Using GIS Technology to Assess Pedestrian Pathways for Paratransit Customers

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Bus & Paratransit Conference 🚝

Pedestrian Pathway Assessment Key Presentation Take-Aways

- Conditional eligibility enforcement requires knowledge of the condition of pedestrian sidewalk pathways
- Field data can be collected using ArcCollector
- Pathway accessibility grading is based on the individual passenger's functional abilities
- Partner with your city to make sidewalk pathway repairs



Pedestrian Pathway Assessment





Pedestrian Pathway Assessment



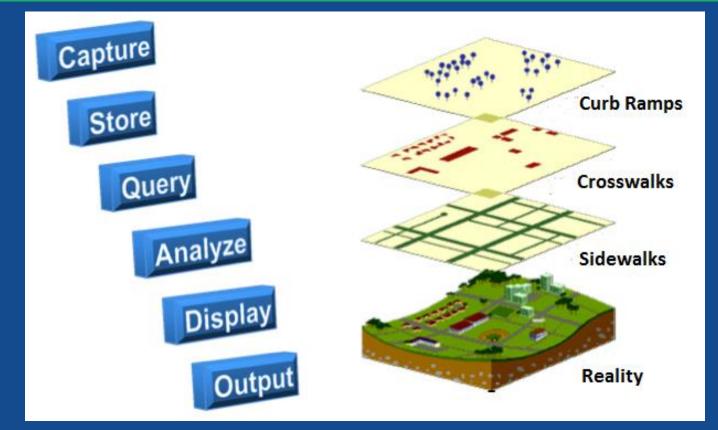




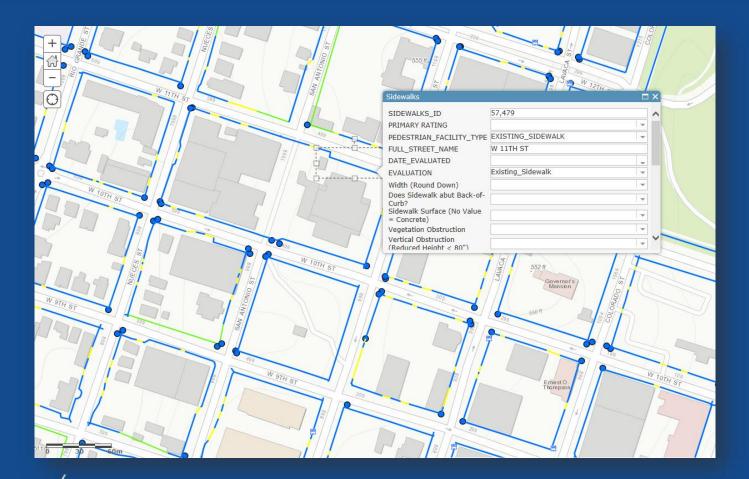
Data is collected relating to the condition of:

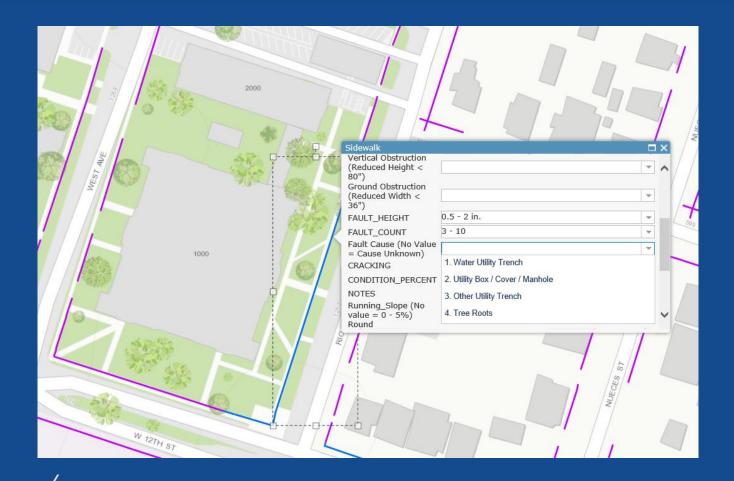
- Sidewalks
- Driveways
- Curb Ramps
- Crosswalks





Merging of Cartography – Statistical Analysis – Database Technology



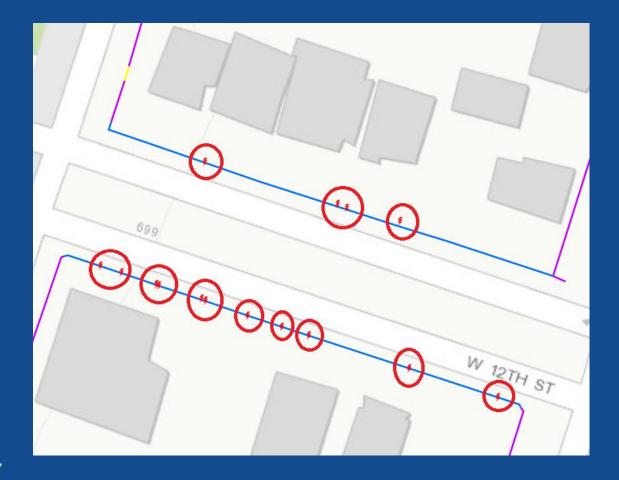


Sidewalk		×
80")		
Ground Obstruction (Reduced Width < 36")	Ŧ	
FAULT_HEIGHT	-	
FAULT_COUNT	-	
Fault Cause (No Value = Cause Unknown)	-	
CRACKING	-	
CONDITION_PERCENT	-	
NOTES		
Running_Slope (No value = 0 - 5%) Round	Ŧ	
Cross_Slope (No	Ŧ	ľ



Sidewalk			×
80")			
Ground Obstruction (Reduced Width <		-	\sim
36")	1. Utility Pole / Guy Wire	-	
FAULT_HEIGHT	2. Hudropt		
FAULT_COUNT	2. Hydrant		
Fault Cause (No Value	3. Mailbox		
= Cause Unknown) CRACKING	4. Other Obstruction		
CONDITION_PERCENT		-	
NOTES			
Running_Slope (No value = 0 - 5%)		Ŧ	
Round			6
Cross_Slope (No		Ŧ	•





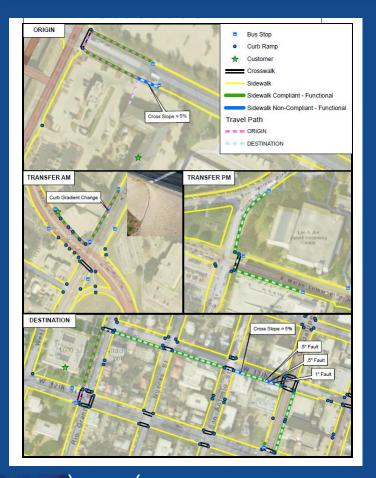
		ULE CES
	(1 of 3)	▲► □×
JL /	Problem_Spot	
	Туре	Fault > 2 Inches
	Notes	Cross Slope Begin - Cross Slope is > 4%
44	CreationDate	Cross Slope End - Cross Slope is > 4%
	Creator EditDate	DIP - Two surfaces meet with each running slope > 5%
	Editor	Fault > .25 Inches
*		Fault > .5 Inches
	DELETE CLOS	Fault > 2 Inches
	IZTH ST	Ground Obstruction - If width reduced less than 36"
861		Ground Vegetation Obstruction - Protrude into pathway reduce path to < 36"
		Gutter Debris - If Mud or Grass like debris is filling gutter at curb ramp
		Running Slope Begin > 5%
		Running Slope End > 5%
		Vertical Vegetation Obstruction - Hangs below 80 inches above path
		Misc
		251

MetroAccess Pathway Assessment Pathway Grading System

- Compliant Functional
 - Pathway meets all ADA requirements
- Non-Compliant Functional
 - Pathway has some minor issues but may not be accessible to all passengers
- Non-Compliant Non-Functional
 - Pathway has major issues and is not accessible

Pedestrian Pathway Assessment Pathway Grading System

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The following are mapped:

- Travel path from customers home to the bus stop
 - Travel path for any transfers
- Travel path from destination bus stop to customer's final destination











Pedestrian Pathway Assessment Benefits

- Improved infrastructure for all pedestrians
- Increased independence for people with disabilities
- Fosters working relationship with the city
- Manage paratransit costs by enforcing conditional eligibility
- Database provides opportunities for additional uses

Pedestrian Pathway Assessment

Thank you!

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