



Lexington-Fayette Urban County Government
OFFICE OF INTERNAL AUDIT

INTERNAL AUDIT REPORT

DATE: September 16, 2015

TO: Jim Gray, Mayor

CC: Sally Hamilton, Chief Administrative Officer
Glenn Brown, Deputy Chief Administrative Officer
Aldona Valicenti, Chief Information Officer
Janet Graham, Commissioner of Law
David Holmes, Commissioner of Environmental Quality and Public Works
William O'Mara, Commissioner of Finance & Administration
Phyllis Cooper, Director of Accounting
Brad Frazier, Director of Engineering
Dowell Hoskins-Squier, Director of Traffic Engineering
Susan Straub, Communications Director
Urban County Council Members
Internal Audit Board Members

FROM: Bruce Sahli, CIA, CFE, Director of Internal Audit
Jim Quinn, CIA, CISA, Internal Auditor

RE: Street Closure Fees Evaluation

Background

The Commissioner of Environmental Quality and Public Works requested an evaluation by the Office of Internal Audit regarding street closure fees to determine whether LFUCG could be overlooking an opportunity to generate additional revenue. This requested project was approved by the Internal Audit Board.

From time to time, portions of the public rights of way including streets, alleys, sidewalks, and parking lanes need to be temporarily closed to vehicle and pedestrian traffic while construction or public improvements occur. Most cities require those entities closing the right of way to acquire a permit in order to minimize disruption to the public and ensure the safety of traffic and workers. The issuance of permits is associated with a review of the plans for traffic control and an examination of the precise areas of the rights of way to be closed to determine traffic impact. Notification of right of way closures may also be provided to the appropriate public safety personnel (Police, Fire, etc.) so that they may make any necessary adjustments in their operations.

The LFUCG has established a policy for temporary lane blockages administered by the Division of Traffic Engineering. According to this policy, a lane blockage permit must be obtained by any person, contractor, utility company or government agency needing to close or block a traffic lane in the public right of way at least two days in advance of the closure so that Police, Fire, Public Information, and the Traffic Information Network may be notified, and so that the plans for the closure may be sufficiently reviewed. Under this policy, contractors granted a permit assume responsibility for approved work zone traffic control procedures (according to the *Manual on Uniform Traffic Control Device Guide*). No fees are charged for the lane blockage permits. According to the Division of Traffic Engineering, approximately 1,250 lane/sidewalk blockage permits are issued each year.

Scope and Objectives

The objectives of this evaluation were to:

- Benchmark the LFUCG practice of allowing street closures to occur without charging a fee against the practices of other cities
- Evaluate the pros and cons of charging fees for lane closures by examining independent studies on the subject
- Provide a reasonable estimate of annual revenue which could be generated if street closure fees are charged by LFUCG

The scope of our evaluation included a review of various city government websites to determine current practices for charging fees for street and right-of-way closures. We also referred to independent studies and audits of street closure fee practices used by certain other cities.

The cities included in our benchmark process and their rankings in terms of 2014 population size are listed below. Lexington-Fayette County is ranked #61:

Cincinnati, OH - #65	Louisville-Jefferson County, KY - #30
Philadelphia, PA - #5	Chicago, IL - #3
Tampa, FL - #53	Denver, CO - #21
Seattle, WA - #20	Atlanta, GA - #39
San Diego, CA - #8	Scottsdale, AZ - #95
Overland Park, KS - #128	Boulder, CO - #278
Bellevue, WA - #190	Champaign, IL - #381
Louisville, CO – Not in Top 1,000	Iowa City, IA - #464
Evanston, IL - #446	Chattanooga, TN - #141
Knoxville, TN - #129	Kansas City, MO - #37
San Antonio, TX - #7	

Statement of Auditing Standards

We conducted our evaluation in accordance with the International Standards for the Professional Practice of Internal Auditing. Those standards require that we plan and perform our work to afford a reasonable basis for our assessments and conclusions.

SUMMARY OF EVALUATION RESULTS

City Fees Vary For Traffic Lane/Sidewalk Blockages

An article concerning control of the public right-of way in the September 2004 *APWA Reporter* (American Public Works Association) states, "The street system represents a substantial investment of public funds. As a steward of the system, the city is obligated to protect that investment. Local governments, in order to fulfill their fiduciary and stewardship responsibilities to the public, must now find ways to effectively manage this public asset. Plans must be developed for the orderly use of public right-of-way, as well as creating methods for identifying and recovering public costs involved with this process."

We reviewed 21 cities to evaluate their policies and procedures for street closures, traffic lane blockages, and other blockages of the public right-of-ways. As noted in the population rankings, ten of the cities we surveyed were larger than Lexington and eleven of the cities were smaller.

We noted that a number of cities, especially the larger ones, have extensive policies, procedures, and fee structures in place for use of the public right-of-way and most of these cities charge fees for use of the public right-of-way, including charges based on the length of time the streets or traffic lanes need to be closed. Some fees are calculated simply by multiplying the number of days or months the lane or right-of-way is closed times a certain rate (unit cost) times either the number of lanes or total square footage of the particular right-of-way closed. The rates usually differed according to the type of right of way closed; traffic lanes on major arterial routes were usually charged the highest rates for closures, while rates charged for the other types of rights-of-way such as traffic lanes on minor arterial routes, connector roads, sidewalks, parking lanes, alleys, etc. were progressively less. We also identified rates which varied according to the time of day the lane is to be closed (either during peak traffic time or other down times) and/or where in the particular city the closure is to take place (either in the downtown/high density areas or areas outside of downtown).

An example of a relatively simple type of fee structure which includes a component for the duration of time the right-of-way is closed was found in Champaign, Illinois:

Exhibit 1. Champaign, Illinois Right-of-Way Occupancy Permit Fees

	For Up To 7 Days	For Each Day 8-180
Major Arterial Street	\$70.00	\$120.00/lane/day
Minor Arterial Street	\$70.00	\$60.00/lane/day
Commercial Collector Street	\$70.00	\$30.00/lane/day
Residential Collector Street	\$70.00	\$12.00/lane/day
Local Street	\$70.00	\$6.00/lane/day
Alleys	\$70.00	\$6.00/1/2 alley/day
Sidewalk/Parkway	\$70.00	\$6.00/sidewalk/day

Source: Champaign, Illinois city government website.

A slightly more complex fee structure was found in Philadelphia, Pennsylvania:

Exhibit 2. City of Philadelphia Street Closure Permit Rates (effective 11/1/2012)

Closure Type	Rate for Center City & University City Rate	Rate for All Other Areas of the City	Maximum Duration
Partial Sidewalk Closure	\$1.00 per foot per week*	\$.50 per foot per week*	1 year
Full Sidewalk Closure Accompanied By Creation of Protected Footway in Parking Lane	\$1.50 per foot per week*	\$.75 per foot per week*	1 year
Parking Lane	\$2.00 per foot per week*	\$1.00 per foot per week*	1 year
Full Sidewalk Closure	\$3.00 per foot per week*	\$1.50 per foot per week*	1 year
Travel Lane	\$3.00 per foot per week*	\$1.50 per foot per week*	1 year
Full Closure - 5 days or less	\$125 per block per day	\$125 per block per day	5 days
Full Closure - More than 5 days	\$1,000 per block per week**	\$500 per block per week**	1 year
* There is a minimum weekly fee of \$40 per closure type per block and a maximum yearly fee of \$50,000 per closure type per block. For full sidewalk closures, the minimum weekly rate after the first week is \$200 per block in Center City & University City and \$100 per block in all other areas. ** For full closures over five days, there is a maximum yearly fee per block of \$50,000 in Center City and University city and \$25,000 in all other areas.			

Source: City of Philadelphia government website.

One of the more creative and innovative methods of calculating fees for street closures we identified was in the City of St. Paul, Minnesota (as described in an April 2000 audit report on Street Closure Permit Activities conducted by the City Auditor in Kansas City, Missouri). Their method took into consideration the "disruptive cost" component of street and right-of-way closures, and fees were determined in part by the mileage distance of detours around streets that were closed. The St. Paul Disruption Cost Recovery process is described below:

St. Paul Recovers Disruption Costs Caused By Street Closures

The City of St. Paul recovers the costs of disruptions caused by street closures. The “disruptive cost” component of excavation and obstruction permits is based on:

(1) losses to businesses and merchants which would not have occurred but for the obstructions, and

(2) social costs to the users of the right-of-way resulting from traffic delays, diversions, disruption in services, missed or delayed appointments, and decline in quality of life. The formula St. Paul uses to calculate the cost of disruption for each day of closure is: (Average daily traffic) x (detour distance in miles) x (\$0.31).

Permittees pay the full fee if the closure affects all of the lanes of traffic, but they pay a reduced fee if all of the lanes are not affected. For example, if there are three lanes of traffic and the closure affects one of them, the fee is 20 percent of the full closure fee.

We used St. Paul’s formula to calculate disruption charges for three closures in Kansas City. A street closure on Main that cost \$60 to obtain would have cost the permittee almost \$13,000 if the city used St. Paul’s method of recovering disruption costs. (See table below.)

Project	Average Daily Traffic	Calendar Days	Lane Disruption Cost	Public Works Fee
2300 Main	9,098	35	\$12,833	\$60
11th Street between Locust and Oak	5,721	2	\$1,419	\$50
All lanes of W. 10th St. between Main and Baltimore	5,552	1	\$224	\$50

Sources: Kansas City, Missouri Public Works records and the City of St. Paul, MN.

We also found some cities which do not charge any fee for street closures/lane blockages at all (similar to Lexington), or that otherwise charge only a minimal fee for the issuance of a permit, with no additional fees for the length of time the street/lanes or other rights-of way were closed or blocked and no additional fee for the size of closure. Most of these cities were smaller, with less road/street infrastructure and less frequent road/street closures and disruption to traffic flow. For example, the cities of Bellevue, Washington, Iowa City, Iowa,

Knoxville, Tennessee and Chattanooga, Tennessee do not charge anything beyond a minimal permit fee. We also noted that Louisville, Kentucky charges a permit fee of \$25/week for lane closures, sidewalk closures, parking meter blockages, or any work in the right of way.

We attempted to make a reasonable estimate of the annual revenue generated by other cities for the street closures fees they charged. Limited information existed, and of the information found it was difficult to determine how much revenue was generated solely by street closure fees. We noted that more revenue is generated by larger cities with fees calculations based on time and size of the closures, and with higher frequencies of closures. For example, the city of Kansas City, Missouri issued 5,549 and 6,199 traffic control permits in FY 2004 and FY 2005 from which they collected total revenue of \$475,948 and \$511,288 in the respective years.

Pros and Cons of Imposing Fees for Traffic Lane/Sidewalk Blockage

We researched sources available online for the pros and cons of imposing fees on blockages and closures of public right of ways, including streets, alleys, sidewalks, and parking lanes. Many of the same factors for and against imposing fees were noted among the various sources we examined. Below is a summary of these factors as noted in the various online sources. The Office of Internal Audit does not vouch for the completeness or accuracy of these studies, but the arguments presented therein appear reasonable and are provided for information and consideration.

Reasons for Imposing Lane Blockage Fees:

- The additional revenue generated can be used for a variety of purposes, including improving and maintaining road infrastructure.
- By charging fees tied to the duration of the lane closure, contractors are given an incentive to complete jobs quickly due to the increased costs. According to a transportation expert in Missouri, charging lane rental fees resulted in 30 to 50 percent less time of closure with just a 10 percent fee increase. Traffic flow is increased as a result. A survey of citizens in Kansas City, Missouri identified traffic flow as one of the top three areas that should receive the most attention by government. By motivating contractors to reduce the amount of time traffic lanes are closed, increased traffic flow will result and inconvenience to motorists will be reduced.
- The amount of time businesses within the street/lane closure area are impacted by the closures is reduced if contractors complete their work more quickly and the traffic lanes are reopened.
- Social costs and inconvenience to the users of right of way resulting from traffic delays are reduced if contractors are incentivized to complete jobs quickly. Increased worker and business productivity may be a result.

- By providing revenue to potentially offset the cost of traffic closure inspections, the number of inspections may be increased. Overall traffic safety during the time of closures may be improved as a result.

Reasons for Not Imposing Lane Blockage Fees:

- The additional costs to developers and contractors of imposing lane blockage fees may discourage investment in new projects and developments.
- Most developers and contractors already incur additional costs and expenses (including liability and traffic control expenses) by operating in the street, so additional lane blockage fees are unnecessary as an incentive for them to move off the street as soon as possible.
- Additional staff and overhead needed by city government to implement new fees results in additional costs which may outweigh the fees charged and the benefits gained.

There is also a potential legal question as to whether LFUCG can issue blockage/closure fees on city streets that are also federal/state highways, which is the case with the major arteries flowing through the downtown area.

Conclusion:

Division of Traffic Engineering Lane Blockage Permit Statistics provided at the end of this report exhibit the traffic impact and number of days lanes were blocked for Dumpster Permits and Lane Blockage Permits during calendar years 2013 and 2014. 2014 Dumpster Permits increased 29% above 2013 levels, while 2014 Lane Blockage Permits only increased 3.7% above 2013 levels. In both 2013 and 2014, nearly all Dumpster Permits had minor traffic impact ratings, regardless of the number of days lanes were blocked. Based on this information, Dumpster Permits do not appear to justify issuing a permit fee based on their traffic impact.

However, nearly all Lane Blockage Permits had moderate or significant traffic impact ratings and have seen an increase in major traffic impact ratings, even though about three-fourths of the Lane Blockage Permits were for blockages lasting seven days or less. This indicates Lane Blockages within Fayette County have noticeable traffic impacts.

To calculate possible revenue associated with Lane Blockage Permit Fees, we used the calendar 2014 Lane Blockage Report statistics and the Champaign, Illinois street closure fee structure because of its relative simplicity (see the Champaign, Illinois fee structure on page four). Using this scenario, and making no distinction between Traffic Impact Ratings, all

1,263 Lane Blockage Permits issued during calendar 2014 would be charged a \$70 permit fee for a total of \$88,410 (1,263 x \$70=\$88,410).

To calculate the effect of the escalating fee structure, we used the most conservative approach for blockages/closures greater than 7 days, taking an average of all possible Champaign, Illinois Permit Fees for blockages/closures “For Each Day 8-180” (which computes to \$34.29 per day), assumed no distinction between Traffic Impact Ratings, and assumed the minimum number of days above the seven day minimum in each escalating category (e.g., for the 8-30 days blocked category we assume only 8 days of blockage, which had 222 events). Bearing in mind that the Champaign, Illinois fee structure charges an additional fee per lane per day, we assumed only one lane was blocked.

We calculated the following additional fees:

8-30 days - 8 days (less the 7 day minimum) = 1 day x 222 x \$34.29 = \$7,612.38
 31-60 days - 31 days (less the 7 day minimum) = 24 days x 39 x \$34.29 = \$32,095.44
 61-90 days – 61 days (less the 7 day minimum) = 54 days x 8 x \$34.29 = \$14,813.28
 >90 days – 91 days (less the 7 day minimum) = 84 days x 15 x \$34.29 = \$43,205.40

Total possible annual revenue based on this scenario = \$186,136.50.

This demonstrates the significant impact permit fees with an escalating fee structure can have on projects that exceed a minimum number of days, such as the seven day minimum in our example. This is particularly noticeable when you get into the greater than 90 days category.

It is important to remember that this is only one estimate based on one set of criteria, and our evaluation noted that some cities employed fairly complex formulas such as location, square footage blocked, etc. to assess blockage fees.

Recommendation:

The creation of fees for street blockages/closures appears to have merit. Applying fees to major and significant blockages/closures could represent a “middle ground” approach to addressing the impact of street closures, while making some concession for minor blockages/closures and minimizing the impact on LFUCG Divisions responsible for administering the fees. As noted above, there is also a potential legal question as to whether LFUCG can issue blockage/closure fees on city streets that are also federal/state highways, which is the case with the major arteries flowing through the downtown area. The state of Kentucky is a home rule state, which would appear to give Lexington the ability to charge a

fee for blockages/closures on state routes within the city. This would need to be verified by the Law Department prior to moving forward with such a permit fee.

Other issues to consider would be whether the creation of such permit fees would be sufficient to pay for the administration costs, which Division would administer and enforce the fees, and what penalties would need to be established for non-compliance. If the purpose of the permit fee is to minimize traffic impact on the public and incentivize contractors et al to work as expeditiously as possible to complete projects and remove blockages/closures, the effect of such fees will not be definable until sometime after the fees have been in place.

In our opinion, the establishment of street closure/blockage fees deserves consideration.

Chief Administrative Officer Response:

I certainly appreciate the evaluation. Your work was excellent and very informative. I have several questions to Law which I will address. However, at this time I do not plan to pursue city fees. In the future, we certainly may address this and solicit Council input.

LFUCG Traffic Engineering Lane Blockage Permit Statistics
Calendar Year 2014

Dumpster Permits Total issued - 481 permits

<u>Traffic Impact Ratings</u>	<u># of permits</u>	<u>% of all permits</u>
minor	459	95.43%
moderate	12	2.49%
significant	0	0.00%
major	4	0.83%
no rating	6	1.25%

<u>Number of Days Lanes Blocked</u>	<u># of permits</u>	<u>% of all permits</u>
7 days and under	123	25.57%
8-30 days	219	45.53%
31-60 days	76	15.80%
61-90 days	19	3.95%
> 90 days	44	9.15%

Median number of days lanes blocked - 28 days

Average number of days lanes blocked - 36.12 days

Permit with highest number of days lanes blocked - 205 days

Lane Blockage Permits Total issued - 1263 permits

<u>Traffic Impact Ratings</u>	<u># of permits</u>	<u>% of all permits</u>
minor	94	7.44%
moderate	631	49.96%
significant	511	40.46%
major	27	2.14%

<u>Number of Days Lanes Blocked</u>	<u># of permits</u>	<u>% of all permits</u>
7 days and under	979	77.51%
8-30 days	222	17.58%
31-60 days	39	3.09%
61-90 days	8	0.63%
> 90 days	15	1.19%

Median number of days lanes blocked - 2 days

Average number of days lanes blocked - 8.72 days

Permit with highest number of days lanes blocked - 442 days
(water main installation - W. Fourth Street)

Source: LFUCG Division of Traffic Engineering Lane Blockage Master Report

LFUCG Traffic Engineering Lane Blockage Permit Statistics -
Calendar Year 2013

Dumpster Permits

Total issued - 373 permits

<u>Traffic Impact Ratings</u>	<u># of permits</u>	<u>% of all permits</u>
minor	367	98.39%
moderate	5	1.34%
significant	0	0.00%
major	1	0.27%
no rating	0	0.00%

<u>Number of Days Lanes Blocked</u>	<u># of permits</u>	<u>% of all permits</u>
7 days and under	156	41.82%
8-30 days	181	48.53%
31-60 days	22	5.90%
61-90 days	6	1.61%
> 90 days	8	2.14%

Median number of days lanes blocked - 13 days

Average number of days lanes blocked - 19.00 days

Permit with highest number of days lanes blocked - 199 days

Lane Blockage Permits

Total issued - 1218 permits

<u>Traffic Impact Ratings</u>	<u># of permits</u>	<u>% of all permits</u>
minor	0	0.00%
moderate	665	54.60%
significant	546	44.83%
major	7	0.57%

<u>Number of Days Lanes Blocked</u>	<u># of permits</u>	<u>% of all permits</u>
7 days and under	951	78.08%
8-30 days	227	18.64%
31-60 days	21	1.72%
61-90 days	4	0.33%
> 90 days	15	1.23%

Median number of days lanes blocked - 3 days

Average number of days lanes blocked - 8.56 days

Permit with highest number of days lanes blocked - 553 days (UK Dorm Project - Woodland Avenue)

Source: LFUCG Division of Traffic Engineering Lane Blockage Master Report