



## Legislation Text

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**DATE:** April 23, 2017

**TO:** Board of Mayor and Aldermen

**FROM:** Eric Stuckey, City Administrator  
Paul Holzen, Director of Engineering  
Jonathan Marston, Assistant Director of Engineering  
William Banks, Engineer I

**SUBJECT:**

Discussion on the Harpeth River Watershed Feasibility Study and the Franklin Road Streetscape Project. (Referred from 4/27/17 CIC)

**Purpose**

The purpose of this memorandum is to provide an update to the Board of Mayor and Aldermen (BOMA) on the Harpeth River Watershed Feasibility Study and the Franklin Road Streetscape Project.

**Background**

The May 2010 flood event created devastation throughout the Harpeth River Watershed, including four (4) fatalities and over \$480 million in direct economic impacts in the Harpeth River Watershed. For this reason, the U.S. Army Corps of Engineers (USACE) conducted a preliminary reconnaissance of the Harpeth River Watershed and found over 850 structures in the regulated floodplain within the City of Brentwood, City of Franklin, Williamson County, and Davidson County. In addition, they found aquatic ecosystem issues throughout the basin, primarily involving stream bank erosion and loss of riparian buffers.

On June 13, 2013, the USACE, the City of Franklin, Metropolitan Nashville and Davidson County, the City of Brentwood and Williamson County signed a Feasibility Study Agreement to analyze alternative flood risk management options. The feasibility study evaluated numerous flood risk management options and provided an analysis of cost and benefits associated with various projects. The USACE has determined that channel modifications of the Harpeth River at Franklin Road, within the City of Franklin, are economically justified.

The preliminary cost estimate provided by the USACE is approximately \$1,000,000. The City would be responsible for 35% of the actual cost (\$350,000). A portion of the Franklin Road Streetscape Project, from Harpeth River Bridge to Harpeth Industrial Court, could be incorporated into this project, allowing the City to utilize federal funds to help pay for some of the proposed roadway and pedestrian improvements. Accepting Federal Funds could delay the project. Staff has worked with the USACE to evaluate the following three (3) options:

**Option 1** - Franklin Road as one Project. Accept the Federal funding and bid the entire project under Federal regulations and requirements. Assuming funding was available today, it is anticipated that we would be under construction in approximately 3-4 years.

**Option 2** - Franklin Road as two separate projects. Project 1 would be from the Harpeth River Bridge to BGA and would be subject to all Federal regulations and requirements. Project 2 would be from BGA to Hooper Lane and would follow standard City of Franklin requirements. Assuming funding was available today, Project 1 would be under construction in approximately 4-5 years and Project 2 would be under construction in approximately 3-4 years.

**Option 3** - Franklin Road as one project without USACE participation. Do not accept the Federal funding and incorporate the channel modifications into the City Project. The USACE would provide the modeling and FEMA approvals. The City would be responsible for the Design, ROW acquisition and Construction. If funding was available today, this project could be under construction in the next 2-3 years.

### **Financial Impact**

The estimated financial impact of each option is shown below.

<b>Option 1 - Franklin Road as one project</b>		
City Funding	USACE Funding	
\$50,000	\$0	Misc Design (TBD)
\$287,500	\$287,500	USACE Feasability Study
\$2,500,000	\$0	ROW
\$900,000	\$0	CEI
\$10,790,000	\$0	Construction
\$350,000	\$750,000	Channel Modification + 10
<b>\$14,877,500</b>	<b>\$1,037,500</b>	<b>Total Estimated Cost</b>

<b>Option 2 - Franklin Road as two separate projects</b>		
<b>Project 1 - Franklin Road (Harpeth Riverg Bridge to BGA)</b>		
City Funding	USACE Funding	
\$75,000	\$0	Additional Design (CT Co
\$287,500	\$287,500	USACE Feasability Study
\$1,740,857	\$0	Construction
\$350,000	\$750,000	Channel Modifications
<b>\$2,453,357</b>	<b>\$1,037,500</b>	<b>Total Estimated Cost (Proj</b>
<b>Project 2 - Franklin Road (BGA to Hooper Lane)</b>		

City Funding	USACE Funding	
\$75,000	\$0	Additional Design (CT Co
\$30,000	\$0	Additional Design (SSR)
\$50,000	\$0	Misc Design (TBD)
\$2,500,000	\$0	ROW
\$900,000	\$0	CEI
\$9,149,143	\$0	Construction
\$180,000	\$0	Construction (Temporary S
\$12,884,143	\$0	Total Estimated Cost (Proj
<b>\$15,337,500</b>	<b>\$1,037,500</b>	<b>Total Estimated Cost (Pr</b>

<b>Option 3 - Franklin Road as one project without USACE Participation</b>		
City Funding	USACE Funding	
\$50,000	\$0	Misc Design (TBD)
\$350,000	\$0	Channel Modification Deis
\$2,500,000	\$0	ROW
\$900,000	\$0	CEI
\$10,790,000	\$0	Construction
\$1,000,000	\$0	Channel Modification
<b>\$15,590,000</b>	<b>\$0</b>	<b>Total Estimated Cost</b>

### **Recommendation**

In August of 2016, the BOMA directed staff to move forward with Option 1, accepting the Federal funding. After some initial delay by the USACE, staff would like to revisit this decision with the BOMA. The selection of Option 3 would result in faster project delivery. Staff seeks additional direction and input from the BOMA.