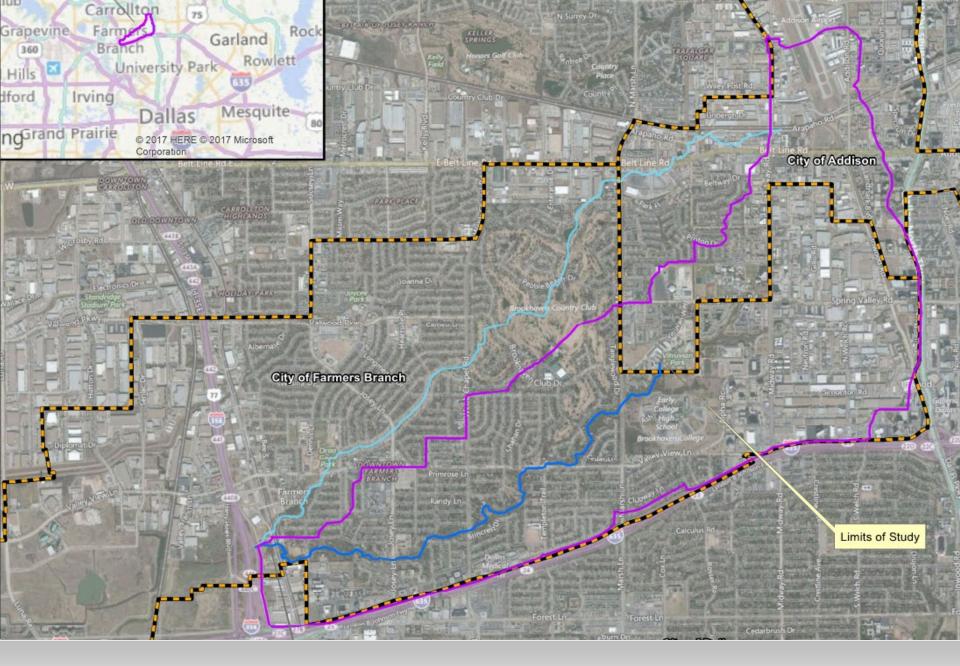
URBAN RENEWAL: channeling stakeholder input into stream restoration

presented by

WYLIE GORUP, EIT, CFM







Flood Risk

• 61 homes in 100-year floodplain

Maydelle Lnn 19

tantur tar par on

Farmers Branch Ln

po

Homes Within Floodplain

Boundary by Storm Event

5-Year

10-Year

25-Year

50-Year

100-Year

- 32 homes in 10-year floodplain
- 23 homes in 5-year floodplain or less

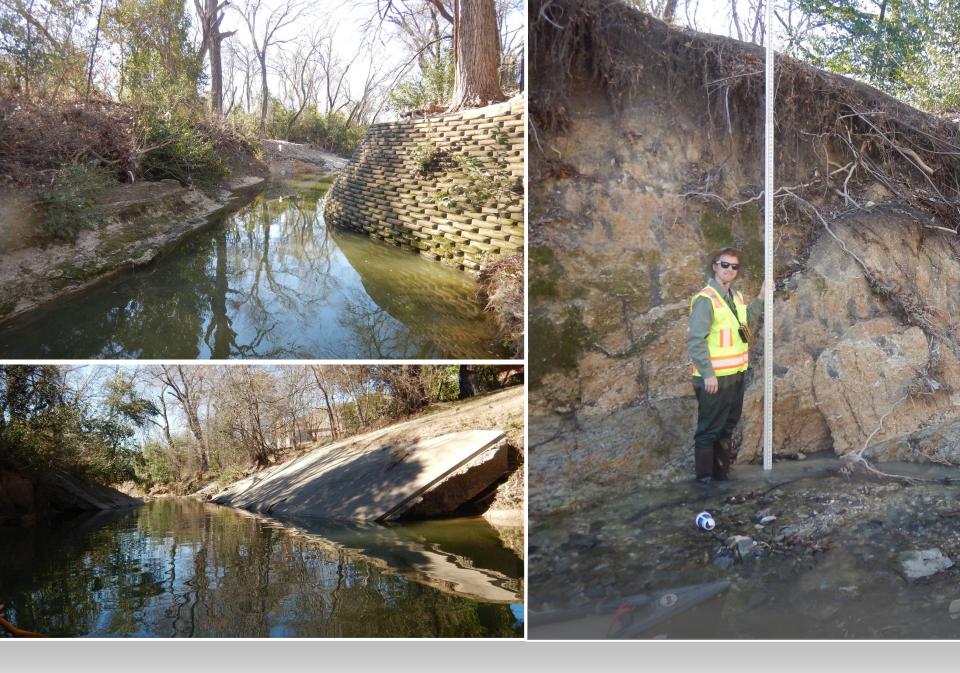
Stream Assessment

Stream Bank Condition

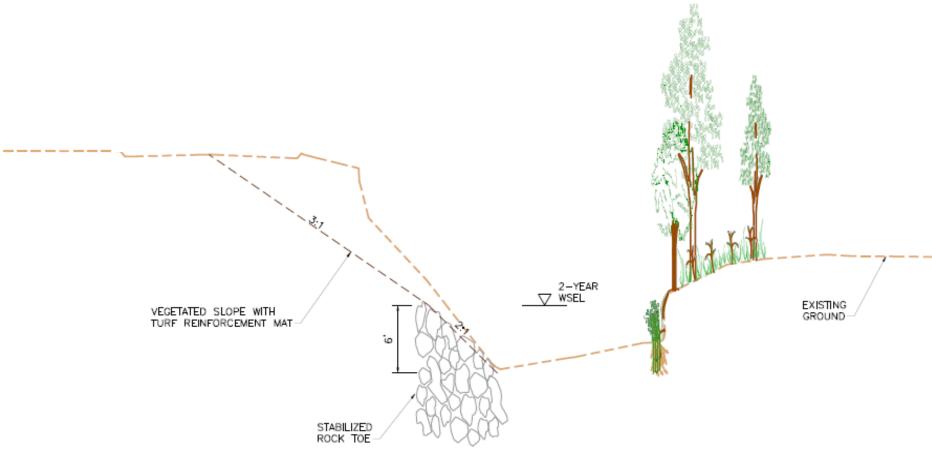
- \sim High Erosion Potential \sim Moderate Erosion Potential
 - \sim Low Erosion Potential
- ~~Impounded
- ∼ Retaining Wall
- \sim Under Construction

Bank Erosion Potential

- 29% high
- 13% medium
- 21% low/impounded
- 37% other



Bank stabilization mechanisms vary in method and condition



Preserve "City in a Park" aesthetic by implementing Green solutions where possible

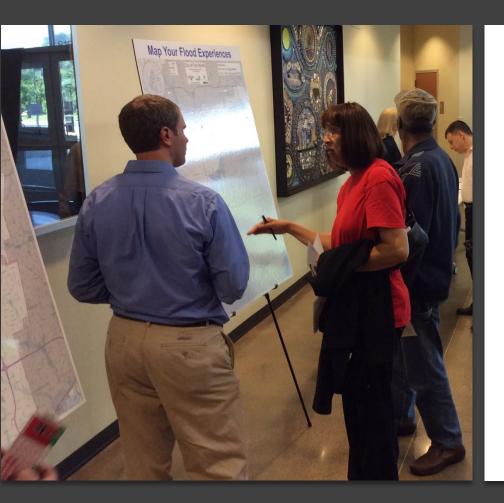


of Park Parcel Ownership



	Reminder!
* Home	Residents - Be sure to fill out and submit the <u>Authorization for</u>
* About	Access form!
* The Problem	
* Meetings	Contact Us
💐 Schedule	We'd love to hear from you! Please let us know your thoughts on the study, previous
Project Team	flooding or erosion problems you have witnessed, concerns you may have moving forward,
Contact Us	or any suggestions you think may help. Be sure to check back in on the website for updates
Community Meeting	along the way and be on the lookout for public meetings throughout the project to hear from the project team directly or share your thoughts in person!

Project Website



Farmers Branch Creek Study

FARMERS BRANCH

June 28, 2017 Community Meeting

Name (optional):____

Address (optional):__

1. How important is it to you to address <u>flooding</u> issues (i.e. roadway overtopping, flooded homes, flooded yards) on Farmers Branch Creek?

		Somewhat		
Very Unimportant	Unimportant	Important	Important	Very Important
1	2	3	4	5

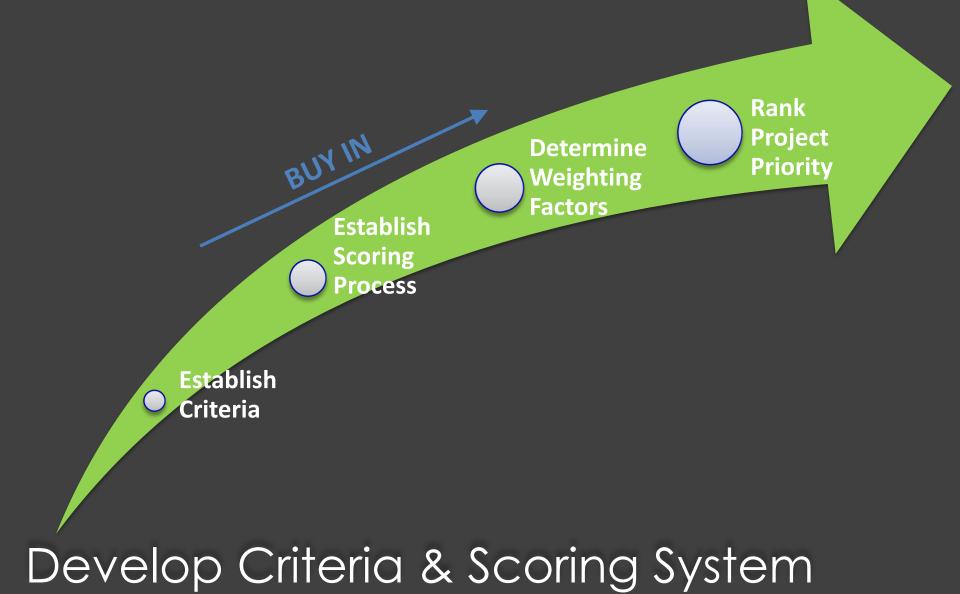
2. How important is it to you to address <u>erosion</u> issues (i.e. exposed sewer lines, undermined creek bank walls, eroded yards, threatened buildings) on Farmers Branch Creek?

			Somewhat				
	Very Unimportant	Unimportant	Important	Importar	ıt	Very Im	portant
	1	2	3	4		5	
							I
3.	Are you <u>open</u> to the being considered in	0	nd erosion solutions		Yes		No
4.	Are you <u>open</u> to prov property for creek in	8 9	5		Yes		No
5.	Are you <u>open</u> to mod your property?	lifications to cree	ek structures on		Yes		No
6.	If you placed a num	bered dot on the	maps, please list the	number	here:		
Co	mments (related to a	bove responses a	nd/or map notation):			

Public Meeting

Stakeholder Committee

Conceptual Project Evaluation and Ranking



Objective method to evaluate and score project alternatives

Select Criteria

1.

 What criteria are important? Weight Criteria

2.

 How important are the criteria? Score Projects

3.

 How do the criteria apply to each project? Calculate Rank

4.

 What projects take priority? 1. Select Criteria

 What criteria are important?



Estimated Construction Cost	Score
\$0 - \$50,000	10
\$50,000 - \$125,000	8
\$125,000 - \$500,000	5
\$500,000 - \$1,000,000	3
\$1,000,000 - \$2,000,000	2
>\$2,000,000	1

Life Safety Impact	Score
Project provides potential substantial life safety impacts	10
Project provides limited life safety impacts	5
Project provides minimal life safety impacts	2

Select Criteria • What

1.

criteria are important?

Score

2. Weight Criteria

 How important are the criteria?

Question #	Criteria A	Criteria A is More Important	Equally Important	Criteria B is More Important	Criteria B
1	Construction Cost				Maintenance
2	Construction Cost				Availability of Easements
3	Construction Cost				Schedule
4	Construction Cost				Life Safety
5	Construction Cost				Flood Risk Reduction
6	Construction Cost				Erosion Classification
7	Construction Cost				Environmental Impacts
8	Construction Cost				Aesthetics/Usability
9	Construction Cost				Areas of Impact
10	Construction Cost				Infrastructure Benefits

Please select a response to the following questions (mark with an X)

2. Weight Criteria

 How important are the criteria?

		1	2	3	4	5	6	7	8	9	10	11	1	
	Criteria	Construction Cost	Maintenance	Availability of Easements	Schedule	Life Safety	In frastructure Benefits	Flood Risk Reduction	Erosion Classification	Environmental Impacts	Aesthetics/ Usability	Area of Impact	Sum	Rank
1	Construction Cost		2.00	2.13	2.75	1.00	1.75	1.13	1.88	1.50	2.00	1.50	17.63	7
2	Maintenance	2.00		2.13	2.13	1.00	1.38	1.13	1.38	1.50	1.88	1.63	16.13	9
3	Availability of Easements	1.88	1.88		2.13	1.00	1.50	1.25	1.25	1.50	1.63	1.50	15.50	10
4	Schedule	1.25	1.88	1.88		1.00	1.25	1.25	1.25	1.50	1.38	1.38	14.00	11
5	Life Safety	3.00	3.00	3.00	3.00		2.88	2.63	2.75	2.88	2.88	2.75	28.75	1
6	Infrastructure Benefits	2.25	2.63	2.50	2.75	1.13		1.50	1.88	2.38	2.63	1.75	21.38	4
7	Flood Risk Reduction	2.88	2.88	2.75	2.75	1.38	2.50		2.88	2.63	3.00	2.38	26.00	2
8	Erosion Classification	2.13	2.63	2.75	2.75	1.25	2.13	1.13		2.00	2.63	2.25	21.63	3
9	Environmental Impacts	2.50	2.50	2.50	2.50	1.13	1.63	1.38	2.00		2.13	2.13	20.38	6
10	Aesthetics/ Usability	2.00	2.13	2.38	2.63	1.13	1.38	1.00	1.38	1.88		1.50	17.38	8
11	Area of Impact	2.50	2.38	2.50	2.63	1.25	2.25	1.63	1.75	1.88	2.50		21.25	5

3.

Score Projects

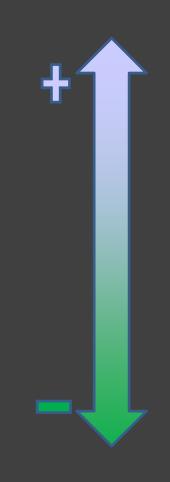
 How do the criteria apply to each project?

Project A



Project B

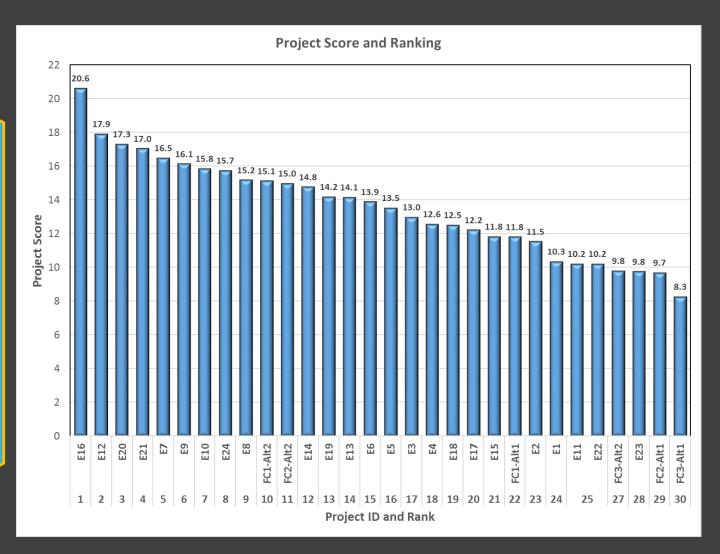




Calculate Rank

4.

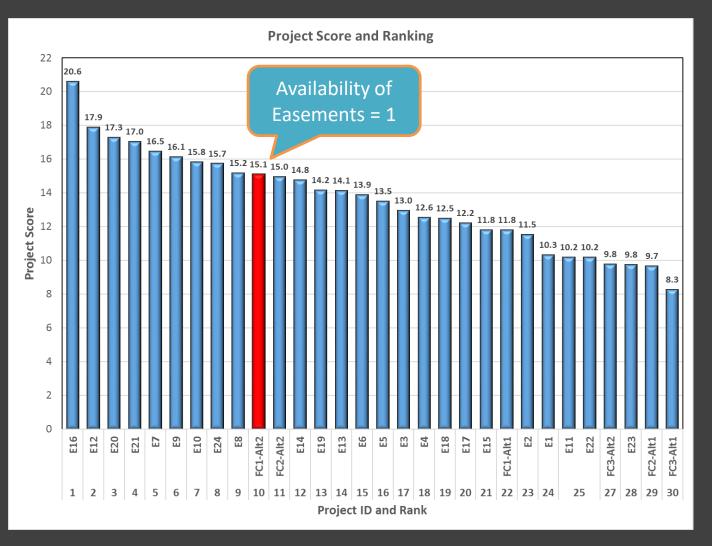
 What projects take priority?



Calculate Rank

4.

 What projects take priority?

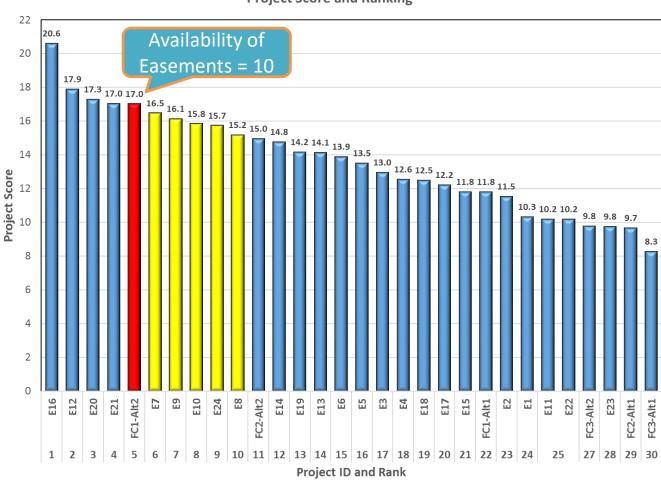


Rank Sensitivity Analysis

Calculate Rank

4.

 What projects take priority?



Project Score and Ranking

Rank Sensitivity Analysis



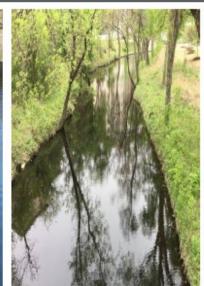
CIP Project Prioritization

Farmers Branch Watershed Study City Council Study Session Meeting

June 19, 2018

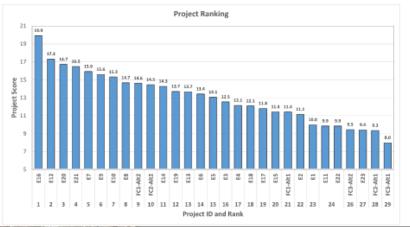






FREESE

2 3 3 2 4 1 5 3 6 3 7 3 8 3 9 F 10 J 11 3 12 2 13 L	Webb Chapel Rd Bridge 3100 Block of Brookhollow Dr 2900 Block of Maydelle Ln 12200 Block of Treeview Ln 3500 Block of Valley View Ln 3300 Block of Chaparral Dr 3100 Block of Brookhollow Dr	Erosion Control Erosion Control Erosion Control Erosion Control Erosion Control Erosion Control	E16 E12 E20 E21	\$623,700 \$764,340 \$76,560 \$243,330	19.9 17.3 16.7
3 2 4 1 5 3 6 3 7 3 8 3 9 F 10 J 11 3 12 2 13 L	2900 Block of Maydelle Ln 12200 Block of Treeview Ln 3500 Block of Valley View Ln 3300 Block of Chaparrail Dr 3100 Block of Brookhollow Dr	Erosion Control Erosion Control Erosion Control	E20 E21	\$76,560	
4 1 5 3 6 3 7 3 8 3 9 F 10 1 11 3 12 2 13 L	12200 Block of Treeview Ln 3500 Block of Valley View Ln 3300 Block of Chaparral Dr 3100 Block of Brookhollow Dr	Erosion Control Erosion Control	E21		16.7
5 3 6 3 7 3 8 3 9 F 10 4 11 3 12 2 13 L	3500 Block of Valley View Ln 3300 Block of Chaparral Dr 3100 Block of Brockhollow Dr	Erosion Control		6242 220	
6 3 7 3 8 3 9 F 10 4 11 3 12 2 13 L	3300 Block of Chaparral Dr 3100 Block of Brockhollow Dr			\$243,330	16.5
7 3 8 3 9 F 10 J 11 3 12 2 13 L	3100 Block of Brookhollow Dr	Ecodian Control	E7	\$1,138,840	15.9
8 3 9 F 10 Ju 11 3 12 2 13 L		Erosion Control	E9	\$117,690	15.6
9 F 10 Ju 11 3 12 2 13 L		Erosion Control	E10	\$214,110	15.3
10 Ja 11 3 12 2 13 L	3300 Block of Valley View Ln	Erosion Control	E8	\$128,230	14.7
11 3 12 2 13 L	Farmers Branch Lane	Flood Risk Reduction	FC1-Alt2	\$5,000,000	14.6
12 2 13 L	Josey Lane to Veronica Road	Flood Risk Reduction	FC2-Alt2	\$5,000,000	14.5
13 L	3200 Block of Brincrest Dr	Erosion Control	E14	\$42,550	14.3
	2900 Block of Maydelle Ln	Erosion Control	E19	\$47,320	13.7
	Lost Vally Dr	Erosion Control	E13	\$163,980	13.7
14 1	13100 Block of Glad Acres Dr	Erosion Control	E6	\$309,850	13.4
15 1	13200 Block of Cedar Ln	Erosion Control	E5	\$495,010	13.1
16 1	13800 Block of New Bark Cir	Erosion Control	E3	\$267,050	12.5
17 1	13800 Block of Wooded Creek Dr	Erosion Control	E4	\$53,020	12.1
18 2	2900 Block of Maydelle Ln	Erosion Control	E18	\$29,700	12.1
19 3	3000 Block of Selma Ln	Erosion Control	E17	\$131,950	11.8
20 3	3200 Block of Brincrest Dr	Erosion Control	E15	\$139,740	11.4
21 F	Farmers Branch Lane	Flood Risk Reduction	FC1-Alt1	\$2,000,000	11.4
22 3	3700 Block of Wooded Creek Ln	Erosion Control	E2	\$130,620	11.1
23 3	3900 Block of Valley View Ln	Erosion Control	E1	\$1,388,130	10.0
24 1	12200 Block of Brisbane Ave	Erosion Control	E11	\$105,730	9.9
24 2	2800 Block of Reedcroft Dr	Erosion Control	E22	\$59,250	9.9
26 N	Marsh Lane	Flood Risk Reduction	FC3-Alt2	\$5,000,000	9.5
27 2	2700 Block of Farmers Branch Ln	Erosion Control	E23	\$55,690	9.4
28 J	Josey Lane to Veronica Road	Flood Risk Reduction	FC2-Alt1	\$2,000,000	9.3





Prioritized list of CIP projects to aid City decision making.

Sometimes the only opinion that matters...





WYLIE GORUP, EIT, CFM wylie.gorup@freese.com

