

Fee-in-Lieu of Detention, Tulsa, Oklahoma: Best Management Practice

► Janet Meshek, PE, CFM and Chris Hill - Meshek & Associates, PLC
William Robison, PE, CFM, Senior Project Engineer - City of Tulsa

After devastating floods in 1974 and 1976, the City of Tulsa initiated proactive measures to mitigate existing flooding problems and reduce the potential for future flooding. One of these measures was the implementation of a Fee-in-Lieu of Detention which allowed developers to pay a set contribution toward the public construction of regional and sub-regional detention facilities “in lieu” of smaller onsite privately-constructed detention facilities. During the intervening 30 years, adjustments to the Fee-in-Lieu of Detention have not kept pace with public out of pocket costs to acquire right-of-way and construct detention facilities. A 2009 review of the fee structure resulted in a massive overhaul to remedy past inadequacies. By integrating the latest Geographic Information Systems (GIS) technology with existing and valid databases for land values and construction costs, a cost-effective and defensible methodology for establishing and updating the City of Tulsa’s Fee-in-Lieu of Detention assessment was developed with application for other cities and counties.

The proposed fee structure is based upon the total public cost to acquire and construct a square foot of additional impervious area by applying today’s construction costs and land values to five existing Tulsa detention facilities. Actual construction costs were calculated using unit costs from current City contracts. Land values were obtained from tax land records at the Tulsa County Assessor’s Office for properties surrounding each detention facility and adjusted to reflect acquisition costs for land from potentially “unwilling” sellers.

Due to the magnitude of the fee increase using actual total costs, recommendations provide for phasing of the increase incrementally each year until the actual total land and construction costs are borne by the development community. After fully implemented, it is recommended that the fee undergo regular review and adjustment based on then current costs.

By using existing, accessible and reliable databases and GIS technology, this methodology represents a best management practice by: (1) establishing a fee structure based on actual public dollars, (2) allowing quick and easy updates at relatively little cost to local governments, (3) promoting new development without passing development costs onto the public and (4) providing applicability to other communities.

This case study provides a step-by-step process outlining the methodology to calculate the City of Tulsa total actual Fee-in-Lieu of Detention costs. It also describes in detail the database sources, formulas, study results and recommendations for implementation of the program.



To compute the total costs for each individual detention facility, the right-of-way cost per square foot of additional impervious area was added to the construction cost per square foot of additional impervious area. The GIS illustration above represents one of the detentions discussed in the study.

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Tulsa: Ph 918.392.5620
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