

Comparison of Infrastructure Financing Associated with New Development in Forty Midwest Cities

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City of Columbia, MO

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By Ben R. Londeree

This survey attempts to identify mechanisms used for financing off-site infrastructure to meet the needs of new development in 40 communities in 11 mid-western states. Of primary interest is the use of development fees, impact fees, excise taxes, exactions, etc. paid by developers and/or builders. However, general comments will be included about the financing of off-site infrastructure with general revenue of the community and financing of on-site infrastructure. The states are Arkansas, Colorado, Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, Oklahoma, Tennessee, and Texas. The criteria for selection of the communities included: 1) large Missouri cities, 2) Missouri cities and cities in the Kansas City and St. Louis areas with a population increase of at least 15% from 1990 to 2005, 3) Big 12 communities, and 4) communities with a division la university in states abutting Missouri.

Community websites were studied to obtain as much information as possible about these financing issues. Some websites either didn't have the information needed for the survey or I was unable to locate it. The most difficult to pin down is the category of exactions for off-site infrastructure because these typically are negotiated at the time of annexation, rezoning, or plan approval.

After the website search, the data were e-mailed to each community's CEO (mayor or city manager) to verify for accuracy and completeness. A second request was e-mailed to non-responders about four weeks later. Since many still did not reply, telephone calls were made to planning departments, public works departments, and others with excellent cooperation. In several cases, these calls helped to identify additional fees charged by a separate entity such as the county, metropolitan districts, benefit districts, co-ops, and private utilities.

The questions sent to the CEOs are shown below. The same information was requested during the telephone discussions, but the format varied depending on the responses from the responder.

1. When a new development occurs are there any development fees, impact fees, excise taxes, or tap fees that the developer or builder must pay to reimburse the city for **off-site infrastructure** that must exist or be enhanced to meet the needs of the development? I am referring to the water system, sewer system, arterial and collector roads, parks, stormwater system, library, fire stations, police stations, municipal buildings, schools, etc. I am **not** referring to fees for services such as inspections, plan reviews, or when the city connects a new structure to the water system. I am referring to charges to pay for the off-site water mains and treatment plant, etc. If your community has such fees, please enumerate them and provide details about and/or how to determine their magnitude for different types of developments/structures.
2. When a new development occurs are there any exactions of the developer that require him to:
 - a. upgrade roads and traffic control devices adjacent to the development
 - b. set aside land for a neighborhood park and/or equipping such park
 - c. extending off-site water mains, sewer mains, and roads to the edge of the development
 - d. set aside land for schools

e. other?

3. Does the developer pay for all on-site infrastructure or are some types of infrastructure supplied by the city or utility company? For example, some city utilities install on-site pipes or electrical equipment and recoup the cost in the monthly billings to all customers. Who pays for over-sizing of on-site infrastructure that is designed to meet the needs of future developments such as a planned city arterial road, water main, or sewer main?

4. Does the city have a stormwater ordinance that requires developers to detain stormwater on-site and release it over an extended period of time? If so, what is the allowable release rate? (This is a question for a stormwater engineer)

5. If your community has fees for off-site infrastructure, please provide an example of such fees for a typical 2,000 square foot single family detached home with 2 ½ baths and 2 car garage on a 10,000 square foot lot in a new medium-to-large subdivision. Please itemize the fees for each category of off-site infrastructure (roads, water, sewer, etc.) The examples provided will be used to generate a spreadsheet comparing the various categories of fees for off-site infrastructure for the different communities. (The purpose of specifying the characteristics in detail was to make the data comparable to the 2006 National Impact Fee Survey reported by Clancy Mullen of Duncan Associates.) (I don't recall any city supplying this information in this format.)

Results

Data were obtained from all of the selected cities and are provided in Appendix A. The 100% return is unusual in survey research and was due to the follow-up calls to appropriate staff in most of the cities. Columbia City Council members requested three additional study sites when this report was presented to them. The data from these additional cities are shown in Appendix B, but were not included in the overall analyses.

Infrastructure within the development (on-site) typically is financed by the developer with the possible exception of over-sizing to meet the needs of other developments. On the other hand, the costs of off-site infrastructure needed by new development are financed through many different mechanisms. In 39 communities, the developer, builder, and/or the eventual owner/end user pay for some (usually the case) or all of the costs. In 39 communities there are developer exactions that may include one or more of the following: off-site roads or on-site over-sizing of roads, water line extensions and/or over-sizing, sanitary sewer extensions and/or over-sizing, on-site detention of stormwater, and donation of park land. Builders in 26 of the communities pay development fees/excise taxes/impact fees (hereafter called development fees for simplicity) for roads (17 cities), water (18 cities), sanitary sewer (24 cities), parks (7 cities), and other categories (3 cities) typically with 2-3 different fees in each community with a range from 1 to 11 different fees. The total development fees for a 2,000 sq. ft. home averaged \$4,217.00 with a median value of \$2,660.00 with a range from \$715.00 to \$22,786.35. Columbia at \$1,200.00 was the fourth lowest of cities with fees. (I assumed that stormwater fees are waived with on-site detention.) One aberration occurred in the second table with Iowa City, IA. When the parking garage benefit district fee is included, Iowa City has the fifth highest total, but without the parking fee, the total fee is the lowest. The developer and builder pass on these costs with markups to the eventual owner/end user. However, some costs may be financed more directly

**Development Fees for A Single Family House with 2,000 Square Feet, 2 1/2 Baths on A Lot of 10,000 Square Feet,
Developer Exactions, and Stormwater Controls In Forty Midwest Cities**

Community	1990 pop.	2005 pop.	Change	Road Fee	Water Fee	Sewer Fee	Park Fee	Other *	Exactions^	Stormwater#
Fayetteville, AR	42,099	66,655	58%		\$ 363.00	\$ 985.00		\$ 312.00	R,W,S,P	100 yr det.
Boulder, CO	83,312	91,685	10%	\$ 1,978.04	\$ 9,710.00	\$ 2,225.00	\$ 1,793.85	\$ 4,349.46	R,W,S,P,St	\$2,730.00
Champaign, IL	63,502	71,568	13%			\$ 1,697.50			R,W,S,P	100 yr. det.
Evanston, IL	73,233	75,,236	3%						R,W,S,P,H	100 yr. det.
Urbana, IL	36,344	38,533	6%			\$ 1,697.50			R,W,S	50 yr. det.
Ames, IA	47,198	52,263	11%						R,W,S	100 yr. det.
Iowa City, IA	59,738	62,887	5%			\$ ~500.00		\$ 5,928.70	R,W,P	Reg./mo.
Lawrence, KS	65,608	81,816	25%		\$ 1,350.00	\$ 1,310.00			R,W,S	Reg./mo.
Lenexa, KS	34,034	43,434	28%	\$ 316.80	\$ 3,610.00	\$ 3,501.00	\$ 410.00		P,St	\$905.00
Manhattan, KS	37,712	48,668	29%						R,W,S,+	Reg./mo.
Olathe, KS	63,352	111,334	76%	\$ 2,187.00	\$2,400.00	\$2,745.00	\$ 520.00		W,S	10 yr. det.
Overland Park, KS	111,790	164,811	47%	\$ 2,150.00	\$ 3,610.00	\$ 3,501.00			R	Var 100 yr det
Lexington, KY (@)	225,366	268,080	19%	\$ 1,110.00		\$~1,313.00	\$ ~846.00		R,S,P,St	\$ ~1052.00
Louisville, KY	269,063	556,429	107%						R large only	
Belton, MO	18,150	24,140	33%	\$ 809.01	\$ 2,857.00	\$ 500.00			R,W,S	100 yr. det.
Blue Springs, MO	40,153	53,094	32%						R,W,S,P	100 yr. det.
Chesterfield, MO	37,991	47,020	24%	\$ 887.89		\$ 1,072.00			R,W,S	100 yr. det.
Columbia, MO	69,101	91,814	33%	\$ 300.00	\$ 400.00	\$ 500.00			R,W,S,	100 yr. det.
Hazelwood, MO	15,324	25,535	67%	\$ 887.89		\$ 1,072.00			S	100 yr. det.
Independence, MO	112,301	110,208	-2%	\$ 1,807.00					St	100 yr. det.
Joplin, MO	40,961	47,183	15%						St	\$~2110.00
Kansas City, MO	435,146	444,965	2%	\$ 715.00					R	100 yr. det.
Lee's Summit, MO	46,418	80,338	74%	\$ 1,001.00	\$ 2,734.00	\$~ 756.00			R,W,S	var. detention
Liberty, MO	20,459	29,042	42%	\$ 1,500.00	\$ 2,225.00	\$ 925.00			R,W,S	10 yr. det.
O'Fallon, MO	18,698	69,694	273%		\$ 2,500.00	\$ 2,500.00			R,P	var. detention
Raymore, MO	5,592	15,530	178%	\$ 1,500.00	\$ 1,956.00	\$ 1,956.00			R,W,S,P	100 yr. det.
St. Charles, MO	54,555	62,304	14%						R,W,S	100 yr. det.
St. Louis, MO	396,685	347,181	-12%							Reg./mo.
Springfield, MO	140,494	150,298	7%						R	100 yr. det.
Wildwood, MO >	32,884	34,831 (x3)	18%	\$ 887.89		\$ 1,072.00			R,W,S,P	100 yr. det.
Lincoln, NE	191,972	239,213	25%	\$ 2,466.00	\$ 1,261.00	\$ 624.00	\$ 334.00		R?,P	100 yr. det.
Norman, OK	80,071	101,719	27%		\$ 850.00	\$ 2,450.00	\$ 150.00		R,W,S,P	100 yr. det.
Stillwater, OK	36,676	40,906	12%	\$ 350.00	\$ ~141.50	\$ ~387.00			R,W,S	100 yr. det.
(cont.)										

**Development Fees for A Single Family House with 2,000 Square Feet, 2 1/2 Baths on A Lot of 10,000 Square Feet,
Developer Exactions, and Stormwater Controls In Forty Midwest Cities (cont.)**

Community	1990 pop.	2005 pop.	Change	Road Fee	Water Fee	Sewer Fee	Park Fee	Other *	Exactions^	Stormwater#
Knoxville, TN	165,121	180,139	9%						R,W,S	100 yr. det.
Memphis, TN	610,337	672,277	10%						R,W,S	10 yr. det.
Nashville, TN	488,374	549,110	12%						R,W,S,P	100 yr. det.
Austin, TX	465,622	690,252	48%		\$ x 550.00	\$ x 550.00			R,W,S,P	variable
College Station, TX	52,456	72,388	38%		\$ 550.00	\$ 300.00	\$ 358.00		R,W,S,P	variable
Lubbock, TX	186,206	209,737	13%						R,W,S	Reg./mo.
Waco, TX	103,590	120,465	16%						R,W,S	100 yr. det.
National ave. n=271 by Duncan Assoc. "				\$ 2,305.00	\$ 2,671.00	\$ 2,588.00	\$ 2,068.00	\$ 6,183.00		\$1,187.00

A blank cell means a zero.

* Other may include police, fire, library, city buildings, affordable housing, human services, parking garage, and/or education.

yr.=year, det.=detention, reg.=regional, mo.=billed monthly to all users

x Austin has four zones with combined water and sewer taps ranging from \$800 to \$2,700. The example is in the desired development zone at \$1,100

^ Developer responsibilities: R=off-site roads and/or on-site oversize, W=off-site water line extension and/or on-site oversize, S=off-site sewer line extension and/or on-site oversize, P=required parkland donation, St=off-site stormwater charge, +=others, and H=affordable housing

(@) Lexington/Fayette Co., KY - fees are paid/acre by developer - fees shown are per acre charge/4 to provide comparisons- also shown as exactions

> Wildwood was incorporated in 1995 - census figure in the 1990 column actually is for 2000 - the percent change was multiplied by 3 for comparison

" 2006 National Impact Fee Survey, Clancey Mullen, Duncan Associates, www.impactfees.com

Criteria for inclusion - at least one of the following

1. Large Missouri city
2. Population growth of at least 15% from 1990 to 2005 for cities in Missouri, Kansas near to Kansas City, or Illinois near to St. Louis
3. A Big 12 community
4. Cities in states abutting Missouri with division la universities

Survey conducted in 2007 by Ben R. Londeree of Columbia, Missouri Londereeb@missouri.edu

Total Fees per City Descending Order	
Community	Total
Boulder, CO	\$ 22,786.35
Overland Park, KS	\$ 9,261.00
Lenexa, KS	\$ 8,742.80
Olathe, KS	\$7,852.00
Iowa City, IA (See text)	\$6,428.70
Raymore, MO	\$ 5,412.00
O'Fallon, MO	\$ 5,000.00
Lincoln, NE	\$ 4,685.00
Liberty, MO	\$ 4,650.00
Lee's Summit, MO	\$ 4,491.00
Lexington, KY	\$ 4,321.00
Belton, MO	\$ 4,166.01
Norman, OK	\$ 3,450.00
Lawrence, KS	\$ 2,660.00
Joplin, MO	\$ 2,110.00
Wildwood, MO	\$ 1,959.89
Hazelwood, MO	\$ 1,959.89
Chesterfield, MO	\$ 1,959.89
Independence, MO	\$ 1,807.00
Champaign, IL	\$ 1,697.50
Urbana, IL	\$ 1,697.50
Fayetteville, AR	\$ 1,660.00
College Station, TX	\$ 1,208.00
Columbia, MO	\$ 1,200.00
Austin, TX	\$ 1,100.00
Stillwater, OK	\$ 878.50
Kansas City, MO	\$ 715.00
Average	\$ 4,217.00
S.D.	\$ 4,330.86
Median	\$ 2,660.00
P75-P25	\$ 2,961.88
National ave. n=271 by Duncan Assoc. "	\$ 8,868.00

See footnotes to previous table

with benefit districts and property liens. Note that national averages reported on the last line of the spreadsheet are higher than those reported in this study and total for the former (2nd table) is less than the sum of the individual values because most cities do not have fees in all categories.

Of particular interest regarding benefit districts is Manhattan, KS where the developer (or the city or petition by citizens) can request a benefit district for all infrastructure costs – both on-site and off-site. The city might participate if there are benefits to the general public. Twice yearly the city bundles all benefit districts and sells bonds. The costs are prorated to the individual lots with tax liens with a payback over a 10 year or 20 year period. Before bonding, the lot owner has the option of paying in full. A number of communities use benefit districts to provide infrastructure ahead of development. Then development fees are charged when the developer and/or builder connect to the system or tax liens (with inflation adjustments and/or interest) are placed on each piece of property and become due with development. Usually the instigator is the city, but in some situations the original developer must pay for oversized infrastructure and he is reimbursed as others connect to the system.

At least two cities in the survey have no undeveloped land: St. Louis, MO and Evanston, IL and it follows that they don't have development fees. In fact, redevelopment in St. Louis usually is accompanied with state and/or federal grants for infrastructure improvements.

Fourteen cities had no development fees. However, nine of these had less than a 15% population increase in 15 years and therefore had less demand for new infrastructure. One of these, St. Charles, MO, receives \$8-10 million per year for capital spending from a local casino. Twenty-four cities had a population increase of at least 15% in 15 years. Nineteen of these cities had development fees. The statistical test suggests that with faster growth, a city may be more inclined to use development fees. However logical this conclusion might be, this statistical test does not prove that it is the correct or only reason for enacting development fee ordinances. Actually, 7 cities with less growth have development fees.

	Less than 15% Growth	15% Or More Growth
Fees	7	19
No Fees	9	5

$\chi^2 = 11.6, p < 0.001$

Columbia, MO is the only city which uses planned districts as a way to exact off-site improvements from developers. Iowa City, IA primarily uses exactions for off-site improvements as a condition of annexation or zoning change, although I suspect that most communities use this form of leverage. It appeared that almost all of the other communities require off-site improvements with regular zoning if the development will place significant stress on the existing infrastructure.

Of the 17 cities which have a road fee, 11 use traffic generation as a basis for determining the fee for at least some zoning categories. In addition, Austin, TX has a monthly traffic impact fee which is based on the number of trips generated per day for the various zoning categories.

Twenty-one cities require on-site detention of the 100 year design storm event. An additional five communities require on-site detention of the 100 year design storm event for some developments depending on size the development or its location in the watershed. Five cities use regional detention with a monthly fee on utility bills. In four cities, the developer/builder pays a

stormwater fee. Lenexa gives a credit for on-site detention. Some cities have not completed work on EPA Phase II stormwater compliance matters.

In the following communities, cooperative and/or legal alliances exist with other cities and/or other agencies for all or some types of infrastructure.

Champaign, IL and Urbana, IL have a combined sewer treatment system and interconnector mains. Each city owns its respective non-interconnector mains and laterals.

Johnson County, KS provides water and sewers for Lenexa and Overland Park

St. Louis Metropolitan Sewer District is in charge of wastewater treatment and stormwater control in Chesterfield, Hazelwood, and Wildwood

St. Louis County administers a Traffic Generation Assessment in Chesterfield, Hazelwood, and Wildwood. Wildwood actually administers its own program but the fee is the same in all three communities.

Missouri-American Water Company, a division of the American Water Co., provides water for Chesterfield, Hazelwood, and Wildwood, MO

Illinois-American Water Company, a division of the American Water Co., supplies water to Champaign and Urbana, IL.

Lexington, KY and Fayette County have a combined government

Louisville, KY and Jefferson County have a combine government

Mid-America Regional Council (MARC) is a cooperative council of Kansas City area cities and five counties in Kansas and Missouri to deal with common and regional issues. Individual governments may adopt MARC recommendations.

The following cities had a 2005 population between 60,000 and 140,000 and a population increase of at least 15% from 1990 to 2005 which makes them reasonable comparison cities to Columbia. However, Columbia is the only one with a municipal electric system.

City	Development Fees	Exactions
Fayetteville, AR	W,S	R,W,S,P,St
Lawrence, KS	W,S	R,W,S
Olathe, KS	R,W,S,P	W,S,St
Columbia, MO	R,W,S	R,W,S,St
Lee's Summit, MO	R,W,S	R,W,S,St
O'Fallon, MO	W,S	R,P,St
Norman, OK	W,S,P	R,W,S,P,St
College Station, TX	W,S,P	R,W,S,P
Waco, TX	None	R,W,S,St

W=water, S=sewer, R=roads, P=parkland, St=on-site stormwater detention

Appendix A

Details for Study Cities

ARKANSAS

Fayetteville

- Water - buy in - \$308/service unit (water usage for an average single family detached home) (\$594 cost less debt and tax credits per service unit) (\$363.00 for a 2,000 sq. ft. single family home)
Treatment plant not included - owned by district of 4 cities
Other use groups pay fee based on number of service units times the fee per service unit
- Wastewater - buy in - \$835/service unit (\$1,097 less credits of \$262)
Other use groups pay fee based on number of service units times the fee per service unit (\$985.00 for a 2,000 sq. ft. single family residence)
- Parks – Donation of 24 acres of land per 1,000 homes
Fee in Lieu/single family unit or mobile home - \$555.000
/multi-family unit - \$393.00
No charge for other zoning categories
- Police & Public Safety - \$162/dwelling unit
- Fire Protection - \$150/dwelling unit
- Exactions - Abutting streets upgraded to standard at developer's expense. For large developments a traffic study is required and recommendations followed.
- Exaction – Water main extension at developer's expense with cost sharing for oversizing
- Exaction – Sewer main extended at developer's expense with cost sharing for oversizing
- Stormwater - Post-development peak discharge shall not exceed pre-development peak discharge for the 2, 10, and 100 year 24 hour design storm event.
- All on-site improvements are at developer's expense

COLORADO

Boulder

- Development Excise Tax (Non-residential - \$2.40/sq. ft.)
(Detached dwelling unit/attached or mobile)
- Police - \$249.91/\$166.44
- Library – \$390.40/\$260.13
- Fire - \$208.55/\$138.89
- Human Services - \$71.56/\$48.50
- Municipal Space - \$260.56/\$173.52
- Parks - \$1,793.85/\$1,196.50
- Recreation - \$448.48/\$299.14
- Transportation - \$1,978.04/\$1,194.13
- Housing Excise Tax - \$0.22/sq. ft. (for affordable homes)

Education Excise Tax - \$1.14/sq. ft. (up to 6,000 sq. ft.)
 Stormwater and Flood Management Plant Investment Fee which is equivalent to \$0.91/sf of new impervious area.
 Water PIF- \$7,770 to \$11,650+/\$5,830 to \$9,710+ (based on # of bathrooms and water demand)
 Wastewater PIF - \$1,485 to \$2,225+/\$1,115 to \$1,855+ (based on # of bathrooms and water demand))
 Exaction – Roads - Exactions are evaluated case by case based on impacts. Upgrades to infrastructure are required regularly. The city pays for oversizing in some cases. In other cases, the developer may set up a reimbursement agreement under which other benefiting properties provide reimbursement over time.
 Exaction – Water main extension – The developer pays for extending the water main. The city pays for oversizing in some cases. In other cases, the developer may set up a reimbursement agreement under which other benefiting properties provide reimbursement over time.
 Exaction – Sewer main extension - The developer pays for extending the sewer main. The city pays for oversizing in some cases. In other cases, the developer may set up a reimbursement agreement under which other benefiting properties provide reimbursement over time.
 Exaction – Parks – Large developments may be required to donate parkland.
 Stormwater – Post-development runoff characteristics shall not exceed pre-development characteristics for minor (water quality storm event) or major events (100 year design storm).
 All on-site improvements are at developer's expense

ILLINOIS

Champaign (Also see Urbana below)

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure charged by the city. All utilities are provided by private companies except sewage treatment and sewer interceptor mains which are owned by the Urbana-Champaign Sanitary District and other sewer lines which are owned by the respective cities and charge fees outlined below. However, the city paid for interceptors and mains to a large area opened for new development and is reimbursed as developers connect to the system.

Sewer Connection Fees – Champaign-Urbana Sanitary District

Interceptor Cost Recovery Fee – Developer pays \$180.00/population equivalent (PE) – Each single family residence is 3.5 PE. Used for maintenance of the interceptor lines.

Connection Fee - \$305.00/PE. Used for treatment plant maintenance.

Road Impact Fee – Under study for possible adoption.

Exaction – Developer pays to upgrade substandard abutting roads. For large developments the developer pays for a traffic study and makes recommended improvements.

Exaction – Developer pays for water main extension and is reimbursed as customers connect (1 ½ times cost of annual use until cost is recouped or 10 years, whichever is first). (Illinois-American Water Co.)

Exaction – Developer pays for sewer main extension.

Exaction – In large developments the developer may be required to include trails.
Parkland dedication is under study for possible adoption.
Stormwater - Storm sewers designed to handle a 10 year design storm are required on site. The overall stormwater plan must handle the 100 year event on-site. A fee in lieu is an alternative when regional detention is available. The fee will approximate actual costs.
On-site improvements at developer's expense

Evanston

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure. The land area is fully developed so that only redevelopment can occur.
Exactions – Roads – For large developments a traffic study is required and recommendations are used to guide negotiations for improvements to roads, turn lanes, alleys, signals, sidewalks, lighting, and streetscape.
Exaction – Water main extension is a developer expense. If oversizing is needed to improve fire flow, the developer pays for this also.
Exaction – Sewer main extension is a developer expense.
Exaction – Affordable Housing – About 3%-5% of units in a residential development expected to be affordable housing. An equivalent amount of money can be placed into an affordable housing fund.
Exaction – Open space is a requirement for large developments.
Stormwater – On-site detention of the 100 year event. Runoff not to exceed the 3 year storm event.
On-site improvements at developer's expense

Urbana

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure charged by the city. All utilities are provided by private companies except sewage treatment and interceptor mains which are owned by the Urbana-Champaign Sanitary District and sewer mains which are owned by the respective cities and charge fees outlined below. However, the city paid for sewer interceptors and mains to a large area opened for new development and is reimbursed as developers connect to the system.
Sewer Connection Fees – Urbana-Champaign Sanitary District
Interceptor Cost Recovery Fee – Developer pays \$180.00/population equivalent (PE) – Each single family residence is 3.5 PE. Used for maintenance of the interceptor lines.
Connection Fee - \$305.00/PE. Used for treatment plant maintenance.
Exaction – Developer pays to upgrade substandard abutting roads. For large developments the developer pays for a traffic study and makes recommended improvements.
Exaction – Developer pays for water main extension and is reimbursed as customers connect. (1 ½ times cost of annual use until cost is recouped or 10 years, whichever is first). (Missouri-American Water Co.)
Exaction – Developer pays for sewer main extension.
Stormwater - Storm sewers designed to handle a 10 year design storm are required on site. The overall stormwater plan must handle the 50

year event on-site with a release rate equal to the 5 year predevelopment release rate
On-site improvements at developer's expense

IOWA

Ames

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.
Exaction – Roads – City may require a developer financed traffic study with recommended improvements. City may share oversizing cost.
Exaction – Water – Developer responsible for extending water main.
Exaction – Wastewater – Developer responsible for extending sewer main.
*Note – If the city designates an area as a village, the city pays for extension of infrastructure.
Stormwater - Post-construction runoff shall be no more the pre-construction runoff as determined from storm events of 5-100 years. Includes a separate underground stormwater sewer system.
On-site improvements at developer's expense

Iowa City

Near Southside Parking Facility District - \$4,000 in 1992 dollars per dwelling unit
Sewer Districts (4) - \$208.08 to \$1,796.50/acre in sewer districts
Exactions - Connection to Water Main – total cost billed to developer
Exactions - Roads – prorated costs of abutting collector or arterial street upgrades including intersections and traffic signals as a negotiated condition for annexation and/or rezonings
Exaction - Open Space – Donation of 3 acres/1,000 people or fee equivalent to the value of 3 acres.
Stormwater - There is regional detention. Costs of the stormwater program are paid with a monthly Stormwater Utility Charge.
On-site improvements at developer's expense

KANSAS

Lawrence

Water system development charge – based on meter size and scheduled to increase each January 1st through 2009
5/8 “ \$1,350
1” \$3,370
1 ½ “ \$6,730
2 “ \$10,760
Progressively higher fees for larger connections
Wastewater system development charge - based on class or water meter size and scheduled to increase each January 1st through 2009
Residential \$1,310
All others

5/8 " \$2,390
1" \$5,980
1 1/2 " \$11,950

Progressively higher fees for larger connections

Impact fees – Discussions are ongoing for possibly implementing impact fees for parks and traffic corridors.

Exaction – Water main extensions up to 12" are at developer's expense

Exaction – Industrial and commercial developments may be required to pay a prorated traffic signal/control fee on nearby streets.

Exaction – PUD/commercial/industrial development may be required to pay for other off-site improvements including but not limited to streets, traffic signals, street lights, extension of water mains or sewer mains, intersections, and sidewalks.

Stormwater – The city has a major drainage area map. Generally stormwater is controlled regionally for the mapped area and supported by a monthly stormwater utility charge to all residents. On-site detention for a development only occurs if there are downstream flooding problems. The city will not pay anything or set up benefit districts for drainage of areas not on the map.

On-site and off-site improvements of streets (including bridges), sidewalks, or sanitary sewers may be financed with benefit districts up to 75% of the total cost using various methods of assessing each lot owner. Developer must arrange for financing the remaining 25%. Oversizing of infrastructure may be paid for by the city.

Other on-site improvements at developer's expense

Lenexa

Parks and Recreation Impact Fee

Residential - \$410.00/unit

Others - \$0.1083/sq. ft. of structures

Wastewater Connection Fee - \$2,334.00 per equivalent dwelling unit (EDU)

Wastewater is a function of Johnson County

Wastewater System Development Charge - \$1,167.00 per EDU

Wastewater system is a function of Johnson County

Water System Development Charge - Water District #1, Johnson County

A function of water meter size

5/8 " \$3,610.00

3/4 " \$5,415.00

1 " \$9,025.00

1 1/2 " \$18,050.00

2" \$38,880.00

Progressively higher costs for larger sizes

System Development Fee for stormwater flood control - \$905.00 per equivalent dwelling unit or 2,750 sq. ft. of imperviousness. Credit for on-site retention.

Transportation Improvement Program Fee - \$31.68/trip generated per day

Single family home - \$316.80 based on 10 trips/home/day

Other use groups based on area of construction or appropriate unit

Exaction - Excise Tax for Parks and Open Spaces - \$0.215/sq. ft. of plat area less rights of way for collector and arterial streets
Stormwater - When detention is required:
 Residential – 100 year storm event
 Commercial – 10 year storm event
On-site improvements at developer's expense

Manhattan

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.
However, infrastructure costs can be financed with tax free bonds packaged by the city and sold twice per year. Essentially these are improvement or benefit districts that can be initiated by the developer, citizens, or the city. The City of Manhattan is second only to Wichita among Kansas cities in the amount of City-sponsored debt financing for development. The City may participate as a funding partner in these developments in an amount which is proportionate to the City at-large benefit of the new improvements (e.g.: arterial connections, water/sewer lines with greater capacity than would be necessary to serve the development only, community trails), but those improvements that solely benefit the residents of the district are assessed at 100% to the benefit district. Property owners have a choice to pay up front or over 10 (or 20) years through tax billing.
Exaction – Roads – Traffic study and follow recommendations with city paying for oversizing.
Exaction – Water – Developer pays for water main extension with city paying for oversizing.
Exaction – Sewer – Developer pays for sewer main extension with city paying for oversizing.
Stormwater - City management system funded by a monthly stormwater charge to all residents. Currently city has no enforcement power for stormwater problems with developers but this will change in a few weeks with passage of a stormwater ordinance.
On-site improvements at developer's expense

Olathe

Transportation Improvements Excise Tax
 Initial Improvement (streets) Tax is \$0.215/sq. ft. of land
 Traffic Signal Improvement Tax
 Single family - \$0.0037/sq. ft.
 Multi-family - \$0.0120/sq. ft.
 Commercial - \$0.0576/sq. ft.
 Others - \$0.0098/sq. ft.
Park Excise Tax
 Residential - \$520/dwelling unit
 Commercial - \$0.13/sq. ft.
 Industrial - \$0.07/sq. ft.
System Development Fee for Water

Single Family & Duplex per dwelling unit \$2,400.00
Multifamily & Mobile Home per dwelling unit \$1,600.00
Non Residential - based on meter size

5/8 " \$2,400.00
1 " \$5,860.00
1 1/2 " \$11,625.00
2" \$ 18,550.00

Progressively higher costs for larger sizes

System Development Fee for Sanitary Sewers

Single Family & Duplex per dwelling unit \$2,745.00
Multifamily & Mobile Home per dwelling unit \$1,825.00
Non Residential – based on water meter size

5/8 " \$2,745.00
1 " \$6,720.00
1 1/2 " \$13,355.00
2" \$21,310.00

Progressively higher costs for larger sizes

Exaction -Sewer taps and extensions – at developer's expense

Exaction - Water taps and extensions – at developer's expense, city may pay for
oversize

Stormwater - On-site detention of the 10 year design storm for residential
developments and the 25 year design storm for commercial
developments. Release rate limited to pre-construction release rate
of the 10 year storm.

On-site improvements at developer's expense

Overland Park

Transportation Excise Tax - \$0.215/sq. ft. of land

Wastewater Connection Fee - \$2,334.00 per equivalent dwelling unit (EDU)

Wastewater is a function of Johnson County

Wastewater System Development Charge - \$1,167.00 per EDU

Wastewater system is a function of Johnson County

Water System Development Charge - Water District #1, Johnson County

A function of water meter size

5/8 " \$3,610.00
3/4 " \$5,415.00
1 " \$9,025.00
1 1/2 " \$18,050.00
2" \$38,880.00

Progressively higher costs for larger sizes

Exactions - Negotiated off-site traffic and roadway improvements for commercial
developments

Stormwater – Currently working on a new stormwater ordinance for new
developments. Currently detention is required only if there are
downstream problems – about 50% of the time. In such cases the post-
development runoff may not exceed pre-development runoff for the 5 to
100 year event.

On-site improvements at developer's expense

KENTUCKY

Lexington and Fayette County

There is an urban growth boundary of 85 square miles and within this region there are five expansion areas totaling 5,400 acres with varying exaction rate schedules shown as ranges below.

Sewer Transmission - \$1,736-\$7,084/acre

Sewer Capacity - \$1,651.00/acre

Sewer Connection - \$420.00 for a ¼ acre lot - more if on larger lot (This appears to be a development fee rather than an exaction.)

Roads - \$1,729-\$4,441/acre

Parks - \$1,411-\$2,386/acre

Stormwater - \$3,451-\$4,209/acre

Open Space - \$1,000/acre

Stormwater – Regional treatment preferred for small developments (<5 acres) but on-site treatment for larger developments. Small developments pay a fee in lieu unless the Director of LFUCG determines that there is minimal impact downstream. On larger developments post-construction peak flows shall not exceed pre-construction peak flows and BMPs must be in place to handle the Quality Storm event.

On-site improvements at developer's expense

Louisville and Jefferson County

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.

Exactions – Large developments may be required to improve abutting roads but it is decided case by case – occurs about 15% to 20% of the time.

Stormwater – Storm sewers are designed for the 10 year storm event. Discharge from development into channels must not cause an elevation downstream above the 100 year flood level.

On-site improvements at developer's expense

MISSOURI

Belton

Arterial street impact fee

Single family attached - \$809.01

Multi-family residential - \$496.62 per unit

Rental townhouse - \$576.72 per unit

Condo/townhouse owner occupied - \$416.52

Mobile home - \$472.59

Senior housing at lower rate

Hotel - \$472.59 per room

Motel - \$376.47 per room

Other - various rates (\$0.34-\$48.55 per sq. ft.)

Water tap fee – Based on meter size.

5/8 “ - \$2,857.00

¾ “ - \$4,762.00

- 1 " - \$7,619.00
- 1 ½ " - \$9,523.00 displacement meter
- 1 ½ " - \$19,047.00 turbine meter
- 2 " - \$19,047.00 displacement meter
- 2 " - \$30,475.00 turbine meter
- Progressively higher fees for larger connections
- Sewer tap fee – includes a connection fee and an improvement fee
 - Connection fee - \$30.00 per drain opening
 - Improvement fee - \$33.48 or \$42.61 depending on district
 - Residential fee is set at \$500.00
- Exactions - Water main extension at developer's expense
 - City usually pays the cost of oversizing on-site and off-site
- Exactions - Sewer main extension at developer's expense
 - City usually pays the cost of oversizing on-site and off-site
- Exactions - Negotiated road improvements based on developer financed traffic study
- Stormwater – Use the Kansas City Chapter American Public Works Association's 5600 Manual and Best Management Practices for Water Quality Manual. Post-development stormwater runoff must not exceed pre-development runoff for the 10, 25, and 100 year storm frequency of 24 hour duration.
- On-site improvements at developer's expense

Blue Springs

- There are no development fees, impact fees, or excise taxes to fund off-site infrastructure.
- Exaction - Land must be dedicated for abutting arterial expansion if not accessed
 - Improvements necessary for access to abutting arterials – improve to standards
 - Build or escrow cash for ½ of abutting non-arterials
- Exaction – parkland dedication
- Water main extension – at developer's expense
 - If oversizing is required, city pays for the differential material cost
- Sewer main extension – at developer's expense
 - If oversizing is required, city pays for the differential material cost
- Stormwater – Use the Kansas City Chapter American Public Works Association's 5600 Manual and Best Management Practices for Water Quality Manual. Post-development stormwater runoff must not exceed pre-development runoff for the 10, 25, and 100 year storm frequency of 24 hour duration.
- On-site improvements at developer's expense

Chesterfield

- Traffic Generation Assessment
 - Single family - \$887.89
 - Multifamily/retirement community – \$355.16/parking space
 - Office/restaurant/research center - \$542.56/ parking space
 - Motel/hotel - \$1,085.22/parking space

General retail/medical offices/shopping centers/nursing home/high turn
over sit down restaurant - \$1,627.78/parking space
Hospital/bank/drive in fast food restaurant - \$3,255.67/ parking space
Convenience store/gas station - \$10,851.97/parking space
Manufacturing - \$434.06/parking space
Warehouse - \$759.65/parking space
Recreational use - \$374.94/parking space
Mini warehouse - \$0.36/square foot
Car wash - \$54,278.07/acre
Loading space - \$2,663.66/space
Chesterfield Valley has special rates
Commercial - \$2.07/square foot
Office - \$1.44/square foot
Industrial - \$4,986.59/acre

Water - If available from Missouri American Water Co., developer pays for extension. If not, developer drills a well on each lot or provides a private system. When the developer's plumber makes a tap for extending the water main, an inspector from the water company must be present. A water tap for a customer involves a fee for service provided by the water company. However, for each new tap, the developer receives \$200.00 from the water company at the end of the year.

Chesterfield Valley has a special rate - \$654.66/acre

Sewer - If available from Metropolitan St. Louis Sewer District (MSD), extension is a developer expense. Otherwise individual septic systems or subdivision package system must be provided by the developer.

Sewer connection charge

Single family dwellings - \$1,072.00

Others are based on the water meter size

$\frac{3}{4}$ " " \$1,072.00

1" 1,669.00

1 $\frac{1}{2}$ " " \$3,031.00

2" \$4,736.00

Incremental increases with larger sizes

Multi-family dwellings have the option of paying \$713.00 per unit

Stormwater – Part of MSD and follows their rules. If differential runoff for the 15 year, 20 minute event exceeds 2 cfs then retention is required. The post - development peak flow can not exceed pre-development peak flow for the 2 year and 100 year, 24 hour events. Some watersheds have more stringent regulations due to flooding problems.

Chesterfield Valley has a special rate - \$2,077.15/acre

Exaction - When a development is adjacent to an existing street, the developer shall improve that street to city standards.

Exaction – If a planned arterial passes through a development, oversizing is a developer expense.

On-site improvements are at developer's expense

Columbia

Development Fee - \$0.15/sq. ft. of total floor area for collector and arterial roads (will increase to \$0.25/sq. ft. in 2008)

- Water Tap Fee – Currently \$400.00 across the spectrum of water meter sizes.
Fees likely will be increased in 2008 and in 2009 and be based on meter size and eventually represent an equity buy-in fee.
- Sewer Tap Fee - based on water meter size
- ¾ “ - \$500.00
 - 1” - \$833.00
 - 1 ½ “ - \$1,666.25
 - 2” - \$2,666.00
- Progressively higher fees for larger connection
Fees likely will be increased in 2008 and in 2009 and be based on meter size and eventually represent an equity buy-in fee.
- Stormwater Fee - 1-2 family residences \$0.09/sq.ft.
- Multi-family, offices, schools, churches \$0.16/sq. ft.
 - Commercial, industrial \$0.195/sq. ft.
- A new stormwater ordinance took effect in September 2007 and requires that flows from the development post-construction will be essentially the same as pre-construction for all design storm events from 1-100 years. It is performance based allowing developers to meet the prescribed level of service in numerous ways from a Design Manual. It is presumed that the above stormwater fee will be charged in rare instances with implementation of the new ordinance.
- Exaction - A common requirement for annexations and/or rezonings is Planned Districts instead of open zoning for medium and large developments with exactions for abutting roads and intersections as well as more control of on-site improvements.
- Exaction - Water main extension is a developer expense with city paying for oversizing.
- Exaction - Sewer main extension is a developer expense, usually from an 80 acre point in the watershed. The city pays for oversizing. Discussions suggest that the 80 acre point may change to the 100 or 120 acre point.
- On-site improvements at developer's expense except the city provides materials for the on-site electric infrastructure. Changes likely will occur as a result of a new electric rate study.

Hazelwood

Traffic Generation Assessment

- Single family - \$887.89
- Multifamily/retirement community – \$355.16/parking space
- Office/restaurant/research center - \$542.56/ parking space
- Motel/hotel - \$1,085.22/parking space
- General retail/medical offices/shopping centers/nursing home/high turn over sit down restaurant - \$1,627.78/parking space
- Hospital/bank/drive in fast food restaurant - \$3,255.67/ parking space
- Convenience store/gas station - \$10,851.97/parking space
- Manufacturing - \$434.06/parking space
- Warehouse - \$759.65/parking space
- Recreational use - \$374.94/parking space
- Mini warehouse - \$0.36/square foot

- Car wash - \$54,278.07/acre
- Loading space - \$2,663.66/space
- Water - If available from Missouri American Water Co., developer pays for extension. If not, developer drills a well on each lot or provides a private system. When the developer's plumber makes a tap for extending the water main, an inspector from the water company must be present. A water tap for a customer involves a fee for service provided by the water company. However, for each new tap, the developer receives \$200.00 from the water company at the end of the year.
- Sewer - If available from Metropolitan St. Louis Sewer District (MSD), extension is a developer expense. Otherwise individual septic systems or subdivision package system must be provided by the developer.
- Sewer connection charge – based on water meter size
 - Single family dwellings - \$1,072.00
 - ¾ “ \$1,072.00
 - 1” 1,669.00
 - 1 ½ “ \$3,031.00
 - 2” \$4,736.00
 - Incremental increases with larger sizes
 - Multi-family dwellings have an option of \$713.00 per unit
- Stormwater - Part of MSD and follows their rules. If differential runoff for the 15 year, 20 minute event exceeds 2 cfs then retention is required. The post-development peak flow can not exceed pre-development peak flow for the 2 year and 100 year, 24 hour events. Some watersheds have more stringent requirements because of flooding problems.
- On-site improvements at developer's expense

Independence

- License Surcharge - An excise tax based on trip generations by a structure. Trip generations are based on a peak hour trip schedule generated by the International Traffic Engineers. Full credits are applied to redevelopment areas – western portion of the city.
 - Residential/warehouse - \$1,760.00/trip
 - Residence - \$1,807.00 (1.01 peak hour trips)
 - Office/industrial - \$564.00/trip
 - Commercial/retail - \$1,760.00/trip
- There are no other development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.
- Stormwater – Use Kansas City Chapter American Public Works Association's 5600 Manual and Best Management Practices for Water Quality Manual. Post-development stormwater runoff shall not exceed pre-development runoff for 1 year through 100 year storm event.
- On-site improvements at developer's expense

Joplin

- There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure except for stormwater (see below). However, a sewer extension project was financed by special assessment on property owners.

A transportation sales tax funds road projects.
A parks/stormwater sales tax funds parks and stormwater projects.
Stormwater - Appears to be an option of on-site or regional control
 Regional buy-in for a residential development - \$8,441.32/acre
 Regional buy-in for other types of development - \$11,255.09/acre
On-site improvements at developer's expense

Kansas City

Transportation Excise Tax - 8 districts, 2 fee schedules
 Taxed at 50% of cost
 Single family detached – Tax - \$706 or \$715/dwelling unit
 Multi-family – Tax - \$432 or \$437/dwelling unit
 Mobile home park –Tax - \$391 or \$394/pad site
 Other uses mostly per 1,000 sq. ft. Tax - \$64 to \$5,222/1,000 sq. ft. - an extensive schedule.
Exactions - abutting roads with credit against Excise Tax
Stormwater – Use Kansas City Chapter American Public Works Association's 5600 Manual and Best Management Practices for Water Quality Manual. Post-development stormwater runoff shall not exceed pre-development runoff for 1 year through 100 year storm event. LID and rain gardens encouraged.
On-site improvements at developer's expense

Lee's Summit

Water Tap - based on meter size
 5/8 x 3/4 " \$2,734.00
 3/4 " \$3,418.00
 1" \$5,468.00
 1 1/2" \$6,835.00
 2" \$13,670.00
 Progressively higher fees for larger meters
Sewer Tap - \$63.00/trap.
 Two watersheds require \$72.00/trap
License Excise Tax for roads
 Residential - \$1,001/dwelling unit
 Manufacturing/Industrial - \$801 times sq. ft./1,000
 Commercial/Retail - \$601 times sq. ft./1,000
Exaction - Water main extension is a developer expense. City pays for oversizing.
Exaction - Sewer main extension is a developer expense. City pays for oversizing.
Exaction - Traffic study required. Recommended road improvements required. City pays for oversizing.
Stormwater - Stormwater Task Force is currently studying improving the process of handling of stormwater. Require a stormwater engineering study and generally follow the recommendations. Detention on-site depending on downstream conditions.
On-site improvements at developer's expense

Liberty

Water System Charge – based on meter size

5/8 “ \$2,225.00

1” \$5,560.00

1 ½ “ \$11,130.00

2 “ \$17,800.00

> 2” individually determine

Sewer Connection Fee

5/8 “ \$925.00

1 “ \$2,310.00

1 ½ “ \$4,630.00

2 “ \$7,400.00

> 2” individually determined

Roadway Development Tax

Residential - \$1,500/peak hour trip generated

Industrial - \$1,050/peak hour trips generated

Commercial - \$750/peak hour trips generated

Exactions – Water main extension is a developer expense. City may reimburse for large oversizing (over 8”).

Exaction - Sewer main extension is a developer expense. City may reimburse for large oversizing (over 20”).

Exaction – Improvements required for abutting roads.

Stormwater – Detention: residential - 10 year event;

Commercial/industrial - 25 year event. Runoff not to exceed pre-construction runoff for the 10 year storm event.

On-site improvements are at the developer’s expense

O’Fallon

Water Tap

Residential - \$2,500.00/lot

Commercial - \$2,500.00/acre (\$2,500.00 minimum)

Sewer Tap

Residential - \$2,500.00/lot

Commercial - \$2,500.00/acre (\$2,500.00 minimum)

There are no other development fees, impact fees, or excise taxes.

Stormwater – Post-construction runoff shall not exceed pre-construction runoff for the 2 year, 15 year, and 25 year 20 minute storm event. In two watersheds, the runoff for the 20 minute 100 year storm event is included as well.

Exactions - Developments that front on an existing road must improve one-half of that road to city standards on the frontage side.

Exaction – Oversizing of water main is a developer’s expense.

Exaction – Oversizing of sewer main is a developer’s expense

Exaction – Donation of open land is based on the city’s perceived need.

On-site improvements are at the developer’s expense

Raymore

Road Excise Tax

Residential - \$1,500.00/adjusted peak flow trip generated

Commercial/Industrial - \$400.00/adjusted peak flow trip generated

Park Land Dedication

Residential - 20 acres/1,000 people
(2.69 people/dwelling unit)

Cash in lieu – greater of \$10,000/acre or purchase price

Commercial/Industrial - \$750/acre of plat

Sanitary Sewer Connection

Residential - \$41/trap – minimum=\$1,956.00

Other - \$51/trap – minimum=\$1,956.00

Water Tap Fee - based on meter size

¾ “ \$1,956.00

1” \$3,130.00

1 ½ “ \$3,912.00

2 “ \$7,824.00

Larger meters progressively higher fee

Exaction - Traffic study required for large developments and recommendations generally are followed.

Exaction – Water main extension is a developer expense. If on master plan, the city reimburses for oversizing.

Exaction – Sewer main extension is a developer expense. If on the master plan, the city will reimburse for oversizing.

Stormwater – Use Kansas City Chapter American Public Works Association’s 5600 Manual and Best Management Practices for Water Quality Manual. Post-development stormwater runoff shall not exceed pre-development runoff for 1 year through 100 year storm event.

On-site improvements at developer’s expense

St. Charles

There are no development fees, impact fees, or excise taxes. There are water and sewer tap fees but they appear to be set to recover the actual cost of making the connections. Approximately 50% of the capital budget (excluding bond issues) is derived from gaming revenues from a local casino.

Exaction - Sewer main extension is a developer expense, including oversizing.

Exaction - Water main extension is a developer expense, including oversizing.

Exaction - Traffic study required and recommendations generally followed.

Stormwater – On-site detention required if runoff exceeds 1 cfs, which is always.

On-site improvements at developer’s expense

St. Louis

There are no development fees, impact fees, excise taxes, tap fees, or exactions for off-site infrastructure. There are no new developments, only redevelopment. Therefore all infrastructure already is in place. Generally off-site improvements are funded with grants.

Stormwater - Monthly stormwater utility fee used by city to fund projects to reduce flooding

On-site improvements at developer’s expense

Springfield

Water Tap Fee – based on meter size – appears to be for cost of installing meter and not for off-site infrastructure?

¾ “ \$300.00

1 “ \$500.00

1 ½ “ \$1,000.00

2 “ \$1,600.00

Larger meters progressively higher fee

Exactions - roads – Developer may have to improve abutting roads

Stormwater – On-site detention of the 1, 10, and 100 year event such that post-construction runoff does not exceed pre-construction runoff. One inch of rain must be detained for 24 to 48 hours

On-site improvements at developer's expense

Wildwood

Traffic Generation Assessment

Single family - \$887.89

Multifamily/retirement community – \$355.16/parking space

Office/restaurant/research center - \$542.56/ parking space

Motel/hotel - \$1,085.22/parking space

General retail/medical offices/shopping centers/nursing home/high turn over sit down restaurant - \$1,627.78/parking space

Hospital/bank/drive in fast food restaurant - \$3,255.67/ parking space

Convenience store/gas station - \$10,851.97/parking space

Manufacturing - \$434.06/parking space

Warehouse - \$759.65/parking space

Recreational use - \$374.94/parking space

Mini warehouse - \$0.36/square foot

Car wash - \$54,278.07/acre

Loading space - \$2,663.66/space

Water- If available from Missouri American Water Co., developer pays for extension. If not, developer drills a well on each lot or provides a private system. When the developer's plumber makes a tap for extending the water main, an inspector from the water company must be present. A water tap for a customer involves a fee for service provided by the water company. However, for each new tap, the developer receives \$200.00 from the water company at the end of the year.

Sewer - If available from Metropolitan St. Louis Sewer District (MSD), extension is a developer expense. Otherwise individual septic systems or if more than 7 lots a subdivision package system must be provided by the developer.

Sewer connection charge – based on water meter size

Single family dwellings - \$1,072.00

¾ “ \$1,072.00

1” 1,669.00

1 ½ “ \$3,031.00

2” \$4,736.00

Incremental increases with larger sizes

Multi-family dwellings have an option of \$713.00 per unit

Stormwater - Part of MSD and follows their rules. If differential runoff for the 15 year, 20 minute event exceeds 2 cfs then retention is required. The post - development peak flow must be significantly lower than pre- development peak flow for the 2 year and 100 year, 24 hour events. Some watersheds have more stringent requirements due to flooding problems.

Exactions - If the subdivision is adjacent to an existing street, the developer must provide additional right of way and improve his half of the street to city standards.

Exaction – Developer must donate public space or pay an in lieu fee

On-site improvements are at developer's expense

NEBRASKA

Lincoln

Impact fees are paid at time of building permit and apply to all types of development. For Arterial Street, Water Distribution and Neighborhood Park & Trail impact fees the city is divided into seven districts and all funds must be spent within the district they are collected. A large portion of the city is excluded from the Neighborhood Park and Trail impact fee since they are already adequately served. The Downtown area is also excluded from the Arterial Street impact fee.

Arterial Street Impact Fee - based on land use

\$2,466.00 – single family detached residential

\$1,301.00 – single family attached/duplex/townhouse

\$1,501.00 – multi-family

\$378.00 – multi-family elderly/retirement

\$1,354.00 – mobile home

\$2.70/sq. ft to 6.99/sq. ft. - commercial – varies with type and size

\$882.00 per room – hotel/motel

\$3.62/sq. ft. to \$6.92/sq. ft. – office – varies with type

\$0.41/sq. ft. to \$4.49/sq. ft. – institutional – varies wit type

\$0.37/sq. ft. to \$2.22/sq. ft. – industrial – varies with type

\$5.02/sq. ft. to \$5,612/acre – recreational – varies with type of recreation

Neighborhood Parks and Trail Impact Fee - residential areas only

\$334.00 – single family detached

\$267.00 – single family attached townhouse

\$257.00 – single family attached duplex

\$200.00 – multi-family

\$284.00 – mobile home

Water System Impact Fee - based on meter size for system wide improvements

¾ “ - \$778.00

1” - \$1,296.00

1 ½” - \$2,592.00

2” - \$4,147.00

Progressively higher fees for larger meters

Water Distribution Impact Fee – based on water meter size for distribution mains in new areas

¾ “ - \$483.00

1” - \$805.00

1 ½" \$1,610.00
 2" - \$2,576.00
 Progressively higher fees for larger meters
 Wastewater Impact Fee - based on water meter size for mains and treatment
 ¾" - \$624.00
 1" - \$1,039.00
 1 ½ - \$2,079.00
 2" - \$3,326.00
 Progressively higher fees for larger meters
 Exactions – Subdivision ordinance requires dedication of land for neighborhood parks as follows:
 0.00558 acres per single family detached dwelling unit
 0.00460 acres per single family attached dwelling unit
 0.00414 acres per duplex dwelling unit
 0.00328 acres per multi-family dwelling unit
 Developers who dedicate land are reimbursed for the value of the land from the Neighborhood Park and Trail Impact Fees.
 Exactions – Many commercial developments may be required to pay for off-site turn lanes and traffic signals on abutting streets.
 Stormwater – On-site detention of 2, 10, and 100 year storm event such that runoff post-construction does not exceed pre-construction runoff.
 On-site improvements at developer expense.

OKLAHOMA

Norman

Development Fees for parks
 Neighborhood park - \$75.00/residence at the time of the building permit
 Community parks - \$75.00/residence at the time of the building permit
 Excise Tax for Wastewater System
 Residential - \$850.00+\$2.00/sq. ft. above 1,200 sq. ft. of living space/dwelling unit
 Nonresidential - \$3,025.00/1,000 gallons of waste projected plus \$90.75/employee
 Water System Charge
 Multi-family and single family with ¾ " meter - \$850.00/unit
 All others based on meter size
 1 " \$1,100.00
 1 ½ " \$2,200.00
 2 " \$3,850.00
 Progressively higher fees for larger meters
 Exactions for neighborhood parks - 2.5 acres/1,000 people (2.62 people/single family residence and 1.77 people/unit for higher densities) or if approved by the city a fee equivalent to the fair market value of the amount of land required. This requirement is the responsibility of the developer. (0.00655 acre/single family residence)
 Exaction for water line extensions – The developer is responsible for all water line extensions. The city may agree to pay for oversizing costs; otherwise

the developer pays for oversizing. If the oversizing cost is substantial, it is prorated and recorded as liens against each benefiting property with payment due to the lien holder (adjusted for inflation) when a final plat of the property is submitted. The cost is reduced by 20% each of the years 16-20 so there would be no lien after 20 years.

Exaction for waste water line extensions - The developer is responsible for all costs of line extension. The city may agree to pay for oversizing costs; otherwise the developer pays for oversizing. If the oversizing cost is substantial, it is prorated and recorded as liens against each benefiting property with payment due to the lien holder (adjusted for inflation) when a final plat of the property is submitted. The cost is reduced by 20% each of the years 16-20 so there would be no lien after 20 years.

Exaction for arterial streets - The developer is responsible for all costs of improving $\frac{1}{2}$ of the abutting streets. Improvement of other off-site streets may be required as well. The city may agree to participate financially. If the cost is substantial, it is prorated and recorded as liens against each benefiting property with payment due to the lien holder (adjusted for inflation) when a final plat of the property is submitted. The cost is reduced by 20% each of the years 16-20 so there would be no lien after 20 years.

Stormwater – Developer must conduct a stormwater study and requirements will be based on it. There is a fee of \$80.00.

On-site improvements at developer's expense.

Stillwater

Transportation Fee

Single family residence - \$350.00

All others - \$0.035/sq.ft. minimum of \$350.00

Water Tap Fee - \$566.00/acre

Sewer Tap Fee - \$0.035/sq. ft. However, credit is given for on-site sewers up to the value of the sewer tap fee so that usually the sewer tap fee is zero.

Water Closet Development Fee for the treatment plant. \$100.00/toilet

Reimbursement for oversized on-site streets, water lines, or sewers. There is a lease purchase option with the city. The city collects a connection fee from subsequent developers and then reimburses the original developer. In essence, a special benefit district is formed. There are several such sewer districts with connection fees ranging from \$1,100.00/acre to \$2,400.00/acre.

Sewer Benefit District – City built a sewer trunk line and one lateral ahead of development and charges a connection fee.

Connection to the trunk line - \$691.43/acre

Connection to lateral - \$1,548.10/acre

Exactions – If abutting streets are not paved, then developer must pave. Large developments are required to do a traffic study and follow its recommendations.

Exaction - Water main extension – developer's expense (reimbursed 75% in Urban Core or downtown)

Exaction - Sewers - Developer's expense for extension if reasonably close or septic systems or on-site system otherwise

Stormwater - on-site detention for storm durations of up to 24 hours and return periods up to 100 years
Cash in lieu for regional detention - equivalent to cost of on-site treatment if regional system is available.
On-site improvements at developer's expense

TENNESSEE

Knoxville

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.
Exaction – Abutting roads must be improved
Exaction – Water main extension is a developer expense
Exaction – Sewer main extension is a developer expense
Stormwater – On-site detention of the 1, 2, 5, 10, and 100 year design storm events except single lots and certain developments in lower section of a watershed (still must detain Water Quality Storm Event).
On-site improvements at developer's expense

Memphis

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.
Exaction – Developer must dedicate land and build one-half of the abutting roads per the city's major road plan including sidewalks and underground storm sewers.
Exaction – Water main extension is a developer expense.
Exaction – Sewer main extension is a developer responsibility including oversizing if needed.
Stormwater – Detention of the 10 year pre- to post- development differential in most cases. In the Fletcher Creek Basin detention must be provided for the 25 year pre- to post- development differential.
On-site improvements at developer's expense including oversizing of infrastructure if needed.

Nashville

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.
Stormwater - Generally stormwater post-construction runoff should approximate pre-construction runoff for storm events through the ten year design storm with emergency storage of the 100 year design storm. Stormwater quality treatment will handle the first inch of rainfall and these BMPs will be protected from larger rainfalls. In large developments stormwater must be handled on-site but smaller developments may use regional facilities if available.
Exaction – Abutting roads must be brought up to standards. Large developments must have a traffic study done and follow its directions.
Exaction – Water main extension is a developer expense

Exaction – Sewer main extension is a developer expense
Exaction – PUD developments must provide an on-site park.
On-site improvements at developer's expense

TEXAS

Austin

Traffic Impact Fee (not an up front fee)
Monthly charge for all citizens based on the estimated number of trips per day for different categories of uses.

Stormwater - On-site detention or regional participation if no adverse effect nearby and downstream properties

Regional Stormwater Participation Fee – consists of two components applied on entire development. No regional detention facilities have been built to-date.

1) Land cost component
5% of appraised value or capped value
Single family development capped value - \$40,000/acre
Other uses capped value - \$120,000/acre

2) Construction cost component
\$35,000 for 1st acre of impervious cover
\$15,000 for 2nd acre of impervious cover
\$10,000 each for 3rd to 5th acres of impervious cover
\$7,000 each for 6th to 10th acres of impervious cover
\$5,000 each for 11th to 20th acres of impervious cover
\$3,000 each for 21st to 50th acres of impervious cover
\$2,000 each for 51st to 100th acres of impervious cover
\$1,500 for each acre over 100 acres
Reduced fee if impervious cover is less than 20%
2 to 5 acres – 50% reduction
5 acres or more – 75% reduction

Combined Water and Sewer tap fee is the base service fee times the number of service units determined by meter size

5/8 “ 1 service unit
3/4 “ 1 1/2 service units
1 “ 2 1/2 service units
1 1/2 “ 5 service units
2” 8 service units
Size goes up to 12 “ with 330 service units
The base service fee depends on the service zone with most residential development occurring in the last two zones

Core Zone \$800.00
Urban Zone \$1,000.00
Desired Development Zone \$1,100.00
Drinking Water Protection Zone \$2,700.00

Exaction – Abutting roads must be improved with costs proportional to expected use.

Exaction – Water main extension is a developer expense with city paying for oversizing.
Exaction – Sewer main extension is a developer expense with the city paying for oversizing.
Exaction – Parkland in residential neighborhoods
Five acres per 1,000 residents
6 dwelling units/acre = 2.8 residents/dwelling unit
7-12 dwelling units/acre = 2.2 residents/dwelling unit
More than 12 dwelling units/acre = 1.7 residents/dwelling unit
Fee in Lieu of Land – actual cost for the amount of land from above
50% credit for private on-site parkland
Exaction – Large developments must dedicate land for a school, fire station, and police substation.
On-site improvements at developer's expense except oversizing is paid by the city.

College Station

Water Impact Fees in 1 district - \$550.00
Sewer Impact Fees in 4 districts with a range of \$232.00 to \$300.00
Park Development Fee
Single family - \$358.00/dwelling unit
Multi-family - \$292.00/dwelling unit
If the on-site land is developed as a park then the Park Development Fee is waived.
Other impact fees – The impact fee ordinance lists two topics that have reserved spaces: roadway and drainage. This suggests that such fees are being studied for future implementation.
Exaction - Park Land Dedication
Single family - 1 acre /101 dwelling units
Multi-family - 1 acre/125 dwelling units
Fee in lieu of land
Single family - \$198.00/dwelling unit
Multi-family - \$160.00/dwelling unit
Exaction – Large traffic generators do a traffic study and follow its recommendations.
Exaction – Water main extension is a developer expense.
Exaction – Sewer main extension is a developer expense.
Oversizing of infrastructure – City may share expenses with developer.
Stormwater – Storm sewers must accommodate the 5 year storm event and bridges must accommodate the 25 year event. Developments in the upper 1/3 of watershed must use detention for the 100 year storm event. Those in the lower 1/3 of the watershed are not required to use detention if they discharge directly into the main channel. All others are determined on a case by case basis.
On-site improvements at developer's expense

Lubbock

There are no development fees, impact fees, excise taxes, or tap fees for off-site infrastructure.

Exaction - Improvement of abutting streets charged to property owners
Exaction – Developer responsible for extending water main. City pays for oversizing.
Exaction – Developer responsible for extending sewer main. City pays for oversizing.
Stormwater - City responsible for providing drainage and has monthly charges to all citizens through a Municipal Drainage Utility. There are natural depressions called playa which are used for regional detention. Developers pay for a drainage study and keep natural drainage paths to the playa intact.
On-site improvements at developer's expense

Waco

There are no development fees, impact fees, or excise taxes for off-site infrastructure.
Exactions - Developer initially pays for required offsite improvements and oversizing of on-site water lines and sewer lines but may be reimbursed by the city at 20% per year for five years.
Stormwater - Detention of stormwater is considered on a case by case basis based on size of development, known or projected downstream problems, location of the development in the watershed, etc. Where detention is required, post development runoff rates are required for 5 – 100 yr storms.
On-site improvements at developer's expense. Water costs can be refunded based on the number of homes completed annually up to ten years.

Appendix B

Details for Other Cities

Infrastructure Facts for Ann Arbor, MI, Sioux Falls, SD, and Fort Collins, CO requested by Columbia, MO council members when the primary survey was presented to them on September 17, 2007

Ann Arbor, MI

Censuses

1990 - 109,592

2000 - 114,024

2006 - 113,206 - fewer people but more housing units

Water Connection Charge

Book value/# of residential equivalents

1" \$2,350.00

1.5" \$5,290.00

2" \$9,405.00

Incrementally higher charge for larger connections

Sewer Connection Charge

Book value/# of residential equivalents

Charge based on water meter size

1" \$2,160.00

1.5" \$4,860.00

2" \$8,635.00

Incrementally higher charge for larger connections

Exaction – Transportation

Traffic study required and complete recommended improvements

Exaction – Parkland Donation

Developer dedication of 5.59 acres per 1,000 residents or 450 households which breaks down to 0.0124 acre per housing unit.

Contributions in lieu of land equivalent to the market value of the above

Some combination of the previous two options

Exaction – Extend sewer main to and through site with city paying for oversize.

In addition, the developer must mitigate older sewer problems such as disconnect foundation drains in an older section in the city. (120% of his potential connections)

Exaction – Extend water main to and through site with city paying for oversize

Exaction – Stormwater - Any change in imperviousness exceeding 15,000 square feet requires detention on-site for first flush, bank full, and 100 year storm event.

All users pay a monthly stormwater utility fee equivalent to \$279.10 per acre of imperviousness.

Sioux Falls, SD

Censuses

1990 – 109,592

2000 – 114,975

2006 – 142,396

Water Connection Charge

Water benefit districts with prorated costs that vary among districts

Sewer Connection Charge

Sewer benefit districts with prorated costs that vary among districts

Parkland

When developments are in the area of a planned park on the master plan, the city negotiates with the developers.

Exaction – Road extension is a developer expense and must be hard surface.

Exaction – Water main extension is a developer expense.

Exaction – Sewer main extension is a developer expense

Exaction – Drainage System Cost Recovery Charge

Single family development \$1,579.10/acre

Multifamily development \$3,159.40/acre

Industrial development \$3,949.25/acre

Office development \$3,159.40/acre

Commercial development \$5,213.00/acre

Institutional development \$3,159.40/acre

Recreational areas None

Agricultural areas None

Credit may be received for developer financed major on-site drainage improvements.

Exaction – Regional Detention Charge

For developments of five or more acres, the charge is \$762.57/acre

For developments of less than five acres:

Single Family \$762.57/acre

Multifamily \$1,525.13/acre

Industrial \$1,906.41/acre

Office \$1,525.13/acre

Commercial \$2,516.46/acre

Institutional \$1,525.13/acre

Recreational None

Agricultural None

The Regional Detention Charge is waived if the developer donates land for a regional detention facility identified in the master plan if the facility serves more than 50% of the land in the basin not owned by the developer.

Fort Collins, CO

Censuses

1990 - 87,758

2000 - 118,652

2006 - 129,467

Street Oversizing Capital Expansion Fee – Based on acreage, trip generation, and zoning class and the schedule is shown on the website.

Single family residence \$2,417.00

Duplex per D. U. \$1,817.00

Townhouse \$1,483.00

Condominium \$1,574.00

Apartment per D. U. \$1,549.00

Nonresidential is based on trip generation and whatever is an appropriate unit of measure such as square feet, # of pumps, beds, per acre, etc. from a table.

Larimer County Transportation Expansion Fee (in addition to the above)

Single Family Detached	\$164.00
Multifamily per D. U.	\$113.00
Mobile Home per site	\$ 82.00
Hotel/motel per room	\$153.00

Water Plant Investment and Development Fee

Single Family	\$710.00 + 37cents/square foot of lot (On 8,600 sq. ft. lot \$3,890.00)
Duplex	\$490.00 + 28 cents/square foot of lot
Multifamily	\$490.00 + 28 cents/square foot of lot
Nonresidential is based on meter size	
¾ “	\$6,640.00
1”	\$19,300.00
1 ½ “	\$38,630.00
2”	\$61,660.00

Incrementally higher for larger sizes

Raw Water Requirement

Each development must have water rights or equivalent
Water rights acceptable to city
City water certificates
Cash in lieu of water rights at \$6,500.00 per acre foot

Residential

= (0.3456 x no. of living units + (2.304 x net acres of development)

For an 8,600 sq. ft. single family residential lot the fee is \$5,203.00

Nonresidential

¾ “ meter	\$5,850.00
1”	\$19,550.00
1 ½ “	\$39,000.00
2”	\$62,400.00

Incrementally higher for larger sizes

Wastewater Plant Investment and Development Fee

Single Family detached residence	\$2,223.00
Duplex and multifamily/unit	\$1,583.00
Nonresidential is based on meter size	
¾ “	\$4,749.00
1”	\$12,151.00
1 ½ “	\$21,965.00
2”	\$38,865.00

Incrementally higher for larger sizes

Neighborhood Parkland Fee per dwelling unit and area

Residential \$824.00 to \$1,921.00 (2,000 sq. ft. = \$1,578.00)

Nonresidential None

Community Parkland Capital Expansion Fee

Residential per dwelling unit and area
\$700.00 to \$3,461.00 (2,000 sq. ft. = \$2,844.00)

Commercial and Industrial None

Fire Capital Expansion Fee

Residential per dwelling unit and area
\$99.00 to \$230.00 (2,000 sq. ft. = \$189.00)

Commercial per sq. ft. \$0.202

Industrial per sq. ft. \$0.056

General Government Services Capital Expansion Fee

Residential per dwelling unit and area
\$125.00 to \$291.00 (2,000 sq. ft. = \$239.00)

Commercial per sq. ft. \$0.225

Industrial per sq. ft. \$0.062

Police Capital Expansion Fee per dwelling unit and area

Residential per dwelling unit and area
\$67.00 to 159.00 (2,000 sq. ft. = \$131.00)

Commercial per sq. ft. \$0.140

Industrial per sq. ft. \$0.038

Library Capital Expansion Fee per dwelling unit and area

Residential per dwelling and area
\$275.00 to \$642.00 (2,000 sq. ft. = \$527.00)

Commercial and Industrial None

Poudre School District Impact Fee per dwelling unit

Up to 4 units \$1,200.00

Over 4 units \$ 600.00

Thompson School District Impact Fee per dwelling unit

Up to 4 units \$1,342.00

Over 4 units \$ 946.00

Exaction - Electric Plant Investment and Development Fee

Cost/sq. ft. of development excluding right of way \$0.04215

Cost/linear ft. of developed site abutting r.o.w.

Residential \$7.90

Nonresidential \$29.83

Cost per dwelling unit

150 amp panel s. f. = \$1,078.00, m. f. = \$719.00

200 amp panel s. f. = \$1,806.00, m. f. = \$1,267.00
(s. f. on 8,600 sq. ft. lot \$2,852.00)

Cost per 100 amps at service entrance for nonresidential

Single phase 208 volts \$ 946.00

Single phase 240 volts \$1,091.00

Three phase 208 volts \$1,638.00

Three phase 240 volts \$1,890.00

Three phase 480 volts \$3,779.00

Primary circuit charge from source to transformer per linear foot

Single phase \$7.20

Three phase \$13.10

Transformer installation charge per transformer

Single phase \$1,119.00

Three phase \$2,097.00

Exaction - Stormwater Plant Investment Fee

= runoff coefficient x \$3,070/acre x acres of gross area, (runoff coefficient is a measure of imperviousness and gross area includes open space and right of way.) The fee would be \$514.00 for a typical 14,576 sq. ft. residential lot and 0.5 for the runoff coefficient. The fee for a nonresidential one acre lot with 0.8 runoff coefficient is \$2,456.00.