations during the evening commute, usually defined as the peak flow hour during 4-6 pm. Each one-way trip has a beginning and an end. In this model the location where a trip ends is credited with the trip. That location has something that draws traffic to it thereby contributing to the traffic congestion during the peak hour. The attraction might be a movie, an office visit, shopping, work, going home, etc

Thousands of trip generation studies have been conducted by traffic engineers and their ilk. The Institute of Transportation Engineers evaluates studies submitted to them for quality and if they

⁴ Government Affairs Street Funding Subcommittee, Columbia Chamber of Commerce (050211 Street Funding Report_CBOR.pdf)

meet certain standards are added to their database. Then they pool the studies into categories and analyze them. Trip ends are expressed in per unit of measure such as for a single family home the value would be one home. In non-residential development the unit of measure typically is per 1,000 square feet but could be any meaningful unit such as number of pumps at a gas station or number of beds in a nursing home. They publish the results in a set of books titled Trip Generation. The information in the table was taken from the 7th edition published in 2001 which was found in Columbia's traffic engineering department.⁵

In the model, the local community decides what the trip generation fee will be. The fee would be the same for every trip end. A table like the one in the appendix would be consulted for each building permit application. The total fee is the product of number of trip ends for the appropriate location category, appropriate number of units, and the fee per trip to determine the total fee.

An example will illustrate. Let's say that the community has established a fee of \$2,000 per unit per trip end. The building permit is for a single family dwelling which has a Trip End value of 1.01 and the Unit is one Dwelling Unit. The total fee would be 1.01 times 1 Unit times \$3,000 = \$3,030. The Trip End number for a Fast Food Restaurant with Drive Thru is 17.74 and the Unit is 1,000 sq. ft. A permit application fee for that restaurant would be 17.74 times 3.5 Units times \$3,000 = \$186,270.

Affordable Housing Options for Low Incomes

The City could establish a reserve fund (not funded by other development fees) which could pay for the development fee for qualified applicants. When a qualified applicant applies for a building permit the City could provide a loan for the amount of the development fee and place a lien on the property. The loan automatically would amortize 20% of the original loan amount each year so that after 5 years the balance would be zero. If the owners sell before the 5 years, the remaining balance would be due at time of closing. This arrangement would help provide an affordable home to qualified individuals but guard against "gaming" the system for a quick profit. It would insure that the property owners will gain equity in the property rather quickly. Home owners with equity in their home are more likely take care of the property to maintain their equity. Higher property values mean higher property taxes received by taxing agencies.

Infill Development Incentives

If the City wishes to encourage infill development and adequate road and sidewalk infrastructure is in place, credits could be earned for such activity. The amount of the credit would depend on where the development occurs. The City could target certain areas and/or base the credit on the inverse of distance from downtown. In the latter case, the credit would be highest near downtown and gradually decrease to zero at 1-2 miles from downtown. The credits should become part of the City's accounting system.

⁵Institute of Transportation Engineers, Trip Generation, Washington, D.C., ITE, 7th Edition, Vols. 1-3, 2001

Table 1: ITE¹ Weekday 4-6 PM Peak Hour Trip Generation Fee Scenario

(rev. 6/27/11)

Category	Trip Ends ²	Unit ³	# of Units	Trip Generation Fee		
				\$1,000 Fee ⁴	\$3,000 Fee ⁵	\$4,785 (50% Cost) ⁶
1 Condo/Townhouse	0.52	Dwelling Unit	1	\$520	\$1,560	\$2,488
2 Single Family Detached	1.01	Dwelling Unit	1	\$1,010	\$3,030	\$4,833
3 Apartment - 4+ units	0.62	Dwelling Unit	16	\$9,920	\$29,760	\$47,467
4 Quick Lube	5.19	Service Position	2	\$10,380	\$31,140	\$49,668
5 Nursing Home	0.42	1000 sq. ft.	25	\$10,500	\$31,500	\$50,243
6 Senior Adult Attached	0.11	Dwelling Unit	100	\$11,000	\$33,000	\$52,635
7 Assisted Living	0.22	Beds	50	\$11,000	\$33,000	\$52,635
8 Apparel Store	3.83	1000 sq. ft.	3	\$11,490	\$34,470	\$54,980
9 Furniture Store	0.46	1000 sq. ft.	25	\$11,500	\$34,500	\$55,028
10 Mini Warehouse	0.26	1000 sq. ft.	50	\$13,000	\$39,000	\$62,205
11 Church	0.66	1000 sq. ft.	25	\$16,500	\$49,500	\$78,953
12 Congregate Care Facility	0.17	Dwelling Unit	100	\$17,000	\$51,000	\$81,345
13 Nursery (Garden Center)	3.80	1000 sq. ft.	5	\$19,000	\$57,000	\$90,915
14 Tire Store	3.79	Service Bay	6	\$22,740	\$68,220	\$108,811
15 Toy/Child Superstore	4.99	1000 sq. ft.	5	\$24,950	\$74,850	\$119,386
16 Self Serve Car Wash	5.54	Wash stalls	5	\$27,700	\$83,100	\$132,545
17 Continuing Care Retirement Community	0.29	Units	100	\$29,000	\$87,000	\$138,765
18 Motel	0.58	Occupied Rooms	50	\$29,000	\$87,000	\$138,765
19 Mobile Home Park	0.59	Dwelling Unit	50	\$29,500	\$88,500	\$141,158
20 Golf Course	0.30	Acre	100	\$30,000	\$90,000	\$143,550
21 Drinking Place	11.34	1000 sq. ft.	3	\$34,020	\$102,060	\$162,786
22 Video Rental Store	13.60	1000 sq. ft.	4	\$54,400	\$163,200	\$260,304
23 Low Rise Apartment <3 floors	0.58	Dwelling Unit	100	\$58,000	\$174,000	\$277,530
24 Hotel	0.59	Rooms	100	\$59,000	\$177,000	\$282,315
25 Fast Food Restaurant with Drive Thru	17.74	1000 sq. ft.	3.5	\$62,090	\$186,270	\$297,101
26 High Turnover Sit Down Restaurant	10.92	1000 sq. ft.	6	\$65,520	\$196,560	\$313,513
27 Day Care Center	13.18	1000 sq. ft.	5	\$65,900	\$197,700	\$315,332
28 New Car Sales	2.64	1000 sq. ft.	25	\$66,000	\$198,000	\$315,810
29 Quality Restaurant	7.49	1000 sq. ft.	9	\$67,410	\$202,230	\$322,557
30 Pharmacy/Drug with Drive-thru	8.62	1000 sq. ft.	10	\$86,200	\$258,600	\$412,467
31 Medical/Dental Office Bldg (peak pm)	3.72	1000 sq. ft.	25	\$93,000	\$279,000	\$445,005
32 Auto Care Center	3.38	1000 sq. ft.	30	\$101,400	\$304,200	\$485,199
33 Research & Development Center (peak pm)	1.08	1000 sq. ft.	100	\$108,000	\$324,000	\$516,780
34 Warehousing	0.47	1000 sq. ft.	250	\$117,500	\$352,500	\$562,238
35 Business Park (peak pm hour)	1.29	1000 sq. ft.	100	\$129,000	\$387,000	\$617,265
36 Office Supply Superstore	3.40	1000 sq. ft.	40	\$136,000	\$408,000	\$650,760
37 Gas/Service Station	13.86	Fueling position	10	\$138,600	\$415,800	\$663,201
38 Convenience Market 24 hr	52.41	1000 sq. ft.	3	\$157,230	\$471,690	\$752,346
39 Multiplex Movie Theater	13.64	Screen	14	\$190,960	\$572,880	\$913,744
40 Convenience Market with Gas Pumps	19.22	Fueling position	10	\$192,200	\$576,600	\$919,677
41 Hardware/Paint Store	4.84	1000 sq. ft.	40	\$193,600	\$580,800	\$926,376
42 Walk-In Bank (peak pm hr)	42.02	1000 sq. ft.	5	\$210,100	\$630,300	\$1,005,329
43 Electronics Superstore	4.50	1000 sq. ft.	50	\$225,000	\$675,000	\$1,076,625
44 Hospital	1.18	1000 sq. ft.	200	\$236,000	\$708,000	\$1,129,260
45 General Lite Industrial	0.98	1000 sq. ft.	250	\$245,000	\$735,000	\$1,172,325
46 Home Improvement Superstore	2.45	1000 sq. ft.	100	\$245,000	\$735,000	\$1,172,325
47 General Heavy Industrial (peak pm)	0.68	1000 sq. ft.	500	\$340,000	\$1,020,000	\$1,626,900
48 Discount Club	4.24	1000 sq. ft.	100	\$424,000	\$1,272,000	\$2,028,840
49 Drive-In Bank	45.74	1000 sq. ft.	10	\$457,400	\$1,372,200	\$2,188,659
50 Free Standing Discount Store	5.06	1000 sq. ft.	100	\$506,000	\$1,518,000	\$2,421,210
51 Discount Supermarket	8.90	1000 sq. ft.	60	\$534,000	\$1,602,000	\$2,555,190
52 Supermarket	10.45	1000 sq. ft.	60	\$627,000	\$1,881,000	\$3,000,195
53 Free Standing Discount Superstore	3.87	1000 sq. ft.	180	\$696,600	\$2,089,800	\$3,333,231
54 Library	7.09	1000 sq. ft.	300	\$2,127,000	\$6,381,000	\$10,177,695

¹Source: Institute of Transportation Engineers, Trip Generation, Washington, D.C., ITE, 7th Edition, Vols. 1-3, 2001

²Trip Ends is an average weighted by sample size

³Unit is the measurement that the trip end number applies to, e.g. trips/dwelling unit or trips/1000 square feet

⁴\$1,000 Fee is the Trip Generation Fee generated for each \$1,000 assessed

⁵\$3,000 Fee is the Trip Generation Fee generated for each \$3,000 assessed

⁶\$4,785 (50%) Fee is the Trip Generation Fee required to pay for 50% of the infrastructure cost of trips generated

Local Government Financing Capacity and
Impact Potential

**Transportation Infrastructure
Financing Options**
Columbia, Missouri

Prepared for
City of Columbia, Missouri

November 2004

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1.0 Introduction

The City of Columbia is considering a complex strategy to support local public financing for the construction new streets and roads as the city continues to grow and to support maintenance and upgrades of existing streets and roads. The pace of population and related land use growth and expansion in Columbia has outstripped the city's ability to finance necessary transportation infrastructure improvements under current budgeting and available revenue sources.

This report first summarizes key growth measures to illustrate that, indeed, Columbia and Boone County experienced above average rates of expansion during the 1990s and may be continuing that trend as the sluggish national economy of the early 2000s picks up steam in the next several years. The analysis then shifts to a specific look at three major tax sources for local infrastructure financing to determine the "capacity" of the city to absorb possible tax increases. These sources are:

- The sales tax because one financing option is to increase the tax rate on the local capital improvements sales tax.
- The property tax because a possible tax rate increase for the city is under consideration.
- A new excise tax that would be imposed on new development in the city to accumulate funds that would be used for transportation improvements to support that new development.

Because the excise tax would be a refinement of the existing "developer charge" of ten cents per square foot of building area in Columbia, the report concludes with analysis of the impacts of such taxes (and their cousins, impact fees) on the amount and rate of growth in the community. Of concern, of course, is that the imposition of a one-time, front-end tax on new development might slow development because of the higher costs involved, thereby slowing the economic expansion of Columbia which is, in many other respects, a desirable goal.

2.0 Historical Growth Trends

2.1 Population

Boone County was the eighth most populated county in Missouri in 2002 with 139,300 residents. This was up only one place since 1970 (32 years) when Boone was the ninth largest county with 81,100 residents. The move up in rank was due to shrinkage in Buchanan County (St. Joseph), which slipped from 8th in 1970 to 12th in 2002.¹

The largest county in the state is St. Louis County (just over a million people in 2002) followed by Jackson County (almost 660,000) and the City of St. Louis (an independent city with 336,000 residents in 2002).

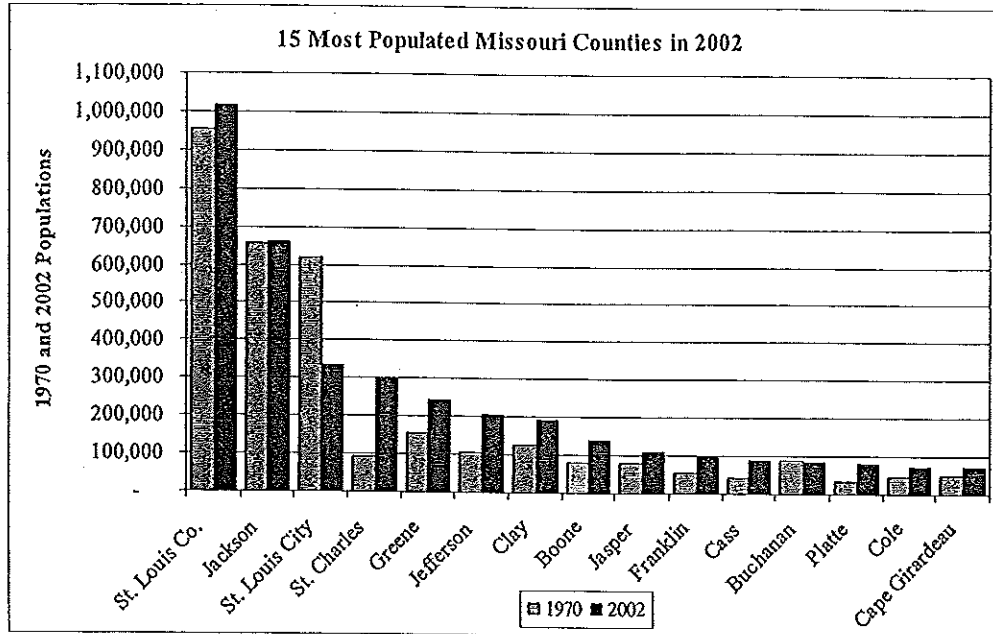
Of the top 15 counties, only Buchanan County and St. Louis City lost population between 1970 and 2002. St. Louis lost almost half its 1970 population while Buchanan lost just 2.1%.

St. Charles County in the St. Louis metro area grew the fastest at 224% between 1970 and 2002. St.

¹ Most of the information in this section on historic growth is based on data obtained from the *Regional Economic Information Systems (REIS)* of the U.S. Department of Commerce, Bureau of Economic Analysis. The present data base spans 1969 through 2002 but is a county system only. Thus, most of the following information focuses on Boone County as a whole. In 2002, by the way, Columbia made up 63.4% of the county's population, up from 61.2% in 1990.

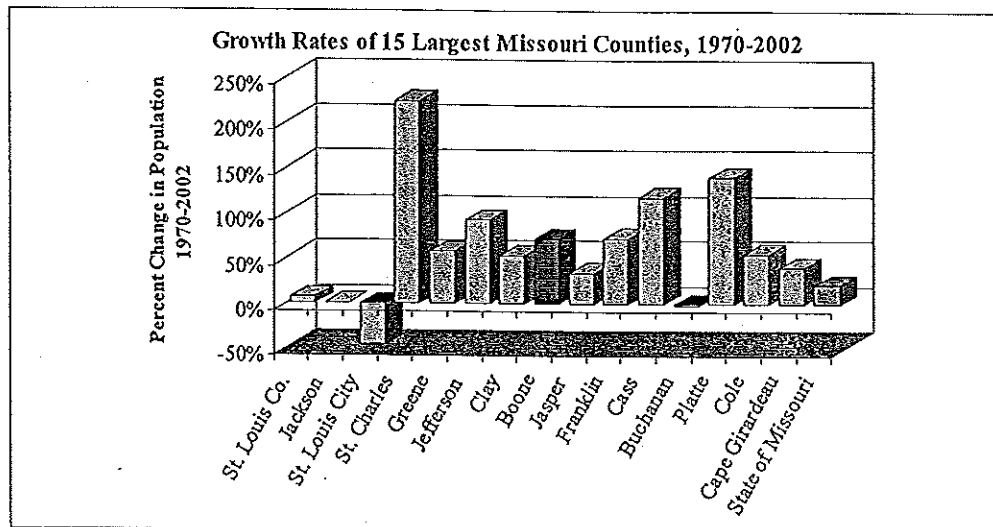
Local Government Financing Capacity and Impact Potential

Charles County had just over 303,000 residents in 2002, and increase of about 209,600 over the 32 years, increasing its rank from the 7th most populous county to 4th.



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, *Regional Economic Information System*.

Boone County's rate of population growth over those 32 years was 71.9%, more than three times the statewide average of 21.0%. Boone had the fifth fastest rate of increase among the 15 largest counties.



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, *Regional Economic Information System*.

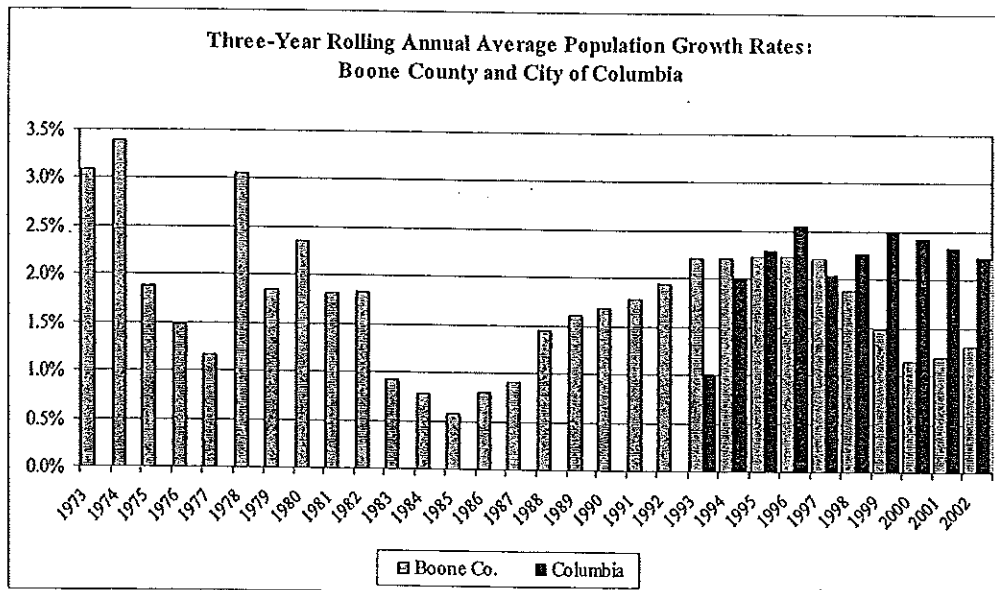
As shown on the following graph, Boone County's population growth rate was somewhat erratic in the 1970s and early 1980s, but then began a steady increase in the rate of growth into the 1990s. The mid-

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1990s experienced fairly steady annual average rates of growth, but these rates were much higher than in the previous decade and a half. In short, the county's population was increasing at an increasing rate and then at a relatively strong rate for several years.

While consistent data on Columbia's population does not go back as far as 1970, the city's rate of growth slightly lagged the overall county growth in the early 1990s, then exceeded the county. Since the late 1990s, the rate of growth for the county as a whole (which includes the city) has declined quite a bit, but the city's growth rate continues at a much higher level than the county.

This helps to explain the current pressures on financing of infrastructure to support this growth. The city's and the county's history had been one of slow growth for many years, but that rate slowly increased such that keeping up with the pace of population increases became progressively more difficult.



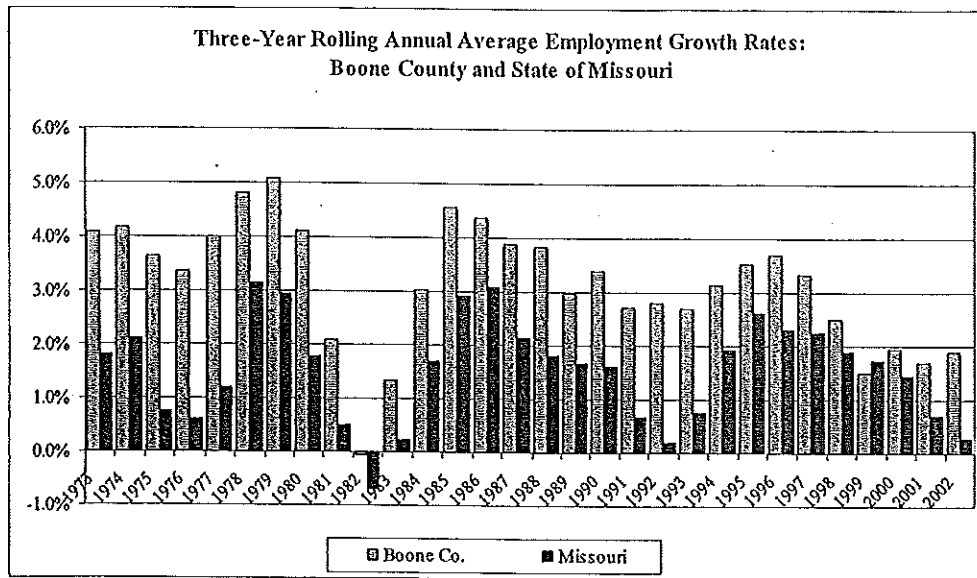
Sources: U.S. Dept. of Commerce, Bureau of Economic Analysis, *Regional Economic Information System*. and City of Columbia 1994-2003 *Trends Manual* from the Department of Finance.

2.2 Employment

Another dimension of the pressure on infrastructure within the city and the county is the employment growth—that is, jobs located in the county. The next graph illustrates that the rate of job growth in Boone County exceeded that of the state in virtually every one of the past 30 years. Jobs in the county totaled 103,200 in 2002, up 62% from 1970, compared to a 58% growth in the state as a whole.

As a result, the ratio of jobs-to-population in Boone County increased from 0.49 in 1970 to 0.74 in 2000 while the ratio in the state increase from 0.47 in 1970 (almost the same as Boone County) to 0.61. Clearly, the county has become a much more important employment center, attracting a larger and larger workforce that lives outside the county. Thus, in addition to internal population pressures on the infrastructure, the county (and, by extension, the city) is having to cope with a great many non-resident workers.

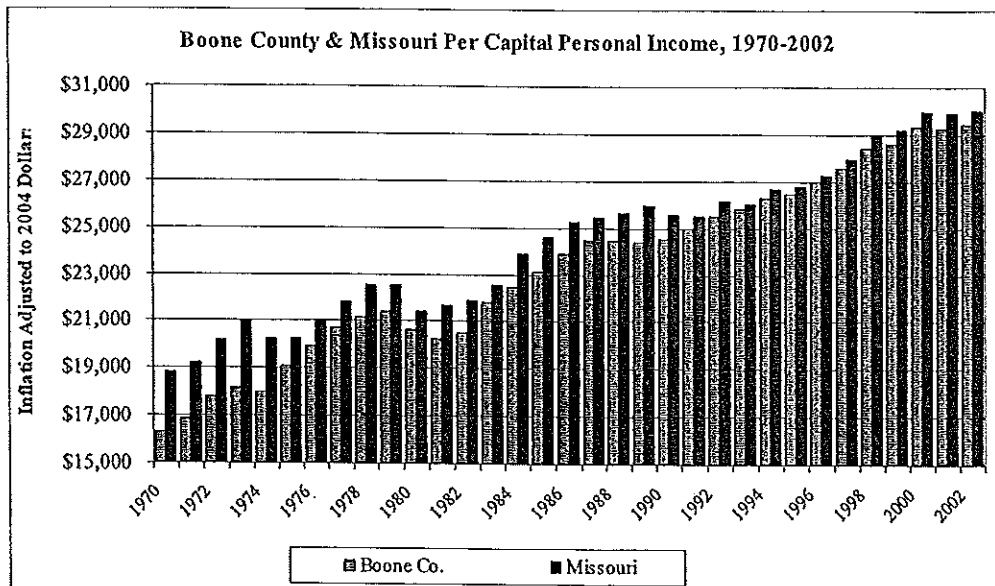
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Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, *Regional Economic Information System*.

2.3 Personal Income

Meanwhile, real income also has been rising, as shown on the next graph. Real income is actual income adjusted for inflation and thus shows the change in buying power even after prices increase because of inflation. The graph shows constant 2004 dollars (i.e., all dollars are converted to 2004 values based on changes in the national Consumer Price Index, CPI-U).



Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, *Regional Economic Information System*.

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The actual dollar amounts on the graph are less important than two other factors:

- (1) Average income in Boone County has long been slightly less than the state as a whole (though the mid-1990s showed quite a bit of equality), and
- (2) real income has been rising quite steadily, thus increasing not only buying power but the tax base to afford a higher level of services.

Note that there are marked "dips" in the rate of change during recent national economic recessions: mid-1970s, early 1980s, and early 1990s. But the most recent recession of the early 2000s did not experience a dip so much as a leveling off.

Between population and employment growth and real personal income growth, the aggregate buying power and aggregate tax base of the county and the city have also been increasing. Affluence is stronger today than ever before. As the city and county consider alternative means for financing future infrastructure, it is well to keep in mind the historic changes that are putting more demand on existing infrastructure than ever before and the increased wealth that is present in the city and county.

3.0 Existing Tax Capacity Analysis

Separate analysis of the transportation infrastructure needs in Columbia over the next 25 years or so concludes that there are both current (i.e., existing) and future deficiencies in the road network and its quality to serve the Columbia area. To overcome these deficiencies, capital improvement costs have been projected and possible sources of additional financing to pay for these deficiencies have been identified. Key among those sources are three taxes discussed in this section:

1. The city's capital improvements sales tax which, today, is set at one-quarter percent of taxable retail sales taking place in the city ($\frac{1}{4}\%$ per \$1.00 of taxable sales). This tax is due to expire in late 2005 unless Columbia voters elect to extend it. Missouri state law enables communities to levy as much as a half-percent capital improvements sales tax ($\frac{1}{2}\%$) so, if Columbia voters elect to increase this tax, it could increase by as much as another $\frac{1}{4}\%$, but voters can also approve an option to increase by only another $\frac{1}{8}\%$ to a total of $\frac{3}{8}\%$. Or they can choose not to increase the tax at all—or even not to renew the tax.
2. The city's portion of the property tax which, today, is set at 41¢ per \$100 of assessed valuation. The overall property tax is much larger (approximately \$7.22 per \$100 A.V. within much of the city where the city's library district is established) but the bulk of the proceeds are earmarked for other jurisdictions such as the library district and the school district. Voters can elect to increase the city government's share of the tax rate from the 41¢ to a sufficient level to support some or all of the transportation infrastructure deficiencies.
3. The city's excise tax which, today, is charged as a flat rate on all new development of ten cents (10¢) per square foot of floor area in new structures, residential or non-residential. This is a one-time only tax levied at the time of development. Under consideration is a change in the excise tax rate to a system focused entirely on raising money for capital improvements in the street network where the tax is based on the number of automobile trips generated by particular land uses during the afternoon peak travel hour. Again, it would be a one-time only charge. City voters can elect to change this tax to a level sufficient to support certain infrastructure improvements.

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An overall goal of the Transportation Infrastructure Financing Options analysis is to determine how the added costs to pay for deficiencies might be apportioned among various sources, including these three taxes and other sources as identified separately. This report is directed only at the three taxes described above, however.

To inform the process of decision making toward possible changes in these three taxes, the "capacity" of Columbia tax payers to afford increased tax rates is addressed below. All three analyses compare the "burden" on Columbia residents' personal income to support an increase in taxes. That is, the analyses convert the tax revenue trends for all three sources in the City of Columbia (other taxing jurisdictions are excluded) into per capita measures and then are compared to per capita personal income. It is then pointed out whether the possible increase in tax rates would "burden" taxpayers at a rate that is consistent or not with trends in the past decade.

In general, increasing the capital improvements sales tax would raise the burden on local residents' incomes to a point above the historic average ratio of sales taxes per dollar of income. Likewise, increases in the city's share of the property tax would have a similar effect. These two major taxes—which make up 82% of all *tax* revenues in the city and some 55% of all city revenues—cannot be increased without raising them to per capita levels that are above recent averages.

An expanded excise tax would not be a direct impact on residents' personal income but would have the effect of raising development costs higher than at present so that developers would attempt to raise prices or rents over current market averages in order to cover those added excise tax costs.

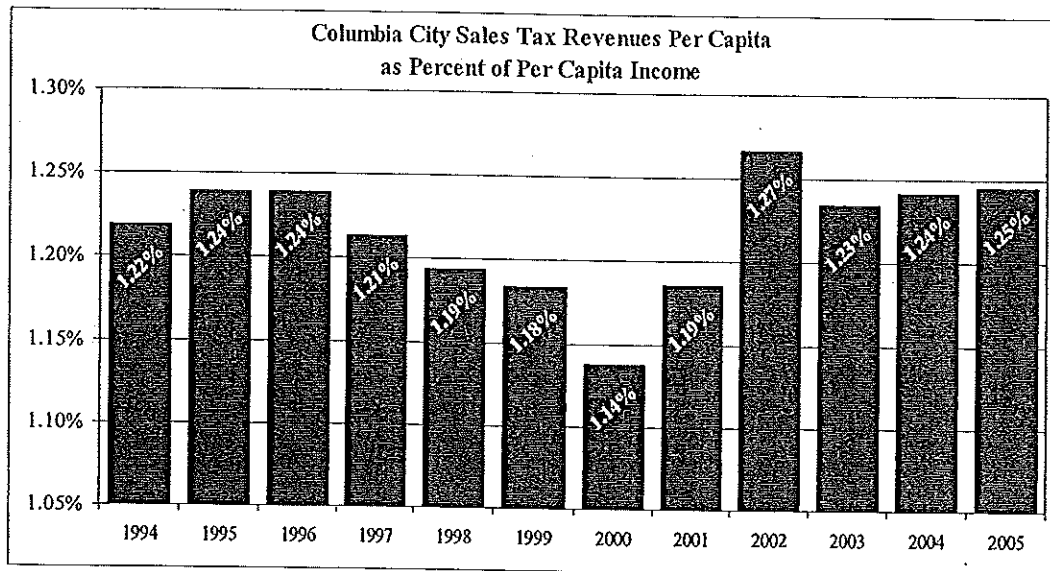
This is not to say that Columbians could not afford to pay more in local sales, property, and/or excise taxes. But doing so would effectively decrease their discretionary income (i.e., income after taxes) to below average proportions of their annual incomes.

For the analyses described on the following pages, tax and revenue data were obtained from the Columbia Finance Department. Personal income information was obtained from the U.S. Department of Commerce (Bureaus of the Census and Economic Analysis). Most dollar amounts discussed below are "nominal" figures, meaning they have not been adjusted for inflation. Those that were converted to "real" dollars were done so using the U.S. Department of Labor's Consumer Price Index (CPI). Development Strategies made adjustments and estimates to per capita income and the CPI for 2004 and 2005. DSI also estimated taxable retail sales based on review of the U.S. Department of Labor's *Consumer Expenditure Survey* (latest available is 2002) by comparing expenditures for various income categories to the 2000 Census breakdown of household income in Columbia. The Columbia Finance Department provided estimates of revenues for 2004 and projections for 2005.

3.1 Sales Tax Revenues

The city's Finance Department provided detail on sales tax revenues for the city (excluding other jurisdictions) for the time period of fiscal year (FY) 1994 through FY2005, which includes the current $\frac{1}{4}\%$ capital improvements sales tax. For FY 2003, sales tax revenues for the city commanded the equivalent of 1.23% of per capita income in the city, compared to an average between 1994 and 2003 of 1.22%—or slightly above average (see graph, below). FYs 2004 and 2005 are projected to attract an even higher percentage of personal income for sales tax revenues. Thus, it would appear that an increase in the local capital improvements sales tax would put a greater burden on the city's residents than what they have been accustomed to in the past.

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Review of the U.S. Department of Labor's *Consumer Expenditure Survey* (latest available is for 2002) shows that about 30% of pre-tax income in communities with an income structure such as Columbia's goes toward taxable retail sales.² Per capita income in Columbia in 2003 is estimated to have been about \$28,710, 30% of which is \$8,610. At the city's present 2.0% sales tax rate (which includes the current $\frac{1}{4}\%$ capital improvements tax), each resident of Columbia would spend about \$172 per year in sales taxes in the city. An added quarter cent sales tax on this amount would increase this amount to about \$194 per year, or about \$22.00 more than at present.³

If the added \$22.00 is increased to reflect 2005 dollar values to reflect the projections of dollar value of transportation infrastructure deficiencies, the added sales tax "burden" per capita becomes \$23.00. Applying this amount to the 2005 sales tax projections by the city would increase the percentage of per capita income supporting local sales tax revenues from 1.25% to 1.32%, above the average of the previous decade which was 1.22%.

While \$23 per year would be the expected added burden to the average a Columbia resident, the average sales tax revenue collections by the city currently average about \$47 per person. The difference between the \$23 and the \$47 is almost certainly explained by two primary factors:

- It is estimated that at least 30 percent of sales taxes paid in Columbia are paid by non-residents, such as those living in the surrounding parts of Boone County or in other counties. With all the major college athletic events at the University of Missouri that attract fans from all over the state as an example, not to mention all the other conferences and conventions that take advantage of Columbia's central location, it is not difficult to understand how the local sales tax is so strongly supported by non-residents who visit the city when they buy taxable goods.

² This is an estimate by Development Strategies using retail line items in the Consumer Expenditure Survey.

³ Indeed, the effect would technically not be this large because some retail sales tax dollars expended by Columbians is spent outside the city—in other counties, on vacations around the world, through Internet and catalog sales, etc. But the proportional analytical effects described here would be the same.

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- Private businesses also pay sales taxes on a great many purchases. This "burden" is also not counted against the per capita costs of operating a household in the city.

The precise breakdown of "who pays the sales tax" in Columbia is unknown, but local residents—who are the local voters—would not be directly burdened for the entirety of the revenue potential from an increased capital improvements sales tax rate.

If an increased capital improvements sales tax is enacted in Columbia by the voters, the question arises, "How much of it would be paid by existing residents and how much by future new residents?"

- If the $\frac{1}{4}\%$ sales tax represents an additional \$23 per person added to their cost of living, then the projected 2005 population of the city (90,967, according to the Columbia Department of Finance) would pay an additional \$2,092,000 in sales taxes (90,967 residents x \$23 per capita).
- Projections of growth assumed by the transportation planners for this study average 900 single family homes and 300 multifamily homes per year. Assuming a 2.5 percent vacancy rate for single family homes, a 5.0 percent vacancy rate for multifamily homes, 3.3 persons per household (pphh) for single family units, and 1.8 pphh for multifamily units, these projections would add an average of 3,400 new residents each year after 2005.
- At \$23 per resident (in 2005 dollars), the newcomers would pay an added \$78,000 in capital improvements sales taxes each year (3,400 x \$23). But, of course, they will also be paying the existing $\frac{1}{4}\%$ capital improvements sales tax, so the "new" amount from the capital improvements sales tax would double (2 x $\frac{1}{4}\%$) to \$156,000 in "new" money each year.
- In the first year of the larger tax, therefore, the city would collect, say, \$2.1 million from residents who lived in the city the prior year and another \$156,000 from newcomers. The newcomers, therefore, would contribute about 6.9 percent of *new* capital improvements sales tax revenues.
- The second year would double the amount of "new" taxes (to \$312,000), because another 3,400 residents would have been added to the city, while "existing" taxes would remain the same (\$2.1 million). In other words, the new people since the imposition of the tax would be contributing 12.9 percent of the capital improvements tax in the second year.
- In the third year, more newcomers would add another \$156,000 to a total of \$468,000, or about 18 percent of "new" money—again, while existing residents continue to generate \$2.1 million per year). And so on as time passes.

This explanation, of course, excludes assumptions about non-resident and business tax payments. If they were to increase at the same rate as population, then the dollar amounts would be roughly double what are described above. And "new" dollars would show similar percentage improvements.

- But will population growth alone increase non-resident sales by the same amount? If, for example, a sellout at a Mizzou football game currently contributes strongly to these out of town tax revenues, adding more population will not increase the number of fans.
- Business taxes, however, might be expected to grow proportionally as employment and commercial activity accommodate the added labor force and buying power.

Moreover, these assumptions assume that the per capita sales within the city limits will remain constant. They may, in fact, go up or down significantly depending on demographic and housing changes within the current city limits.

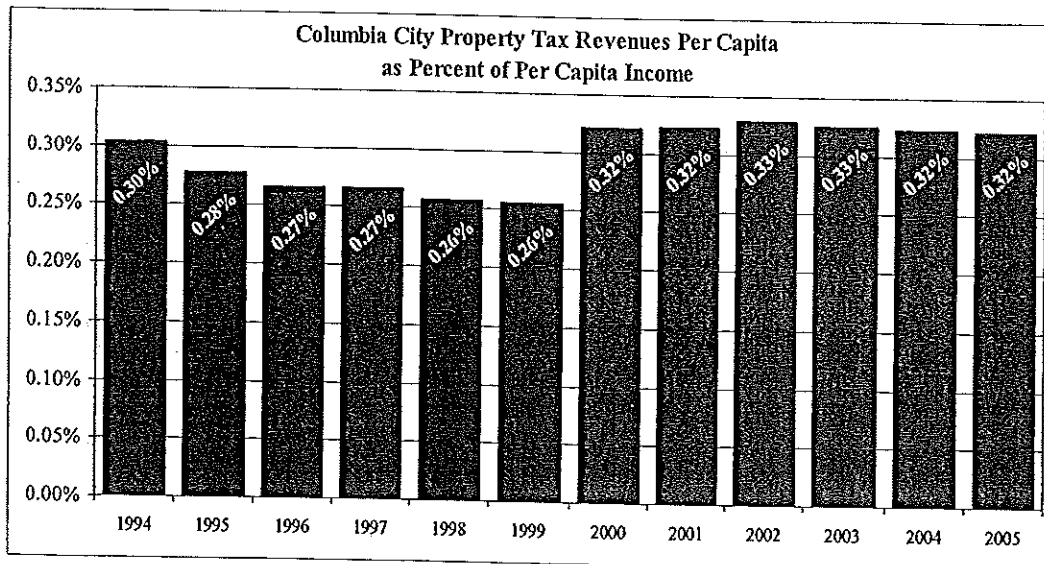
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The analysis of comparing sales tax revenues to per capita income over time is only accurate if the proportion between sales tax dollars paid by city residents and visitors remains constant. Over the past five years or so, the Columbia area has seen large stores like Walmart, Home Depot, and Lowes open in smaller communities surrounding Columbia, which undoubtedly slowed growth of tax revenues in the city as even Columbians shifted some of their spending to these big boxes. On the other hand, some of these "shifts" in spending might be made up with Columbia's recently exhibited ability to attract higher value stores that are opening within the city limits. The opening of the Bass Pro shop may also have a significant effect of attracting more sales tax dollars from non city residents.

In short, the assumptions used here—such as the \$23 and \$47 per capita averages—should be considered by policy makers as guides to future fiscal planning, not as firm constants. Columbia will need to make every effort to remain competitive in the retail sector to assure at least constancy, if not net tax revenue growth.

3.2 Property Tax Revenues

The previous two measures suggest that adding to the sales tax burden of Columbians would require that above average amounts of local income would have to be devoted to sales taxes. To increase prospective street and road funds, therefore, perhaps the property tax might be called on to absorb some of the necessary taxation.



In 2003, the city's property tax revenues⁴ commanded some 0.33% of local per capita income. While property taxes are not necessarily as closely associated with income as sales taxes, income is still a good proxy for the ability of residents to pay such taxes. In this case, the 0.33% in 2003 was above the 1994-2003 average of 0.30%. Indeed, the city is projecting that property tax revenues as a portion of personal income will decrease only slightly in 2004 and 2005 to 0.32% each year—still above the 1994-2005 average which is also 0.30%.

This measure suggests that shifting some of the sales tax increase proposal to property taxes would also

⁴ This excludes all other taxes by relevant taxing jurisdictions such as the county or the school district. But it includes the public library property taxes for the area of the city within the 1965 city limits which define the library district to this day.

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burden local residents in ways they have not generally experienced in the past.

3.3 Excise Tax Capacity Analysis

Columbia officials are considering an excise tax for new development to help raise funds for transportation improvements that are needed to support this new development. The excise tax would, effectively, be charged to land developers when they obtain building permits. The exact amount of the tax would be based on a formula for the number of vehicular trips that are generated at the afternoon peak hour by that particular kind of land use.

The easiest means for understanding and comparing excise taxes is to consider the impact on the street system of new single family detached homes. The formula for determining excise taxes for single family homes indicates that they generate 1.01 vehicular trips during the peak time frame. Thus, for all intents and purposes, an excise tax of a certain dollar amount *per trip* means that single family homes effectively represent the "per trip" basis. Other land uses would have taxes based also on a per trip measure, but comparisons with other communities is made simpler by referring to growth in single family homes, not numbers of trips. The following analysis, therefore, focuses on single family home comparisons.

A national database of a sample of impact fees and excise taxes was obtained from the National Association of Realtors (NAR) for 130 cities in 25 states. The database includes fees and taxes for a wide range of public works including streets, schools, libraries, sewers, and the like. This analysis dealt only with the total amounts, however. Development Strategies added a few selected Census 2000 data items to the database in order to conduct some statistical analysis, described below. The cities, their total taxes/fees, and the Census data are shown on the table following this analysis.

Most of the cities tend to be relatively small and are located in outer suburban areas where most metropolitan growth takes place and where the pressures for added infrastructure are greatest. The data are utilized in this study are for the lowest fees charged per single family dwelling unit. While provided by the NAR, there were too few "high" numbers, so this analysis is based on the lowest fees charged—for which every city on the list has an entry. The average nationwide is \$3,860 per single family unit.

At issue is whether Columbia might reasonably charge an excise tax of some amount and how this amount relates to, say, the value of housing. To evaluate that issue, the relative growth pressures for each city were estimated using a ratio of median housing value to median household income (using 2000 Census data). The reasoning is that a high value-to-income ratio indicates a community with relatively higher demand for housing and, therefore, higher pressure on growth and the need for infrastructure. The average ratio for the 130 cities is 3.30, while the ratio for Columbia is above average at 3.51, slightly above the national average. This suggests that the excise tax for Columbia could also be set above average, or at least as high as the average of all 130 cities.

Since the basis of the data is single family homes, the next analysis was to compare an index of the ratio between the data on excise taxes and impact fees charged to the median value of housing (again using the 2000 Census). A higher index means that the tax/fee charged is a higher proportion of housing value. The average index is 2.57. If Columbia set its ratio also at 2.57, the excise tax would come out at about \$3,000. This is not quite the average of all cities, but certainly approaches it.

In short, Columbia's growth rate is slightly above average for cities charging excise taxes and impact fees. Thus, Columbia is a good candidate for considering and adopting an excise tax so that its street construction and maintenance can keep better pace with the rate of growth. The above analysis suggests that a reasonable excise tax is likely to be in the range of \$3,000 to \$3,800 per single family unit. While

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the tax can certainly be set higher if political will allows, this range keeps Columbia well within the range of communities with similar housing value and growth rate characteristics.

As a point of information, almost all excise taxes (and their related development exactions) are attempted to be passed on to the ultimate home buyer (or commercial tenant, etc.) in the form of higher prices. Thus, the homebuyer, as an example, will likely include that amount in the borrowed funds for a mortgage, effectively spreading the cost of the tax over the life of the mortgage loan. This would add about \$20 per month (\$240 per year) to a mortgage that borrows \$150,000 for 30 years at a seven percent interest rate.

Adding, say, a \$3,000 excise tax to the cost of developing new homes in Columbia will, other things being equal, add \$3,000 to price that a homebuilder needs to receive in order to recover costs. In the specific case of Columbia and Boone County, could this cause builders to prefer unincorporated areas to the city?

An approach to that answer is complicated, but must deal with the differentials in marginal costs to develop in the city vs. the county. Assuming all normal construction costs are the same (materials, labor, etc.), discussions with county planners suggests that, at present, it is perhaps a few hundred dollars per home cheaper to building in Columbia rather than in unincorporated areas. This difference has to do with variations in hookup fees for sewers and water and the like.

But there can be many added costs external to the home in unincorporated areas that are not reflected in the city. For instance, homes annexed into the city would be on the public sewer line. But unincorporated developers and builders are as likely to have to create their own sewer treatment systems, thus adding to the overall cost per home. On the other hand, developers suggest that improvements in technology for sewer treatment are pushing these costs lower per unit, so the added burden is decreasing over time.

Discussions with planners and developers reveal, primarily, that there is no clear consensus on the differential costs of building in one location or another. The county would prefer that most new development be included inside the city limits through annexation. This keeps the county from having to raise and devote resources to, say, manage subdivision regulations, leaving this task instead to municipal officials. Thus, close cooperation between city and county officials in the implementation of an excise tax can help to assure that the county encourages city growth and, thus, the collection of the tax to fund road improvements.

While the research literature on the topic of development exactions finds little evidence that growth is slowed because of those exactions, this doesn't exclude marginal effects. Almost certainly, based on economic theory, there will be potential homebuyers for whom the added tax/cost will prevent them from making the purchase (all other factors assumed to be equal) and there will be developers in unincorporated areas who will exploit the fact that the county does not impose such a tax in order to lure buyers to presumably less expensive housing. Available evidence to date, however, suggests that this "border differential" has been inadequately documented to draw specific conclusions about the amount of marginal effect on growth or the ability of certain households to purchase a property.

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NATIONAL DATABASE OF CITIES IMPOSING EXCISE TAXES OR IMPACT FEES							
Sources: National Association of Realtors, 2003 for impact fee information. U.S. Census 2000 for population and housing information.							
State	Place	Sum of Fees and Taxes*	Population	Median Housing Value	Median Household Income	Median HH Income to Median Housing Value	INDEX of Median Housing Value to Total Tax/Fee
MO	Columbia		84,780	\$118,500	\$33,729		
MO	Boone County		135,454	\$107,400	\$37,485		
AZ	Apache Junction	\$2,321	31,281	\$98,400	\$33,170	2.97	2.36
AZ	Avondale	\$4,045	35,802	\$129,200	\$49,153	2.63	3.13
AZ	Fountain Hills	\$10,369	20,199	\$217,200	\$61,619	3.52	4.77
AZ	Gilbert	\$7,028	109,936	\$157,300	\$68,032	2.31	4.47
AZ	Mesa	\$2,914	397,215	\$122,100	\$42,817	2.85	2.39
AZ	Oro Valley	\$4,082	29,662	\$177,400	\$61,037	2.91	2.30
AZ	Sedona	\$7,683	10,178	\$253,700	\$44,042	5.76	3.03
CA	Bakersfield	\$4,914	247,385	\$106,500	\$39,982	2.66	4.61
CA	Calimesa	\$3,303	7,371	\$131,900	\$37,849	3.48	2.50
CA	Ceres	\$5,697	34,534	\$119,900	\$40,736	2.94	4.75
CA	Coronado	\$2	24,226	\$683,400	\$66,544	10.27	
CA	El Centro	\$2,154	37,801	\$104,300	\$33,161	3.15	2.07
CA	Escondido	\$13,966	133,528	\$192,600	\$42,567	4.52	7.25
CA	Folsom	\$13,147	51,912	\$228,700	\$73,175	3.13	5.75
CA	Garden Grove	\$2,745	165,710	\$199,700	\$47,754	4.18	1.37
CA	Hesperia	\$1,737	62,578	\$95,900	\$40,201	2.39	1.81
CA	Lemoore	\$5,608	19,524	\$110,900	\$40,314	2.75	5.06
CA	Montclair	\$2	33,119	\$135,700	\$40,797	3.33	
CA	Pismo Beach	\$8,239	8,537	\$313,100	\$46,396	6.75	2.63
CA	Rancho Sta Margarita	\$1,560	47,718	\$280,700	\$78,475	3.58	0.56
CA	Santa Maria	\$7,809	77,113	\$145,600	\$36,541	3.98	5.36
CA	Signal Hill	\$25,993	9,273	\$202,600	\$48,938	4.14	12.83
CA	Susanville	\$840	13,574	\$103,800	\$35,675	2.91	0.81
CA	Truckee	\$1,901	13,967	\$247,800	\$58,848	4.21	0.77
CA	Turlock	\$3,147	55,488	\$128,300	\$39,050	3.29	2.45
CA	Upland	\$7,902	68,427	\$211,000	\$48,734	4.33	3.75
CA	Victorville	\$2,343	64,516	\$98,700	\$36,187	2.73	2.37
CA	Yucaipa	\$14,179	41,299	\$140,000	\$39,144	3.58	10.13
CO	Boulder	\$10,063	94,510	\$304,700	\$44,748	6.81	3.30
CO	Breckenridge	\$3,200	2,366	\$580,100	\$43,938	13.20	0.55
CO	Brighton	\$10,907	20,882	\$146,500	\$46,779	3.13	7.45
CO	Colorado Springs	\$5,152	360,798	\$147,100	\$45,081	3.26	3.50
CO	Grand Junction	\$725	42,225	\$121,500	\$33,152	3.66	0.60
CO	Littleton	\$4,731	40,416	\$192,200	\$50,583	3.80	2.46
CO	Longmont	\$14,250	71,303	\$177,900	\$51,174	3.48	8.01
CO	Westminster	\$2,338	101,197	\$170,400	\$56,323	3.03	1.37
CO	Windsor	\$11,587	10,138	\$158,600	\$54,976	2.88	7.31

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DE	Lewes	\$1,750	2,902	\$241,500	\$48,707	4.96	0.72
FL	Aventura	\$1,555	25,267	\$225,900	\$44,526	5.07	0.69
FL	Cape Coral	\$4,137	102,206	\$110,800	\$43,410	2.55	3.73
FL	Clearwater	\$3,212	107,925	\$100,500	\$36,494	2.75	3.20
FL	Deltona	\$569	69,818	\$82,200	\$39,736	2.07	0.69
FL	Green Cove Springs	\$1,387	5,534	\$76,000	\$33,487	2.27	1.82
FL	Lakeland	\$2,639	78,162	\$81,100	\$33,119	2.45	3.25
FL	Melbourne	\$3,658	71,371	\$85,400	\$34,571	2.47	4.28
FL	Mount Dora	\$6,523	9,422	\$110,700	\$36,086	3.07	5.89
FL	Ocala	\$1,359	45,622	\$77,600	\$30,888	2.51	1.75
FL	Port St. Lucie	\$3,463	88,796	\$88,700	\$40,509	2.19	3.90
FL	Royal Palm Beach	\$1,121	21,564	\$114,900	\$54,766	2.10	0.98
FL	Tampa	\$2,445	303,512	\$81,500	\$34,415	2.37	3.00
FL	Wellington	\$1,743	38,036	\$164,800	\$70,271	2.35	1.06
GA	Acworth	\$500	13,494	\$128,100	\$50,918	2.52	0.39
GA	Hinesville	\$1,000	30,534	\$77,700	\$35,013	2.22	1.29
GA	Peachtree	\$1,193	31,896	\$190,900	\$76,458	2.50	0.62
GA	Roswell	\$1,937	79,844	\$207,700	\$71,726	2.90	0.93
GA	Tyrone	\$1,075	3,865	\$149,500	\$63,080	2.37	0.72
ID	Jerome	\$6,900	7,634	\$70,100	\$30,074	2.33	9.84
ID	McCall	\$7,315	2,175	\$151,300	\$36,250	4.17	4.83
ID	Meridian	\$529	34,858	\$121,200	\$53,276	2.27	0.44
ID	Mountain Home	\$2,441	11,458	\$91,400	\$37,307	2.45	2.67
ID	Sandpoint	\$372	6,913	\$111,100	\$32,461	3.42	0.33
IL	Carpentersville	\$2,365	30,287	\$116,300	\$54,526	2.13	2.03
IN	Fishers	\$3,817	38,937	\$161,500	\$75,638	2.14	2.36
KS	Tonganoxie	\$1,500	2,759	\$93,700	\$44,278	2.12	1.60
KS	Wichita	\$1,440	343,997	\$78,900	\$39,939	1.98	1.83
ME	Saco	\$2,465	16,822	\$119,800	\$45,105	2.66	2.06
MD	Centreville	\$2,335	1,925	\$123,800	\$41,100	3.01	1.89
NV	Sparks	\$2,897	66,532	\$143,700	\$45,745	3.14	2.02
NH	Bedford	\$6,709	18,274	\$218,300	\$84,392	2.59	3.07
NH	Manchester	\$1,822	107,006	\$114,300	\$40,774	2.80	1.59
NH	Bow	\$7,683	7,138	\$169,400	\$79,329	2.14	4.54
NH	Windham	\$2,500	10,709	\$230,100	\$94,794	2.43	1.09
NC	Carrboro	\$4,407	16,704	\$172,800	\$33,527	5.15	2.55
OH	Lebanon	\$4,290	16,848	\$129,900	\$46,856	2.77	3.30
OH	Oxford	\$20	22,087	\$139,400	\$25,164	5.54	0.01
OH	Sidney	\$580	20,264	\$87,600	\$38,663	2.27	0.66
OK	Norman	\$850	95,693	\$95,400	\$36,713	2.60	0.89
OK	Stillwater	\$493	38,968	\$96,700	\$25,432	3.80	0.51
OR	Cottage Grove	\$864	8,537	\$113,500	\$30,442	3.73	0.76
OR	Fairview	\$4,919	7,666	\$184,900	\$40,931	4.52	2.66
OR	Hermiston	\$907	13,417	\$99,700	\$35,354	2.82	0.91
OR	Irrigon	\$4,572	1,693	\$87,100	\$35,799	2.43	5.25
OR	Klamath Falls	\$3,078	19,335	\$86,600	\$28,498	3.04	3.55
OR	La Grande	\$525	12,253	\$91,700	\$31,576	2.90	0.57
OR	Molalla	\$8,347	5,543	\$146,900	\$42,672	3.44	5.68
OR	Newberg	\$4,280	18,113	\$141,500	\$44,206	3.20	3.02
OR	Redmond	\$3,369	13,815	\$111,800	\$33,701	3.32	3.01

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OR	Salem	\$6,478	136,694	\$131,100	\$38,881	3.37	4.94
OR	Tangent	\$1,461	917	\$153,000	\$44,231	3.46	0.96
OR	Tigard	\$8,280	41,261	\$188,600	\$51,581	3.66	4.39
OR	Veneta	\$5,552	2,529	\$128,200	\$37,326	3.43	4.33
OR	Wilsonville	\$10,237	13,905	\$227,900	\$52,515	4.34	4.49
RI	East Greenwich	\$8,178	12,948	\$244,900	\$70,063	3.50	3.34
TN	White House	\$1,245	7,241	\$116,100	\$51,649	2.25	1.07
TX	Boerne	\$2,637	6,108	\$114,500	\$42,009	2.73	2.30
TX	Carrollton	\$684	109,215	\$125,900	\$62,406	2.02	0.54
TX	Cibolo	\$1,227	3,169	\$127,400	\$53,780	2.37	0.96
TX	Colleyville	\$6,956	19,574	\$267,100	\$117,419	2.27	2.60
TX	McKinney	\$1,700	54,384	\$148,100	\$63,366	2.34	1.15
TX	Marble Falls	\$468	4,972	\$84,600	\$30,880	2.74	0.55
TX	Pflugerville	\$1,684	16,366	\$134,900	\$71,985	1.87	1.25
TX	Plano	\$1,708	222,301	\$162,300	\$78,722	2.06	1.05
TX	Saginaw	\$1,838	12,397	\$85,000	\$55,549	1.53	2.16
UT	Holladay	\$450	14,551	\$273,100	\$66,468	4.11	0.16
VT	Richmond	\$980	4,090	\$136,000	\$57,750	2.35	0.72
VT	Shelburne	\$1,658	6,944	\$184,600	\$68,091	2.71	0.90
VT	Burlington	\$1,956	38,889	\$131,200	\$33,070	3.97	1.49
WA	Bainbridge	\$4,390	20,308	\$335,000	\$70,110	4.78	1.31
WA	Carnation	\$1,378	1,905	\$198,400	\$60,156	3.30	0.69
WA	Duvall	\$6,435	4,647	\$252,200	\$71,300	3.54	2.55
WA	Federal Way	\$2,710	83,233	\$171,700	\$49,278	3.48	1.58
WA	George	\$2,530	510	\$85,000	\$21,181	4.01	2.98
WA	Gig Harbor	\$10,437	6,593	\$215,400	\$43,456	4.96	4.85
WA	Kenmore	\$3,308	18,540	\$246,000	\$61,756	3.98	1.34
WA	Kirkland	\$1,578	44,986	\$283,100	\$60,332	4.69	0.56
WA	Lynden	\$4,460	9,093	\$157,400	\$42,767	3.68	2.83
WA	Milton	\$2,134	5,831	\$161,100	\$48,166	3.34	1.32
WA	Mount Vernon	\$6,586	26,297	\$142,000	\$37,999	3.74	4.64
WA	North Bend	\$1,571	4,893	\$273,400	\$61,534	4.44	0.57
WA	Pasco	\$565	31,976	\$93,000	\$34,540	2.69	0.61
WA	Sedro-Woolley	\$5,715	8,698	\$123,400	\$37,914	3.25	4.63
WA	Snohomish	\$4,687	8,454	\$179,500	\$46,396	3.87	2.61
WI	Cedarburg	\$2,282	10,775	\$179,900	\$56,431	3.19	1.27
WI	Cottage Grove	\$1,490	3,962	\$163,600	\$66,628	2.46	0.91
WI	De Pere	\$350	20,545	\$122,100	\$50,282	2.43	0.29
WI	Franklin	\$983	29,556	\$156,400	\$64,315	2.43	0.63
WI	Grafton	\$10,000	10,319	\$145,800	\$53,918	2.70	6.86
WI	Mayville	\$200	4,891	\$102,100	\$42,393	2.41	0.20
WI	New Berlin	\$493	38,362	\$162,100	\$67,576	2.40	0.30
WI	Oak Creek	\$571	28,456	\$139,100	\$53,779	2.59	0.41
WI	Waunakee	\$939	8,975	\$175,300	\$59,225	2.96	0.54

* Includes fees and taxes for streets, libraries, schools, parks, sewers, and other public works.

4.0 Effects on Community Growth and Development

Of concern to many communities that consider excise taxes or impact fees is the potential for such "added

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costs" of development to discourage or slow down the growth process. This section summarizes a selection of professional literature that addresses that question. The crucial conclusion is that, in fact, excise taxes or impact fees (terms frequently lumped into "development exactions" in the literature when addressing this question) range from having a neutral effect to actually encouraging growth.

1. Downing, Paul and McCaleb, Thomas. "Chapter 3: The Economics of Development Exactions." Development Exactions. Ed. James E. Frank and Robert M. Rhodes. Chicago: American Planning Associations, 1987. 42-69.

The authors of this chapter address the economics of development fees, believing that extractions, or fees, provide an adequate means for addressing the costs of new development when the level of the funding is equal to the actual cost which the growth imposes on the community. The authors believe, however, that existing formulas used to calculate the cost of growth do not properly meet the criteria for economic efficiency. In essence, the analysis suggests that most exactions are under-priced in terms of the added public costs that development causes.

"To the extent that exactions reflect the true costs imposed by new development on the community, we treat them as prices to be paid for the public services provided to the new development rather than as prices paid for the right to develop." (43).

"Based only on the estimates of density costs, property value differentials would have to be quite large for the additional tax revenues to cover the full costs without increasing tax rates. Furthermore, the adoption of use valuation for property taxes impedes the operation of the prepayment mechanism. On balance then, the property taxes paid by new development are unlikely to be sufficient to cover the cost of the public services provided." (50).

2. American Planning Association: Policy Guide on Impact Fees. Ratified by Board of Directors, Cincinnati, Ohio, October 1988. Revised and updated, San Diego, California, April 1997. Ratified by Board of Directors, San Diego, California, April 1997.

The APA Board found that exactions do not appear to slow development but are necessary measures, in part, to meet the growing infrastructure needs of growing communities because of declines in revenue sharing programs from states and the federal government. Moreover, local governments seem to be using development exactions as a way to forestall increases in the general property tax—thus shifting more of the burden of new development onto that new development rather than spreading it over the entire community.

"There has been little to demonstrate that the imposition of a fee system has stifled development. The fees supplement local government resources that otherwise have decreased because of diminished state and federal transfers of funds. Local governments have also used impact fees to delay, or as a substitute for, general property tax increases." (Findings, 1).

The APA goes on to insist that local governments rely on a variety of tools to manage their growth, and that such tools as impact fees are but one approach. In this case, the APA also warns communities not to use such fees to stop growth—presumably by setting them so high that development could not afford to take place at all. Development Strategies found no evidence of this practice in other literature research.

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"It is important that communities rely on zoning and other land use regulations, consistent with a comprehensive plan, to influence patterns of growth and to more accurately predict new infrastructure needs. However, in areas facing development moratoria because of lack of adequate public facilities, impact fees may be viewed not as growth stopping measures, but rather as growth facilitators. Impact fees should not be considered a panacea for funding of general capital improvements, nor should they be used to 'stop growth'. They can do neither." (Findings, 1)

Finally, of note is APA's recognition that impact fees cannot be used for maintenance and repair, just as Columbia concludes. Instead, they are useful in raising funds to pay for new infrastructure which, when incorporated into the existing infrastructure, then becomes part of the larger community tax base.

"...Since impact fees cannot be used to cover the staggering costs of maintaining and repairing the existing infrastructure, they can augment resources available or new infrastructure necessary to accommodate new growth, for which general revenue funding must be made available." (Policy 2, 2).

3. Nelson, Arthur and Moody, Mitch. Paying for Prosperity: Impact Fees and Job Growth. The Brookings Institution Center on Urban and Metropolitan Policy: Washington D.C., 2003.

The authors limit their definition of economic development to job growth and then proceed to describe research conducted to ascertain the link between impact fees and job growth, using Florida impact fees as the primary data source. The authors conclude that job growth is not negatively affected by impact fees and that the presence of impact fees actually makes it more possible for local governments to prepare infrastructure to attract and produce growth and to generate jobs.

"Academic literature suggests that the aggregate benefits of impact fees improve efficiency in the provision of infrastructure." (vi).

"While impact fees often do not reflect the full price of infrastructure improvements, fees do make the economic linkage between those paying for and those receiving benefits more direct, and so promote economic efficiency." (iv).

"In the absence of impacts fees, local governments may not have the revenue to accommodate growth. With impact fees, they gain necessary infrastructure—water, sewer, drainage, and road facilities—to open new parcels of land development." (vii).

"Impact fees do not slow job growth. In this study, we find, at minimum, that impact fees are not a drag on local economies. At most, impact fees are the grease that helps sustain job growth in the local economy." (vii).

"In practice, impact fees bridge the gap between the cost of new municipal infrastructure and available funds." (1).

"The fundamental purpose of impact fees is to generate revenue to build infrastructure serving new development... In the absence of impact fees, local governments may have difficulty raising the revenues necessary to accommodate growth, in terms of paying for new and costly

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infrastructure." (7).

"From an economic development perspective, the availability of key infrastructure such as water, sewer, drainage, and roads to make land buildable is perhaps the important ingredient to increasing the supply of the land commensurate with development pressures." (7).

"...impact fees appeared to reduce the uncertainty and risk of development and are often used to leverage the use of other non-impact fee funds to expand infrastructure." (7).

"Our statistical analyses find a significant positive association between impact fees collected per building permit in one year and job growth over the next two years."

"...impact fees spent on infrastructure development are not a drag on local economies with respect to job growth but, instead can be beneficial to them. A conservative interpretation would at least claim that no discernable adverse economic impacts from impact fees could be found. A liberal interpretation of these model results would argue that the imposition of impact fees typically results in positive effects on local employment..." (15).

"Indeed, impact fees may be needed to sustain growth particularly if the alternative is an inability to expand infrastructure to meet the needs of new development." (15).

4. Theis, Joel R., and Giardina, Richard D. "Impact Fees: A Vote of Confidence for Economic Growth?" Published by Rick Giardina & Associates, Inc.

This essay seeks to examine the effect that impact fees have on growth in America's best performing cities. They conclude that the reports' findings are reasonable. The authors use data points from both reports to show that, in those cities where impact fees are in place, growth is not hindered.

"...Impact fees are a widely used infrastructure funding source that has been opposed by developers as a deterrent to economic growth."

"Although there are many who oppose impact fees under the premise that they limit or restrict growth and economic development, there is little empirical or quantitative evidence to support this conclusion. In fact, there is some evidence that impact fees can act as a precursor or impetus to growth, especially if implemented appropriately and with careful consideration of their application."

"In summary, with careful planning, impact fees can provide the funding source to maintain service levels in a growing community. As such, they can represent an affordable one-time entrance fee into a highly desirable place in which to live and conduct business... In this way, instead of being viewed as a deterrent to growth, impact fees may actually support growth."



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Growth boosts transportation costs

By BEN R. LONDEREE

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Consider three critical points about road needs and costs caused by growth in Columbia: First, at the current rate of growth, it will be necessary to build the equivalent of about 16 new lane-miles of major collector and arterial roads per year to maintain the status quo. A lane-mile is one lane one mile long. The total yearly cost just to keep up would be at least \$14 million. Second, construction costs per new daily afternoon peak flow trip are in excess of \$6,700. Third, failure to fund adequate road building will create numerous areas of unreasonable congestion.

Let's set the conditions that exist in Columbia. Growth has exceeded 2 percent per year in nine of the past 10 years. Consultants calculated a growth rate of 2 percent translates into about 2,100 new daily afternoon rush-hour trips per year. That number is derived from 900 single-family homes (909 trips); 300 apartment units (186 trips); and 400,000 square feet of industrial, office, retail and service areas (1,005 trips.) Traffic volume at peak afternoon flow determines the capacity needs of roads. Tables generated by International Traffic Engineers indicate the average single-family home generates about one afternoon peak flow trip and a Wal-Mart Supercenter more than 400 afternoon peak flow trips. Most growth is occurring three to seven miles from downtown. Therefore, it is reasonable to assume the average new one-way trip length will be 4 miles or more.

Several other assumptions will simplify the calculations and make the subsequent illustration intuitive.

- All travel will be over a newly constructed four-mile arterial road between points A and B with two signalized intersections per mile.
- In the current model, 75 percent of 2,100 trips (1,575) would go from Point A to Point B and the other 25 percent (525) would go from Point B to Point A in the morning. The direction of the flows would be reversed in the afternoon. When modeling road needs, traffic planners typically set opposing flows at about 75 percent and 25 percent during peak periods.
- No turns are permitted at the intersections, but normal delays will occur at the intersections anyway.
- There is no ride-sharing because typically commuters do not have common origins and destinations and are unlikely to share for such short trips.

These assumptions isolate the 2,100 yearly new afternoon peak flow trips on one hypothetical road and thus make the calculations clearer and intuitive. The assumptions should not influence the bottom-line results.

Our task is to determine how many lane-miles of road would be required in each direction to handle the 1,575 new daily peak flow trips in the morning and afternoon. Knowing the number of vehicle trips and the average distance they travel in a particular direction during the afternoon rush hour, the planner selects a road size that theoretically can just accommodate such flow (capacity). Obviously there would be a similar - actually slightly

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smaller - demand in the opposite direction during the morning rush hour. Then total road-building costs can be determined and allocated to each trip.

Traffic planners define capacity as the maximum number of vehicles on a roadway just below the volume that creates unreasonable congestion and erratic traffic flow. On a road with a free flow speed of 40 mph, average speed would fall below 13 mph when capacity is exceeded, according to the Transportation Research Board's Highway Capacity Manual, the industry standard.

According to Columbia's street design standards, a four-lane minor arterial has a theoretical capacity of about 600 to 800 vehicles per hour per lane. Thus two lanes in one direction would have a theoretical capacity of fewer than 1,600 vehicles per hour - a number that agrees with the Highway Capacity Manual. This number is close to the 1,575 trips per hour in our model. Therefore, the road would be near theoretical capacity in one direction in the morning and the other direction in the afternoon.

A four-lane minor arterial would cost about \$500 per running foot for suburban roads in Columbia, Assistant City Manager Bill Watkins says. It would be reasonable in Columbia to include at least one bridge when building a 4-mile-long road. Because part of the roads actually would be in urban areas, which increases the cost considerably, a cost adjustment was added, making the total cost \$14 million, or about \$6,700 per afternoon peak flow trip - see the calculations in the accompanying table. As an aside, to accommodate all 2,100 trips in one direction would require two two-lane arterial roads at a cost of \$18 million.

Stated another way, each new residence built at the perimeter of Columbia creates a need for arterial roads costing at least \$6,700. A new Wal-Mart Supercenter creates a need for arterial roads costing more than \$2.7 million. The developers of the site for the new Wal-Mart Supercenter at Broadway and Fairview recognize the necessity of good roads for the success of their new center and have pledged about \$6 million for area roadwork. If there were no growth, these costs would not occur.

If Columbia doesn't spend at least \$14 million each year for new roads to meet the needs of growth, the level of service for the entire network will decline. As growth eats away at our reserve capacity, congestion will increase. Instead of four or five highly congested areas that we now have - e.g., Interstate 70/Stadium, I-70/63, Stadium/Providence - we're likely to have dozens of highly congested areas in a few years depending on the gap between needs and improvements.

The large sum above does not include the costs of correcting existing deficiencies in the transportation network or maintenance for existing and future roads. The deficiencies include inadequate capacities and substandard roads; consultants say these costs are in the range of \$5 million to \$6 million per year for the foreseeable future. The cost of maintenance runs about \$1.5 million per year but will increase with the addition of roads.

To paraphrase the oil filter ad, you can pay for the roads now or you can pay for them later. One way or another, somebody is going to have to pay these huge costs - either with money to build roads or with a poorly functioning transportation network. The latter scenario probably would put a severe crimp on growth as quality of life deteriorates.

Who should pay these costs? Some say those who create the needs should pay for them with higher development fees. Some developments have created special tax districts, or TDDs, that charge an additional sales tax for purchases in the district - in essence a development fee with a twist. Some have proposed a user tax such as a gasoline tax. Some want taxpayers to pay for the roads with higher property and sales taxes. An advantage of any sales tax is that nonresidents who purchase items in Columbia help pay road costs. Some want to use growth management to reduce the need for new roads, e.g., increased density, mixed-use development, growth boundaries, pedestrian/cycling trails and even a moratorium on development.

The Transportation Advisory Committee has studied a mix of increasing development fees, increasing sales and property taxes, and creating TDDs to "spread the pain." The committee also has considered charging lower development fees for infill development in older neighborhoods and for smaller homes to address the affordability issue.

In summary, growth is creating about 2,100 new afternoon peak flow trips per year. The increased traffic will mean an increased demand for new roads - about 16 new lane-miles per year just to maintain the status quo. The cost of these new roads is at least \$14 million per year, or at least

\$6,700 per new trip. Current and proposed funding falls far short of meeting these needs and will lead to unreasonable congestion and reduced quality of life.

How would you have the city deal with these massive costs?

Ben R. Londeree is a member of the city's Transportation Advisory Committee and a member of the Boone County Smart Growth Coalition.

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Minority Report for Transportation Financing

By Ben R. Londeree and Houston Clyde Wilson

Generally we support the majority report relative to paying for maintenance and existing deficiencies of the transportation system. However we do not support the majority report in its recommendations for dealing with the costs of new growth or, as we see it, not dealing with the costs of growth. Not dealing with the cost of growth up front means that these costs are transferred to existing deficiencies in the future. In this report we discuss the cost of growth, what we see as shortcomings in the majority report, an alternative plan, and our response to critics of our plan.

Growth generates a need for new roads. This need is expressed best as new peak flow vehicle trips because the number of vehicles on the roads during rush hour determines the capacity requirements. (From this point forward we will use the term "trip" to refer to "peak flow vehicle trip" interchangeably.) It has been calculated that the cost of new roads needed to meet the demands of growth is about \$6,700 per trip.³ In the Existing Conditions Report prepared for our committee, consultants predicted that Columbia's growth will be about 2% per year for the foreseeable future generating at least 2,100 new trips each year.⁷ This growth rate will generate a need for about four miles of new four-lane arterial roads costing about \$14 million per year.³ Actually, Columbia's growth rate has been at or over 2% for nine of the last ten years.⁷ The last two years has seen an estimated growth rate of over 3%, based on an increased number of building permits (Bill Watkins, personal communication), which would put the total cost for new roads for growth needs at about \$20 million per year. These huge numbers for new roads dwarf the recent historical road expenditures of about \$5.3 million per year for all categories of road work: maintenance, correcting existing deficiencies, and new roads.⁷ So far these needs have been met mostly with a combination of treatment of trouble spots by the City and MoDOT and absorption of reserve capacity throughout the transportation system. Reserve capacity refers to the extra capacity designed into a road to accommodate future traffic volume increases. Periodically a new road is built or extended. Currently several roads become giant parking lots during the afternoon rush hour. If changes aren't made in the approach for accommodating new traffic, dozens of roads will become giant parking lots in the near future. Many of our existing deficiencies have occurred because we didn't address growth issues in the past. We need a comprehensive transportation plan with plenty of citizen input for meeting the needs of growth and/or managing growth. Of particular interest now, we must decide who is going to pay for the needs of growth; is it going to be those who create the needs, all Columbians, or some combination? In this minority report we are proposing that those who are creating the needs should pay for most of these costs.

An analysis of the majority plan

1. The upfront excise taxes/development fees are too low in the majority plan. The proposed fees will pay for only about 20% of the actual cost of new roads to serve the needs of residential growth and about 3% for commercial growth and, therefore, do not

fairly apportion new road construction costs to new development. Who is going to pay the remaining costs -80% for residential and 97% for commercial? We presume that off-site improvements will be required for large commercial developments bringing their contribution more in line with residential development; recently these costs have been financed with TDDs, i.e., a tax increase not approved by voters. Sales taxes for capital improvement projects (CIP) and property taxes are earmarked for other purposes (primarily existing deficiencies) in the proposed majority draft. We recognize that new growth will pay CIP sales and property taxes that are earmarked for existing road deficiencies. The current value of these payments would amount to an additional 17% of growth's transportation costs over 10 years, the length of the proposed taxes. Therefore upfront excise taxes/development fees, TDDs, and earmarked sales and property taxes for 10 years add up to 37% of the cost of new roads for new development, therefore leaving a deficit of 63%. The only conclusions we can derive from these data are that 63% of the transportation needs of new development are going to be unmet and dumped on the existing transportation system. The resulting congestion clearly will reduce the quality of life as we know it and undermine the engine of growth. Then voters will be asked to vote to raise taxes for roads again and again.

2. The rationale for an excise tax is that those who benefit should pay the tax in proportion to their benefit. However, the proposed excise taxes in the majority report are not related to expected road use as shown by the following examples.

- a. A structure in a commercial development which generates many more peak flow vehicle trips than a single family home² would pay no excise tax in the majority plan.
- b. An apartment or a condo generates slightly more than one-half as many peak flow vehicle trips per unit as a single family home² yet would pay the same excise tax as a single family home in the majority plan.
- c. Hotels and motels which generate many peak flow vehicle trips² are exempted from the excise tax in the majority plan.

3. The development fee assessed on the basis of square footage of the structures in the majority report is related poorly to expected road use.

- a. On average, a three bedroom house with 1,100 square feet of space probably would generate nearly as many trips as a three bedroom 2,400 square foot house. Traffic engineers use the same value of peak flow trip for all single family homes.²
- b. Different use groups of commercial development generate widely differing amounts of trips independent of structure size.² Within a use group there probably is some relationship between size and trip generation.²

4. The current method of negotiated exactions does not guarantee that the exactions will match the benefits. Exactions are required land donations for public infrastructure. The final agreement depends on the relative negotiating skills of the developer and City representatives and the process is not entirely public.

5. The origin of the idea for discounting fees for smaller homes was to address the affordability issue. Exempting the first 1,500 square feet of residential units does not address affordability because all residential development would get the same benefit.
6. The proposed excise tax and development fees are not inflation adjusted. The other taxes automatically increase with inflation. Therefore, without an inflation adjustment, development fees will become a relatively smaller contributor to road financing over the years.

Suggested alternative

1. There should be a transportation excise tax based on expected peak flow vehicle trip generation from the Institute of Traffic Engineers (ITE) tables.² In this manner all types of development will pay the same proportion of trip costs relative to their needs. The ITE tables are based on numerous entering and exiting traffic counts from various types of uses across the country. In the table below a few examples are provided showing the average number of trips generated by different kinds of uses. The proposed fee is based on 50% of the estimated trip cost as outlined in item #2.

<u>Use group</u>	<u>Peak flow trips²</u>	<u>Proposed fee</u>
Apartment unit	0.62	\$2,077
Single family home	1.01	\$3,384
Office (5,000 sq. ft.)	17.00	\$56,950
Fast food restaurant w/drive thru	62.09	\$208,002
Shopping center (250,000 sq. ft.)	690.00	\$2,311,500
Discount Superstore (175,000 sq. ft.)	407.75	\$1,365,963

2. The transportation excise tax should pay for about 50% of the estimated trip cost of the transportation needs of growth. The estimated trip cost probably is about \$6,700 per trip.³ Additionally, contributions of CIP sales taxes and property taxes earmarked for roads over the life of these taxes (2006-2016) will fund another 17% of the trip generation costs (using current values of these payments). The combined sources add up to 67% of the total cost. The remaining 33% of the costs could be funded with developer financed off-site improvements, TDDs and other sources (county, state, and federal.) *

3. The excise tax should be indexed to inflation of construction costs.

4. There should be a limited number (say 10% of all new single family homes per year) of grants for reduced fees (say 50% reduction) for affordable homes. If the approved number of applications exceeds 10% of all new single family homes, then the grants should be allocated by a fair procedure. Some mechanism should be in place to guarantee that the reduced fees are reflected in lower prices for the homes.

5. There should be grants for reduced fees for approved infill development. The discounts should be based on distance from the City center and/or specific locations selected *a priori*.

a. One specific location for attractive moderate density-moderate height projects is the residential areas surrounding the central city, the university, colleges, medical facilities, retail stores, and financial and government centers. An increase in residents from these institutions in the central region will reduce sprawl and the need for new roads. Also, a mix of permanent and temporary residents has and does contribute to a safe and secure environment vital to an area featuring evening and late night activities - concerts, athletic events, theater, movies, lectures, coffee shops, ice cream parlors, restaurants, and bars. Infill, however, should not be taken as license for demolition of historically significant and/or economically viable structures.

b. One class of locations might be for attractive moderate density projects (owner occupied?) near to bus routes. Making it convenient to use buses will reduce the need for new roads.

6. There should be a requirement that a substantial part (say about 50%) of the excise tax from a development must be spent on transportation projects that benefit the development. Alternatively, this requirement would be met if it can be shown that the fees are used retrospectively for previously built reserve capacity. Developers likely would be more supportive of excise taxes if they could see a benefit for their projects.

7. Only if trip generation fees are at least 50% of the estimated trip costs as recommended in item #2 above and if offsite improvements exceed the scheduled trip generation fees, the excess costs may be credited toward a partial reduction in the excise tax (\$1 reduction for every \$2 spent for offsite improvements in excess of the scheduled excise tax.) For example, if the scheduled excise taxes are \$50,000 and the developer builds off-site improvements costing \$60,000, the excise taxes would be reduced by one-half of the extra \$10,000 (= \$5,000) so that the excise tax would be reduced to \$45,000. A developer could use this procedure to guarantee that his excise taxes are going toward road projects that would benefit his development. There would need to be a procedure to protect against abuse of such a policy, e.g., approval of City Council or pre-approved standards. To repeat, we recommend this excise tax offset only if the excise tax is at least 50% of the per peak flow trip cost!

With this plan, growth will pay most of its own way. Financing will be self modulating. When growth is rapid, more money will be available for new roads to match the increased needs. When growth is slower, there will be less money but the need will be lower as well. When growth pays its way, it will not be necessary to return to the voters for more transportation taxes every five or ten years.

Response to critics

1. Developers and City administrators state that high fees will drive development into the County. On the contrary, it has been determined that currently it costs at least \$10,000 more per lot to develop in the County.⁴ Therefore it is unlikely that fees would drive development into the County unless the fees are increased to near the \$10,000 per trip level. These cost differences explain why developers strive for annexation.
2. Developers and City administrators argue that higher development fees will slow down or stop economic growth. A comprehensive study of 67 counties in Florida showed that economic growth was not stifled by impact fees; in fact, economic growth tended to be higher in communities with impact fees. "Impact fees can directly fund vital infrastructure improvements, while increasing the supply of buildable land, improving predictability in the development process, and indirectly promoting local employment at the same time."⁶ Jobs will not be lost; in fact, they probably will increase.
3. Developers claim that higher development fees will make homes unaffordable. A study published by the Brookings Institute concluded that "...the market is the primary determinant of housing prices, and that sound growth management policies provide more affordable housing than traditional policies."⁵ A study published in the Journal of Planning concluded that "...impact fees contribute to housing price inflation (sic) in communities where there are no reasonable housing substitutes and the tax burden and infrastructure enhancements are capitalized into the price of home and land."¹ Taken together these studies suggest that a sound growth management plan can negate the effect of development fees on the price of housing. The greatest impact on affordability is on small homes built for first time buyers. Therefore we propose offsetting grants to address the affordability issue for some smaller homes.
4. Developers complain that fees that they pay are spent on projects in other parts of the City and they do not benefit them. We feel that this is a legitimate concern and have proposed that at least 50% of the fees should be spent on projects that provide a benefit to the developer. If nearby roads have adequate capacity already, the fees could be used to pay for the use of this reserve capacity. If the developer is required or decides to pay for off-site improvements in excess of his scheduled excise taxes, then his excise taxes would be reduced \$1 for every \$2 spent above the scheduled excise taxes.
5. City administrators state that higher transportation excise taxes will deter commercial development. We argue that these companies recognize the importance of adequate infrastructure to support their activities. They also will recognize that failure to pay for roads up front will result in inadequate infrastructure and the possibility of major tax increases in the future. Quality of Life issues will outweigh the effect of justifiable excise taxes. We have proposed that 50% of the transportation excise taxes should be used to benefit the specific development. The developer can insure these benefits with additional off-site improvements resulting in a reduction in excise taxes.

Summary

We have proposed an alternative plan for paying for the cost of growth. Our plan assigns costs proportionately to those who generate the needs. Infill development is encouraged with reduced fees. Affordability is addressed with a grant process. Part of the transportation excise tax must be spent to benefit the development which is the source of the funds. The transportation excise tax is tied to the inflation of the cost of construction index. If our plan is adopted, there may never be a need to raise sales tax or property tax for roads again.

Annotated Bibliography

1. Evans-Cowley, Jennifer S. "The Effects of Impact Fees on the Price of Housing and Land: A Literature Review. Journal of Planning Literature. Volume 17, No. 3, 351-359, 2003.

"The review of literature suggests that impact fees contribute to housing price inflation (sic) in communities where there are no reasonable housing substitutes and the tax burden and infrastructure enhancements are capitalized into the price of home and land."

2. Institute of Traffic Engineers. Trip Generation Manual. Institute of Traffic Engineers, 6th ed., 1977.

This book represents the results of numerous (often hundreds) of entering and exiting traffic count studies at various types of use groups from all over the country. In its 6th edition, it is the industry standard.

3. Londeree, Ben R. "Growth boosts transportation costs." The Columbia Daily Tribune, Sunday, March 13, 2005.

This paper uses a growth rate of about 2% for Columbia that will result in at least 2,100 new peak flow vehicle trips each year. This growth will require four miles of four-lane arterial roads costing about \$14 million each year or \$6,700 per new peak flow trip.

4. Londeree, Ben R. "Why City Development Fees Don't Drive Developers into the County." Unpublished paper.

The paper concludes that economic cost of developing in the County exceeds the cost of developing in the City by at least \$10,000 per lot. The additional costs include sanitary sewers, offsite road improvements, obtaining a water source, submittal of a development plan concurrently with a rezoning request, bonding, red tape and "hassles", longer time for approval increases interest costs, and poorer services.

5. Nelson, Arthur C. et.al. The Link Between Growth Management and Housing affordability: The Academic Evidence. Brookings Institute, 2002.

"This paper is a comprehensive review of academic literature on the link between growth management and housing affordability." Growth management tools included development fees. "The paper concludes that the market is the primary determinant of housing prices, and that sound growth management policies provide more affordable housing than traditional policies."

6. Nelson, Arthur C. and Mitch Moody. "Paying for Prosperity: Impact Fees and Job Growth." Brookings Institute, 2003.

The study compared 67 Florida counties with and without impact fees over a period of six years versus the previous moving ten year average and showed that those with impact fees experienced more economic growth than those without impact fees. "Impact fees can directly fund vital infrastructure improvements, while increasing the supply of buildable land, improving predictability in the development process, and indirectly promoting local employment at the same time."

7. Stinson Morrison Hecker, LLP, TranSystems Corporation, and Development Strategies, "The Development of a Comprehensive Strategy: Existing Conditions Report." A report to the Transportation Finance Advisory Committee, October 7, 2004, pages 6 and 20 are referenced in this paper.

The report identifies trends, conditions, and transportation needs existing in Columbia.

**Recommendations by the Government Affairs Street Funding Subcommittee Approved by
the Chamber Board of Directors
February 11, 2005**

1. The Chamber encourages the reduction of the overall scope of any road construction initiative to a 10 year period, instead of the 25 year time table now being discussed. Pending further review by its Government Affairs Committee and Transportation Committee, the Chamber may support a reduction in the target new construction amount from \$11.4 million to a lesser amount commensurate with a revised project list.

- The Chamber urges the City Staff to quantify and justify the consultants' overall need assumptions in terms of both dollars and specified projects. This information must be added to the TFAC proposal prior to the final TFAC recommendation.

2. In lieu of any increase in real estate property taxes, the Chamber recommends that funding derived from State reimbursements to the City for its share of annual Motor Vehicle Taxes (\$1,029,653 in 2003) and Gasoline Taxes (\$2,364,583 in 2003) should be dedicated to capital road (new) improvement projects.

3. Because of equitability and accountability considerations, the Chamber would offer its preference for the assessment of impact fees, or a blend of impact and targeted user fees, rather than relying exclusively on general excise taxes.

- Impact fees require the expenditure of collected fees for infrastructure improvements in the same zone or vicinity as the development that spurred the impact fees.
- Excise taxes would permit the expenditure of funds anywhere in the City and, perhaps, for non-road expenditures; excise taxes could remain a viable option if, and only if, the applications of these funds were stipulated for roadway associated infrastructure improvements.

4. The Chamber encourages the expedient development and publication of a map illustrating that part of the City where (1) any impact fee or excise tax would be reduced or waived; and/or (2) any incentives would be extended.

5. The Chamber encourages at least 2 "town hall" meetings where the public can be invited to view the list of street projects proposed to be built with the new funding. City staff should formulate a means for the public to prioritize street projects by a ballot or some other ranking mechanism.

- If the public feels their views would be considered, the chances of approving ballot initiatives would probably increase.

6. The Chamber could support a reasonable impact fee on residential new homes and commercial developments if it was understood that any Planned District proposal would be limited to such

fees. The practice of extracting developer contributions toward arterial and collector streets would thus be terminated.

7. The Chamber suggests that the trip charge variable, in the financial options formulated by the consultant, is difficult to administer, hard for the public to understand and results in inequities. Therefore, the Chamber recommends that other variables be used to calculate impact fees, such as square footage.

8. The Chamber urges the development of a sliding scale for impact fees on residential and non residential development based on square footage and the 14 Use Groups currently used by the City of Columbia Dept. of Protective Inspection.

9. The Chamber strongly supports the extension of the current 1/4 percent Capital Improvement Sales Tax to support street infrastructure improvements and recommends that the City consider an additional increase of 1/8 percent to provide a total of 3/8 percent. This will provide approximately \$8.4 Million Dollars in revenue.

10. The Chamber urges that the City consider a ballot issue extending the current 1/8th percent park tax (expiring in March 2006) to redirect that funding to support street infrastructure improvements. This will provide approximately \$ 2.8 Million Dollars in revenue.

Item for consideration:

The Chamber asks the City to consider new sources of funding for (new) road construction projects, such as the implementation of an annual automobile license fee. For instance, 57,287 vehicles at \$25 per vehicle would provide \$1.5 million annually in new funding.