City of San Antonio

Legislation Details (With Text)

File #:	17-6663
Type:	Staff Briefing - Without Ordinance
In control:	Transportation Committee
On agenda:	12/14/2017
Title:	Briefing on the Micro-Trench Pilot Program. [Peter Zanoni, Deputy City Manager; Mike Frisbie, Director, Transportation & Capital Improvements]
Sponsors:	
Indexes:	
Code sections:	
Attachments:	1. Staff Presentation-Transportation Committee-Item 2

Date	Ver.	Action By	Action	Result

DEPARTMENTS: Transportation & Capital Improvements Department

DEPARTMENT HEADS: Mike Frisbie, P.E.

COUNCIL DISTRICTS IMPACTED: Citywide

SUBJECT:

Micro Trench Pilot Program Update

SUMMARY:

The Transportation & Capital Improvements Department (TCI) will provide a briefing to the City Council Transportation Committee on the Google Fiber Texas, LLC micro trenching pilot program.

BACKGROUND INFORMATION:

On February 19, 2014, Google Fiber Texas, LLC (Google) announced their proposal to build fiber-to-the-home (FTTH) broadband networks in thirty-four (34) cities within nine (9) metropolitan areas across the country. On August 5, 2015 Google announced that San Antonio would be one of the selected cities for the deployment of a broadband network to consumers delivering one (1) gigabit speed for downloading and uploading data to the Internet. This tier of Internet connectivity will have far reaching positive implications for educational access and research capabilities, as well as for encouraging entrepreneurs to pursue the development of new business models.

In August 2016, Google submitted a formal request to the City which would allow them to implement a 190 mile micro trench pilot program in a defined geographic area within Council District 6. On September 29, 2016 City Council via Ordinance #2016-09-29-0757 approved this pilot program request.

Micro trenches are generally between .75" and 1.25" wide and 2" to 16" deep, and can be cut directly into the road surface, in the joint between asphalt and gutter pans, and/or in the joints between curbs and sidewalks. One major benefit of micro trenching construction method is that it reduces conflicts with existing underground utilities thereby avoiding disruptions to water, gas, and other essential services and preserving the community's quality of life. Micro trenching also enables contractors with the ability to complete large sections of the network in days instead of weeks, reducing the construction impact on neighborhoods.

Current City policy does not authorize trenching at depths less than 30" in city streets and 36" in the parkway. To achieve these shallower depth requirements, contractors must either bore or open trench cut. However, these construction methods increase the risk of striking existing underground utilities, generally mandate larger construction footprints, and typically take longer to complete.

Per the Ordinance, City staff was tasked to monitor the Google Micro Trench Pilot Program and evaluate its success on the following criteria:

1. Number of utility impacts (water or sewer breaks)
2. Pace of work and disruption to the right of way
3. Community support for the program

ISSUE:

The Transportation & Capital Improvements Department (TCI) will provide a briefing to the City Council Transportation Committee on the Google Fiber Texas, LLC micro trenching pilot program.

The micro trench pilot is nearing completion and to continue the use of the micro trenching City staff must update the Utility Excavation Criteria Manual to include the provisions related to this construction method. Continuing the use of micro trenching in San Antonio would enable a faster, less disruptive deployment of underground fiber deployment in San Antonio right-of-way.

To date, Google has completed approximately 100 miles of fiber deployment under this construction method and the pace of their fiber deployment has increased, utility strikes have decreased, and the community has not had significant opposition to this construction method. As a result, staff recommends the continuation of this deployment method on a city-wide basis. Staff will update the Utility Excavation Criteria Manual to include the guidelines related to this construction method. This will allow Google Fiber and all other interested companies to utilize micro trenching to deploy their infrastructure.

ALTERNATIVES:

This is a briefing only.

FISCAL IMPACT:

This is a briefing only.

RECOMMENDATION:

Staff recommends the Transportation Committee receive a briefing on the results of the Micro Trench Pilot Program.