ACEC/PEPP Annual Seminar

City of San Antonio
Conceptual Sidewalk Master Plan

January 25, 2019

Anthony Chukwudolue, P.E., Deputy Director

Transportation & Capital Improvements

"Through **innovation** and **dedication**, we **build** and **maintain** San Antonio's Infrastructure."

Sidewalk Program Outcome

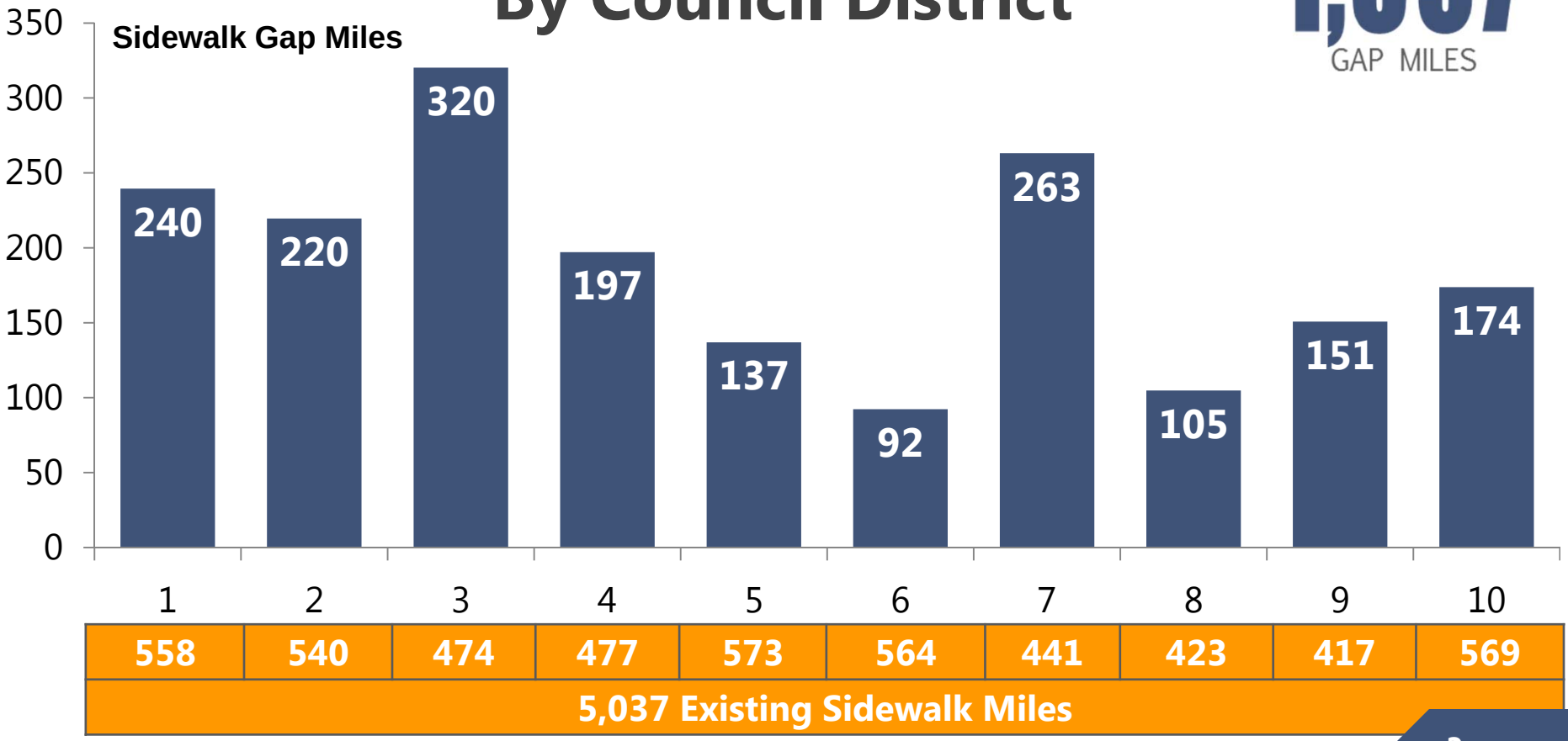
Build **quality** sidewalks in the areas that **need them most,** first.

Overview

- **Overview of Network**
  - Sidewalk Gaps
  - Existing Sidewalks
- **Conceptual Sidewalk Master Plan Goals**
- **Sidewalk Condition Assessment**
- **Closing – Next Steps**

Overview of Network By Council District

1,897
GAP MILES



Conceptual Sidewalk Master Plan Goals

- Develop Prioritization Matrix
- Develop Estimates
- Align Funding
- Draft Implementation Plan

Sidewalk Gaps

Current Programs, Prioritization, Inventory, Funding and Timeline

Project Selection Criteria & Prioritization

Prioritization Criteria	Max. Points
1. Pedestrian Safety	25
2. Schools	17.5
3. Transit Access	15
4. Arterial Roadway Access	12.5
5. Zero Car Households	12.5
6. Healthcare Facilities	10
7. Other Destinations	7.5

Score	Priority	Total Gap Miles
80 - 100	1	**3**
60 - 80	2	**31 (2%)**
40 - 60	3	**159 (8%)**
20 - 40	4	**899 (47%)**
0 - 20	5	**804 (42%)**

Sidewalk Gap Prioritization By District

District	Priority Level of Sidewalk Gaps (Miles)					District Subtotal	District Percent
	1	2	3	4	5		
1	1	6	32	133	68	240	13%
2	0	4	26	111	77	219	12%
3	0	3	19	156	142	320	17%
4	0	0	7	76	114	197	10%
5	2	10	24	74	28	137	7%
6	0	1	4	42	44	92	5%
7	0	4	24	138	97	263	14%
8	0	1	8	42	54	105	6%
9	0	1	5	48	96	150	8%
10	0	1	11	77	84	174	9%
Priority Subtotal	**3**	**31**	**159**	**899**	**804**	**1897**	**100%**
Priority Percent	**0%**	**2%**	**8%**	**47%**	**42%**	**100%**	

Sidewalk Funding

Programs

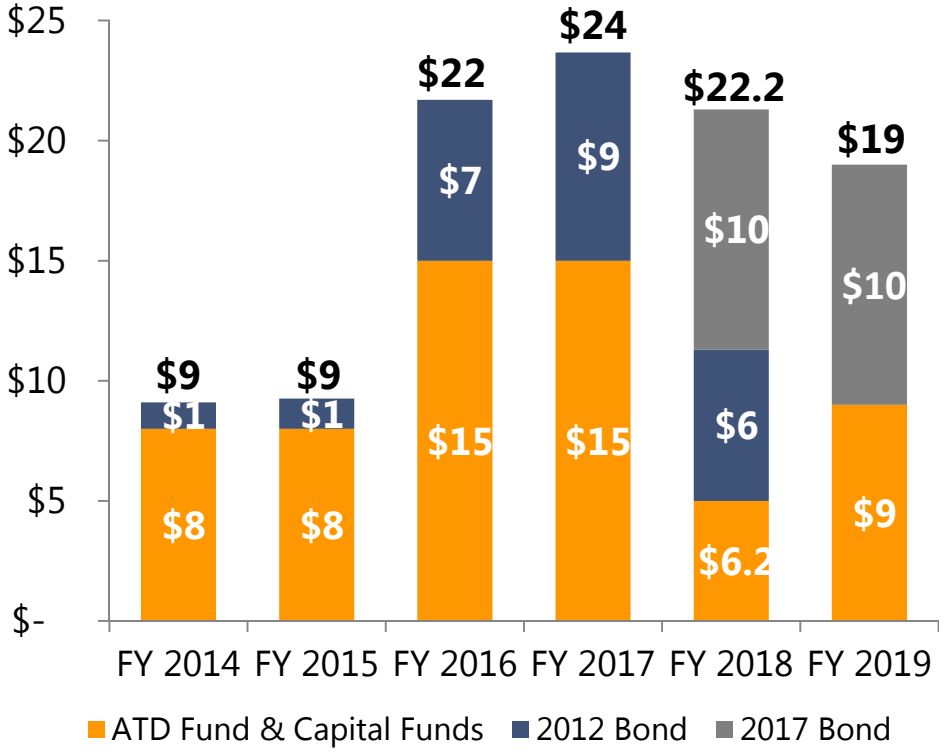
- Sidewalk Maintenance Program – component of 5-Yr. Infrastructure Management Program (IMP) - $5M Baseline/Varies Annually
- City's 2017 Bond Program - $78M
- Neighborhood Access Mobility Program (NAMP) - $2M/Annually
- Community Development Block Grant (CDBG) – Funding Varies
- Sidewalk Rebate Program – Existing Sidewalks Only

Gap Completion Timeline

- $18M – IMP
- $34M – Bond
- Complete Network by 2042

Annual Funding

($ in Millions)

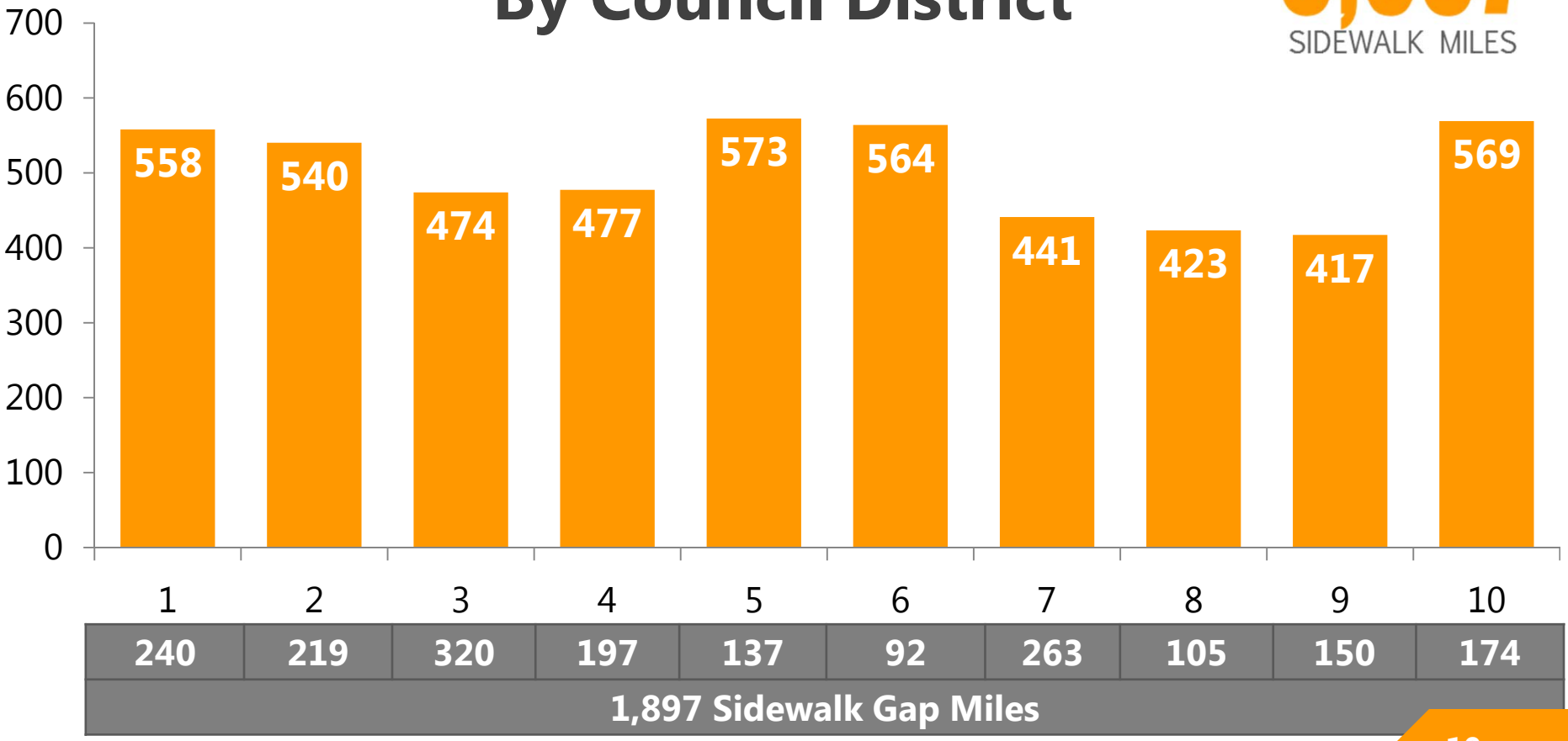


Existing Sidewalks

Inventory, Prioritization and Current Programs

Existing Sidewalk Miles By Council District

5,037
SIDEWALK MILES



Existing Sidewalk Prioritization By District

District	Priority Level of Sidewalk Gaps (Miles)					District Subtotal	District Percent
	1	2	3	4	5		
1	14	48	102	303	91	558	11%
2	2	19	100	236	183	540	11%
3	2	25	71	230	146	474	9%
4	2	7	41	242	186	477	9%
5	17	48	128	294	86	572	11%
6	1	9	41	261	251	564	11%
7	1	18	48	197	176	441	9%
8	1	11	36	134	241	423	8%
9	0	4	16	138	260	417	8%
10	0	2	43	229	296	569	11%
Priority Subtotal	**41**	**190**	**628**	**2262**	**1915**	**5037**	**100%**
Priority Percent	**1%**	**4%**	**12%**	**45%**	**38%**	**100%**	

Existing Sidewalk Condition Assessment

Scope

- Identifying & classifying defects
- Tripping Hazards
- Sidewalk Obstructions
- Inventory Update

Completion Timeline

- Priorities 1-3 March 2019
- Priorities 4 & 5 October 2019

Closing

Next Steps

- Hire Pedestrian Mobility Officer to Drive Initiative
- Council Committee Briefings
- Program projects through IMP & Bond
- Pedestrian Master Plan

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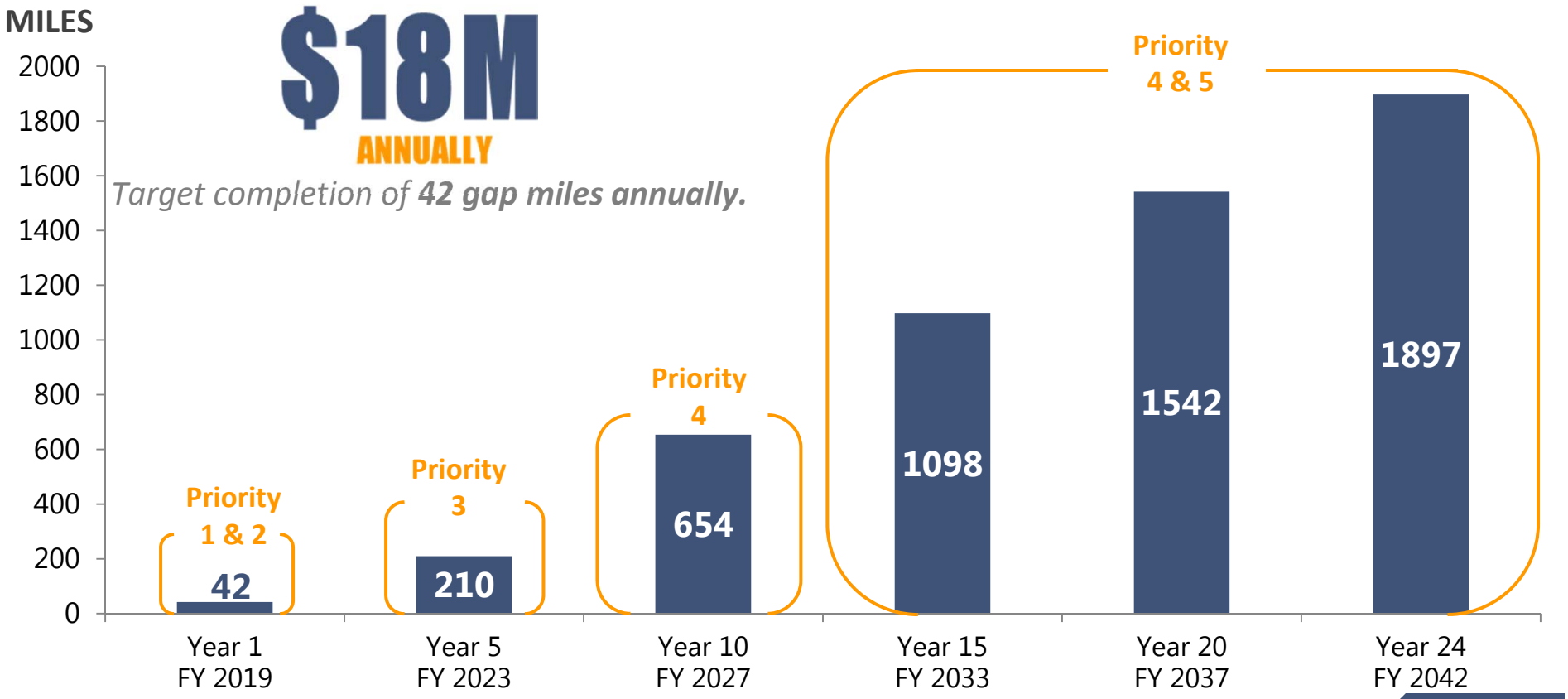
Back Up Slides

Sidewalk Gaps Completion Timeline



Sidewalk Master Plan Recommendations

As part of this program, TCI has identified several key goals to achieving long-term sidewalk transformation targets, including:

1. **Update Network Data**
2. **Maintenance Responsibility**
3. **Prioritization**
4. **Sidewalk Construction Standards**
5. **Equity Based Funding Allocation**
6. **Network Completion Targets**

Current Programs for Existing Sidewalks

- 5-Yr. Infrastructure Management Program (IMP)
- Bond Program
- Neighborhood Access Mobility Program (NAMP)
- Community Development Block Grant (CDBG)
- Sidewalk Cost-Sharing Program

Funding Sources

1. City Infrastructure Management Program (IMP) - $ 5.0 M baseline funding for sidewalks and ramps
2. City Bond Mobility Program - $9.5 M per year for 5 years
3. Neighborhood Access and Mobility Program (NAMP) - $2.0 M
4. Community Development Block Grant (CDBG) – $2.6 M approx. for FY 2018
5. Sidewalk Rebate Program

Sidewalk Point Scoring Priority

1. **Pedestrian Crash History (0-25)**
2. **Schools (0-17.5)**
3. **Transit Access (0-15)**
4. **Arterial Roadway Access (0-12.5)**
5. **Zero-Car Households (0-12.5)**
6. **Health Care Facilities (0-10)**
7. **Other Destinations (0-7.5)**

Pedestrian Master Plan

1. **Proposed new community facilities (e.g. convention centers)**
2. **New recreational facilities (e.g. parks and other future developments)**
3. **New schools**
4. **Planned transit facilities**
5. **Coherence with striping plans for pedestrian crossings**
6. **Planned street improvements**

SIDEWALK MAINTENANCE RESPONSIBILITY

Municipal Code

Construction of Sidewalk

Sec. 29-192

If City Council finds a public necessity to lay a sidewalk it may pass an ordinance ordering property owner to construct such sidewalk.

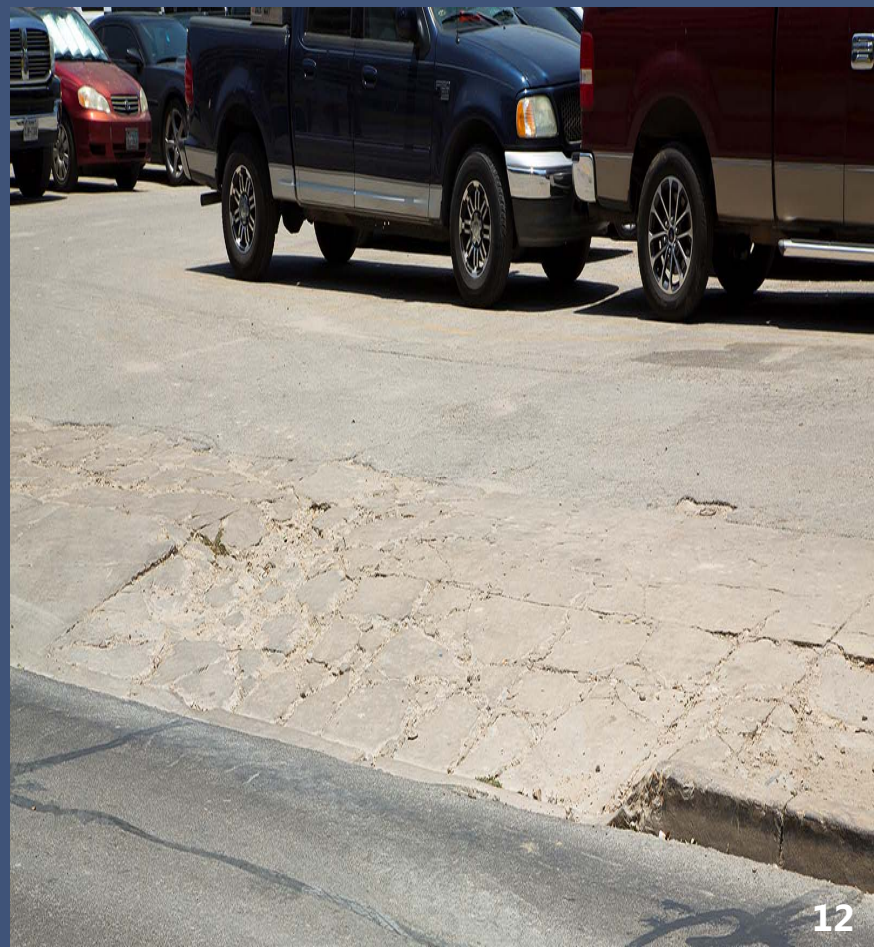
Repair of Sidewalk

Sec. 29-11

Places the duty on an abutting property owners to:

(a) Keep sidewalks in a good and safe condition and free from defects and hazards; and,

(b) Repair sidewalks upon receipt of written notice from the director of Public Works.



2019 Council District 3 Sidewalk Improvements

Project Type	Project Name	Total Funding
Sidewalk IMP	Betty Jean (Junior Street to Hillje Street)	$820,000.00
	Commercial Ave (IH 45 S. Access Road to W. Southcross Blvd)	
	Eureka Dr (Goliad Rd to Cul-De-Sac)	
	Genevieve Dr (Curtis Street to Roosevelt Ave)	
	Goliad Road (E Southcross Blvd to Bill Miller Ln)	
	Ronda Street (Shasta Ave to Cul-De-Sac)	
NAMP	Steves Ave (S Gevers to Candler Street)	$27,000.00
SMP	Sligo Street (Siluria Street to Palos Street)	$445,000.00
	Kate Schenck Ave (Pickwell Dr to Alsbrook Dr)	

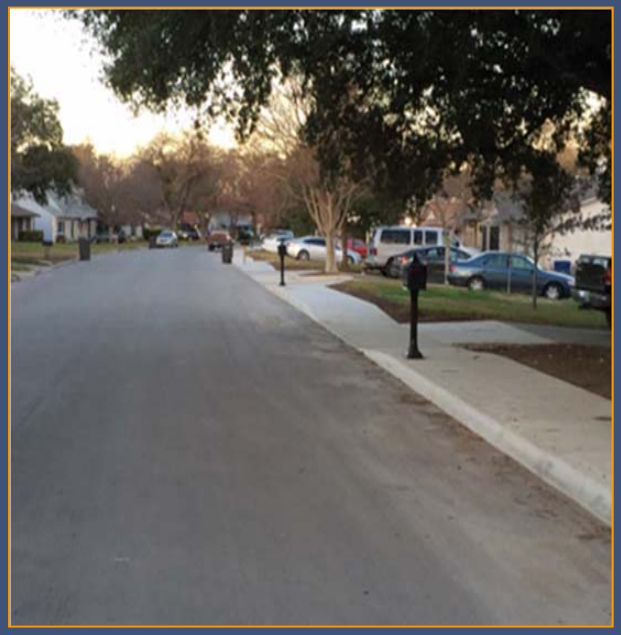
Cost Sharing Project Summary						
District	FY 2016 Requests	FY 2016 Completed	FY 2017 Requests	FY 2017 Completed	FY 2018 Requests	FY 2018 Projects To Be Completed
1	22	15	30	18	10	7
2	3	1	7	5	11	4
3	9	3	11	5	4	0
4	4	3	6	4	7	3
5	0	0	3	1	2	2
6	0	0	7	1	3	2
7	0	0	3	0	1	1
8	1	1	8	5	1	1
9	4	1	12	6	0	0
10	3	2	11	7	6	5
	46	26	98	52	45	25

	PARTICIPANTS REQUESTS	PARTICIPANTS PAID	PERCENT PAID	Total Paid by Citizens	Paid 30%	Paid 50%
FY 2016	46	26	56.5%	$18,896.40	4	22
FY 2017	98	52	53.1%	$41,931.30	20	32
FY 2018	51	25	49.0%	$21,656.00	11	14

Sample Sidewalk Gaps Priority Rankings

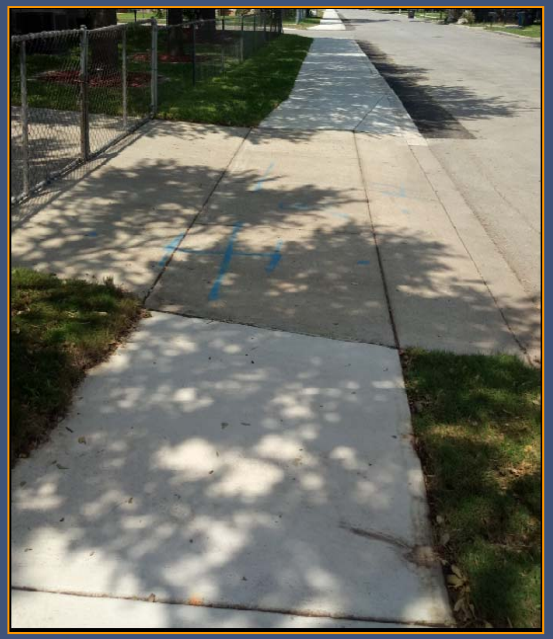
Map Priority Levels	Segment Street	From Street	To Street	District	Final Segment Score
80 - 100 (1)	-	-	-	-	-
60 - 80 (2)	Eureka Dr	Goliad Dr	Cul-De-Sac	3	61
40 -60 (3)	Fayette	Cottonwood Ave	W Theo Ave	3	44.3
20 - 40 (4)	Weaver St	Mission Rd	Roosevelt Ave	3	25.3
0 - 20 (5)	Oakcrest Ave	E Theo Ave	E Mitchell St	3	7.5

Sidewalk Project Costs



$90 PER LINEAR FOOT

$50 PER LINEAR FOOT

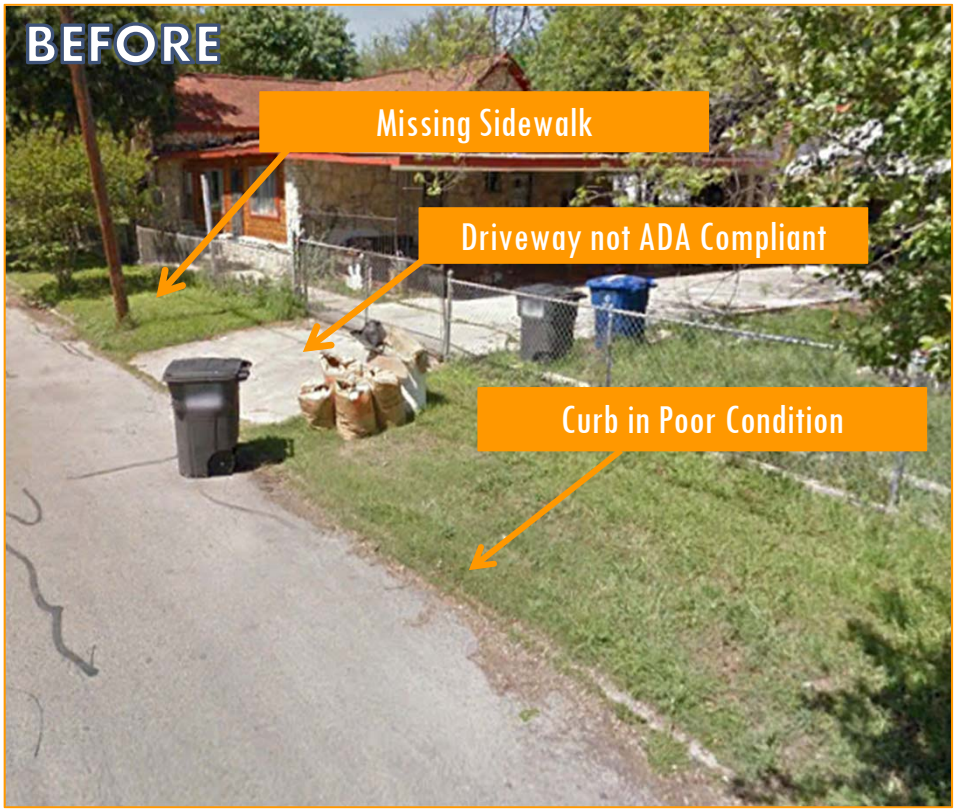


$75 PER LINEAR FOOT

Sidewalk Maintenance By District

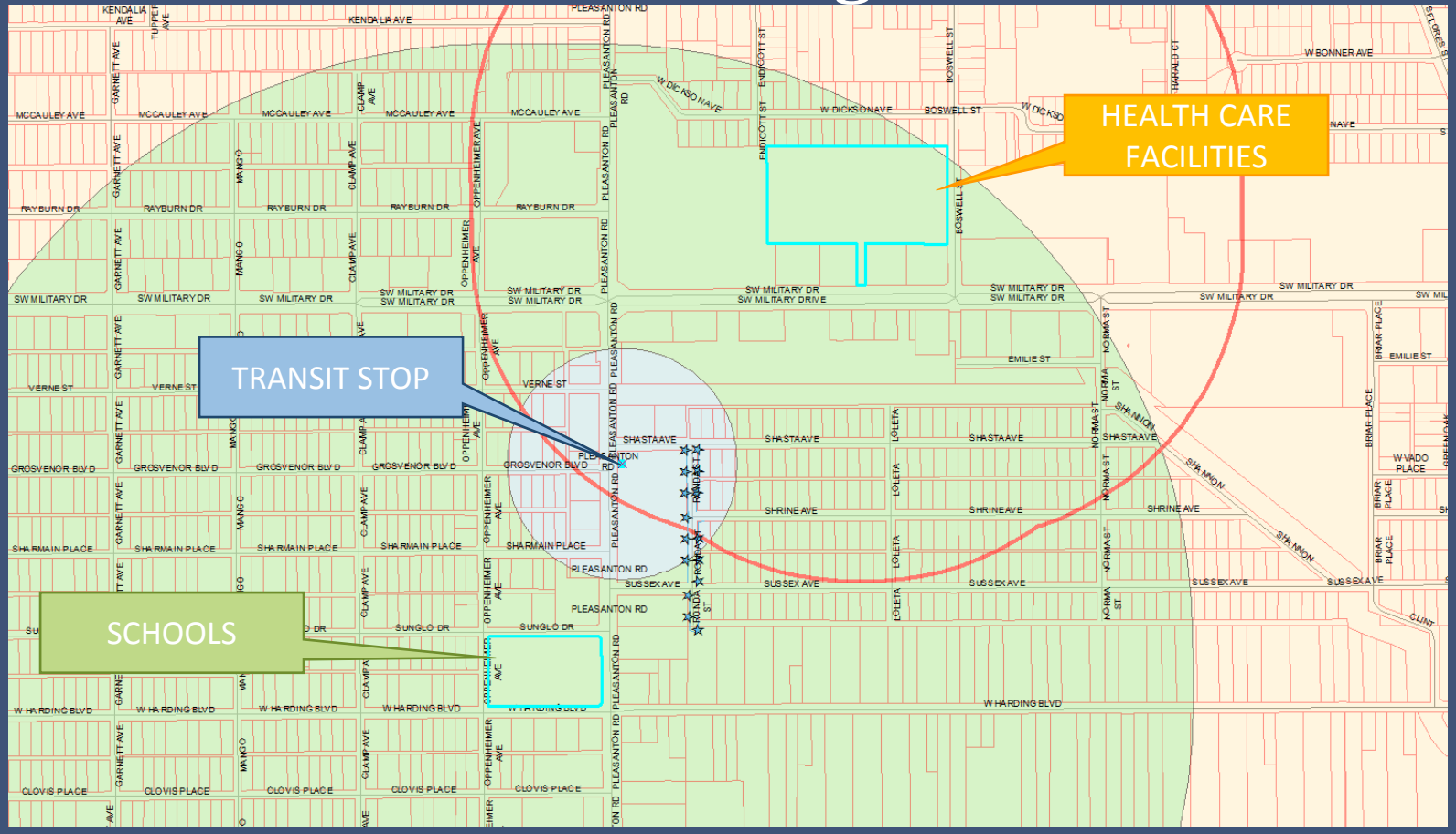
District	Existing Sidewalk (miles)	Estimated Survey Sample Size (miles)	Total Sidewalk (Miles) In Need of Repair	% of Sample Estimated as Needing Repairs
1	558	26	2.09	8.0%
2	540	20	1.9	9.5%
3	474	20	2.26	11.3%
4	477	19	1.28	6.7%
5	572	24	1.74	7.3%
6	564	25	0.43	1.7%
7	441	21	0.86	4.1%
8	423	22	0.48	2.2%
9	417	24	0.32	1.3%
10	569	22	1.35	6.1%
TOTAL	**5,037**	**223**	**12.71**	**5.8% (Average)**

Current Sidewalk Construction



Current Sidewalk Construction

Sidewalk Scoring Matrix

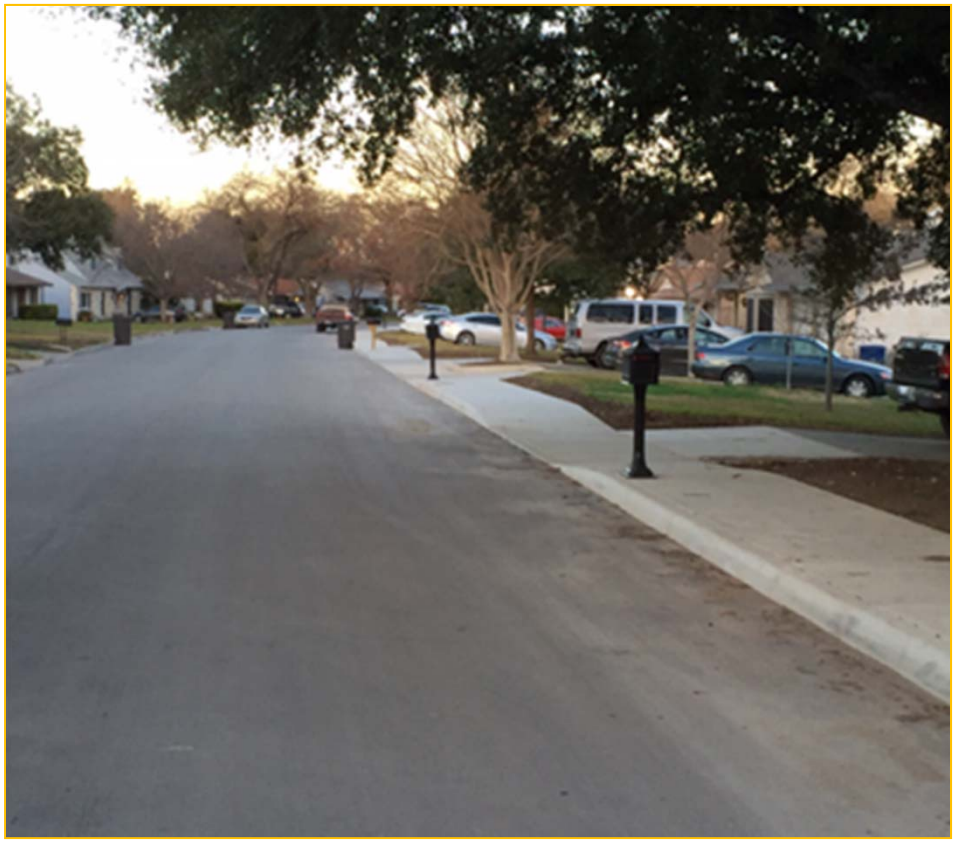


Current Sidewalk Construction

Current Process

Criteria

- **Priority Selection** (Priority Corridors - Schools, Hospitals, Libraries, Parks, Commercial Centers, VIA Bus Routes, and Pedestrian Crashes)
- **Project Elements**
  - Sidewalks
  - Curbs & driveway sections
  - Retaining walls (as necessary)
  - Landscaping (sodding as necessary)
  - Relocation of existing infrastructure in right of way (fences, mailboxes, irrigation lines)



Fewer Infrastructure Elements

Criteria

- **Priority Selection** (Low cost projects with limited impacts)
- **Project Elements**
  - Sidewalks only
  - No curbs, retaining walls or landscaping (sodding)
  - Limited driveway sections
  - Property owners responsible for relocation of existing infrastructure in right of way (fences, mailboxes, irrigation lines)

Modified Current Process

Criteria

- **Priority Selection** (Focus on priority corridors and prioritize easy to construct projects with minimal obstructions)
- **Project Elements**
  - Sidewalks with minimal incidental improvements
  - Limited driveway sections, curbs, retaining walls and landscaping (sodding) as necessary
  - Limited relocation of existing infrastructure in right of way (fences, mailboxes, irrigation lines)

Summary of Options

Alternative A

Current Process

- **Priority Selection** (Priority Corridors - Schools, Hospitals, Libraries, Parks, Commercial Centers, VIA Bus Routes and Pedestrian Crashes)
- **Project Elements**
  - Sidewalks
  - Curbs
  - Driveway sections
  - Retaining walls
  - Landscaping (sodding as necessary)
  - Relocation of existing infrastructure in right of way (fences, mailboxes, irrigation lines)

Alternative B

Fewer Infrastructure Elements

- **Priority Selection** (Low cost projects with limited impacts)
- **Project Elements**
  - Sidewalks Only
  - **No** Curbs
  - **Limited** Driveway sections
  - **No** Retaining walls
  - **No** Landscaping
  - **Property Owners** responsible for relocation of existing infrastructure in right of way (fences, mailboxes, irrigation lines)

Alternative C

Modified Current Process

- **Priority Selection** (Priority corridors and prioritize easy to construct projects with minimal obstructions)
- **Project Elements**
  - Sidewalks
  - **Limited** Curbs
  - **Limited** Driveway sections
  - **Limited** Retaining walls
  - **Limited** Landscaping
  - **Limited** relocation of existing infrastructure in right of way (fences, mailboxes, irrigation lines)

Project selection and elements can be modified and/or combined.

Sidewalk Project Costs

FY 2016 & FY 2017

Category	Total Cost	%
Concrete Sidewalks	$ 5,680,430.00	30%
Concrete Driveway	$ 3,528,030.64	19%
Concrete Curb	$ 3,231,777.38	17%
Removal of Existing	$ 2,012,112.25	11%
Street	$ 1,341,535.78	7%
Landscaping	$ 1,382,502.90	7%
Retaining Walls, Steps, Railing	$ 736,311.85	4%
Signage and Pavement Markings	$ 399,282.94	2%
Safety	$ 320,883.80	2%
SAWS	$ 177,335.80	1%
Fencing	$ 59,282.00	0%
Grand Total	$ 18,869,485.34	100%

Data compiled by Audit Office (December 2017)