



Agua Fria Street Corridor Study

Public Meeting #2

**WILSON
& COMPANY**

discipline | intensity | collaboration | shared ownership | solutions

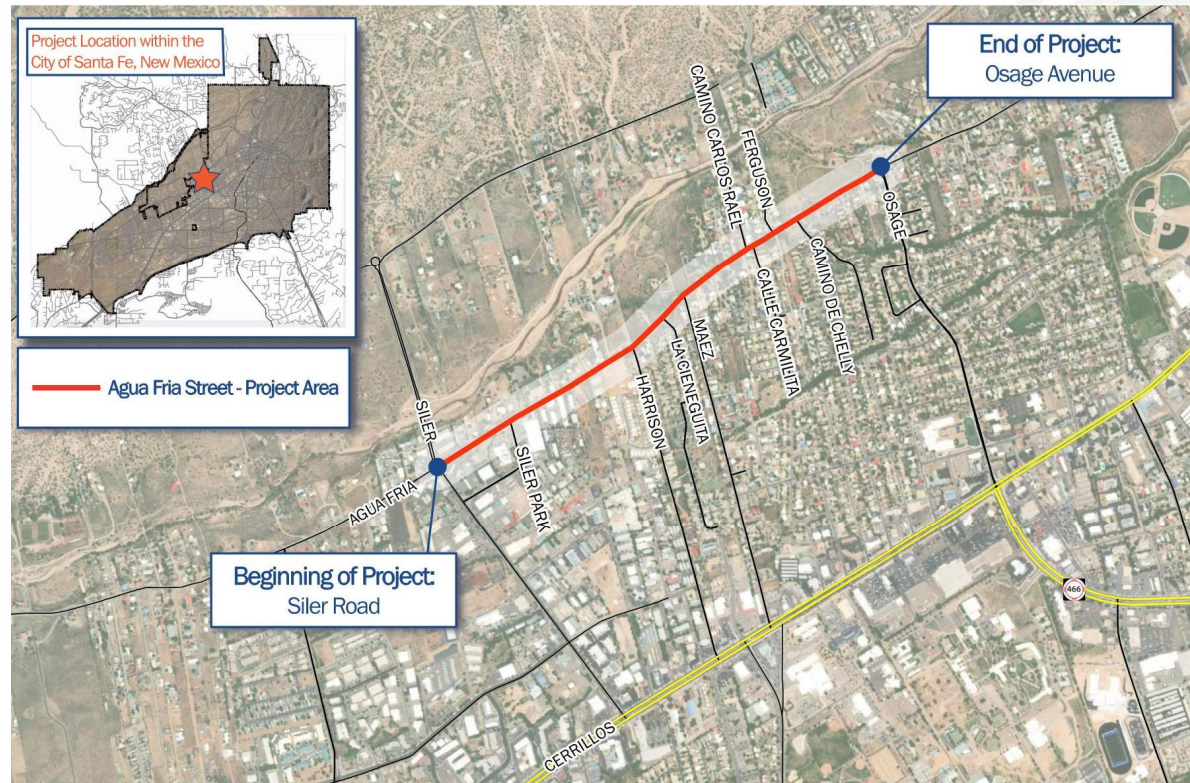
Agenda

- Project purpose and need
- Existing conditions
- Proposed conditions
- Public comments



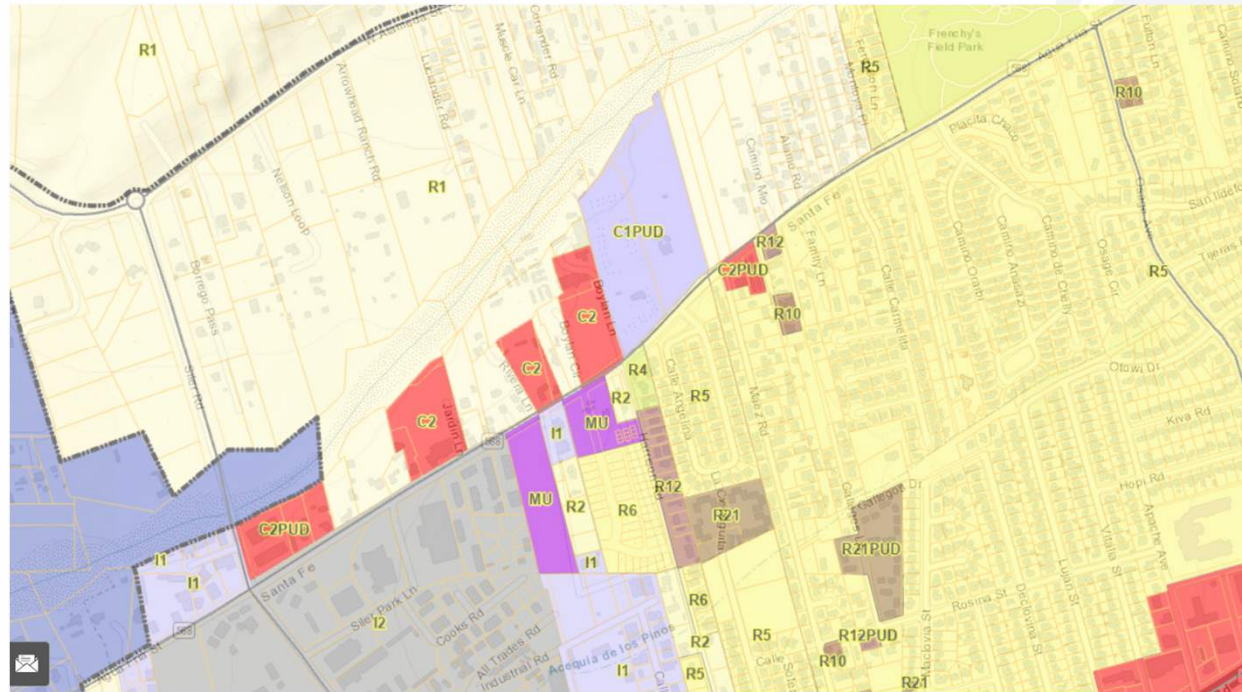
Study Limits

- Study Limits: Agua Fria Street, Siler Road to Osage Avenue
- Length: 1.1 miles
- Posted Speed Limit: 35 mph
- Roadway Classification: Minor Arterial



Study Limits

- Zoning: residential with commercial and industrial
- History: El Camino Real de Tierra Adentro Trail – earliest Euro-American trade route in the U.S.



Project Purpose and Need

- Roadway safety
 - Driveway and business access
 - Speeding concerns
- Bicycle and pedestrian safety
- Intersection improvements
 - Traffic flow

Outcomes will be used to develop future improvement projects



Schedule

- Existing Conditions – Fall 2022
- Public Meeting #1 – December 2022
- Proposed Roadway Alternatives – Spring 2023
- Public Meeting #2 – Tonight’s meeting
- Final Report – Fall 2023



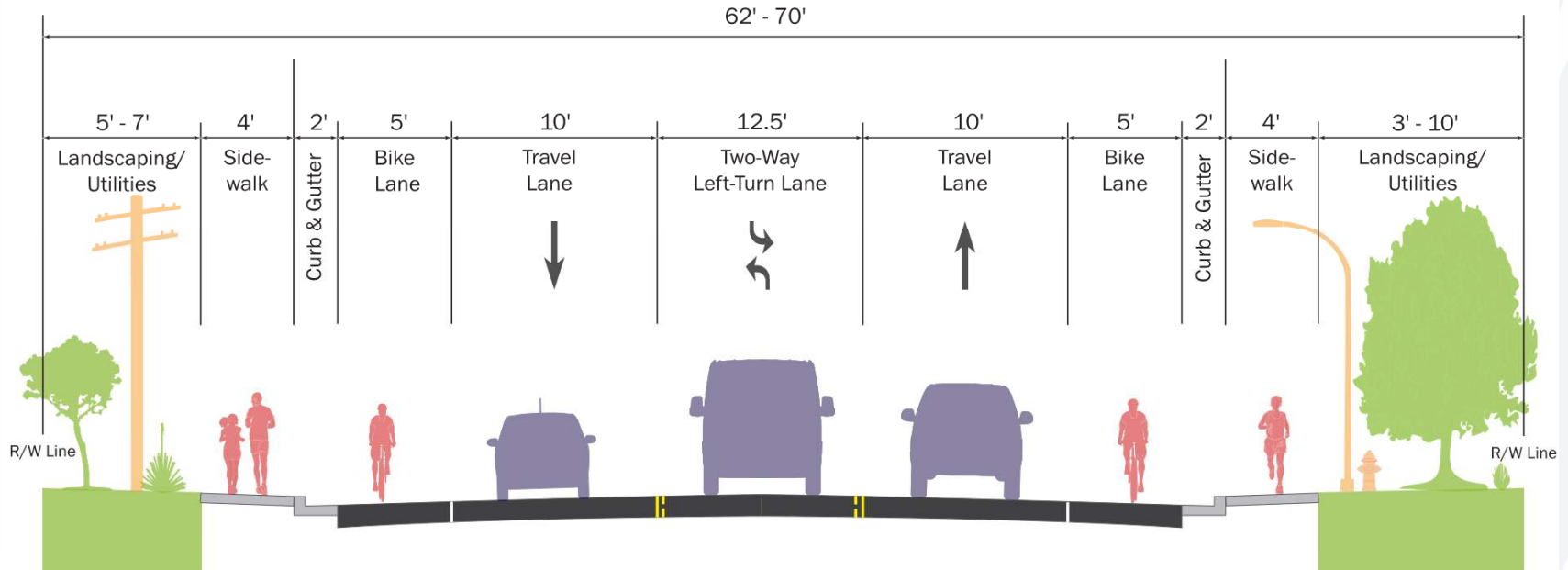
Existing Conditions

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Existing Typical Section

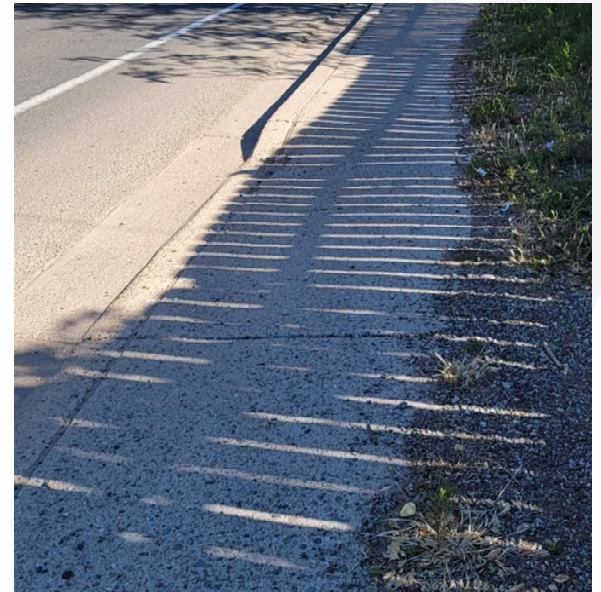
Agua Fria Street Siler Road to Osage Avenue



Existing Conditions Photos



Existing Conditions Photos



Pedestrian Crossings

- Existing Frenchy's Park crossing
- Acequia Lofts crossing (recently constructed)
- Planned El Camino crossing (designed)



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Traffic Counts

- Tube counts at 3 locations
- Collected data for 14-days (volume, speed)
- 85th percentile speed within 5 mph of posted speed limit

Counter No.	Location	Direction	Volume (veh/day)	ADT (veh/day)	Posted Speed (mph)	85 th -Percentile Speed (mph)
1	Agua Fria Street between Siler Road and Siler Park Lane	EB	5,754	11,095	35	37
		WB	5,341			39
2	Agua Fria Street between Boylan Circle and Harrison Road	EB	5,145	10,764	35	40
		WB	5,619			39
3	Agua Fria Street between Camino de Chelly and Osage Avenue	EB	6,076	11,930	35	39
		WB	5,854			39



Intersection Operations

- Turning movement counts at 10 intersections
 - Collected vehicles, pedestrians, bicyclists
 - Collected data on a Thursday, Friday, Saturday
- Determined how intersections operate
 - 2022 (Existing)
 - 2032 (Future)
 - Build
 - No-Build
 - Individual movements at Siler and Osage operate unacceptably



Crash Analysis

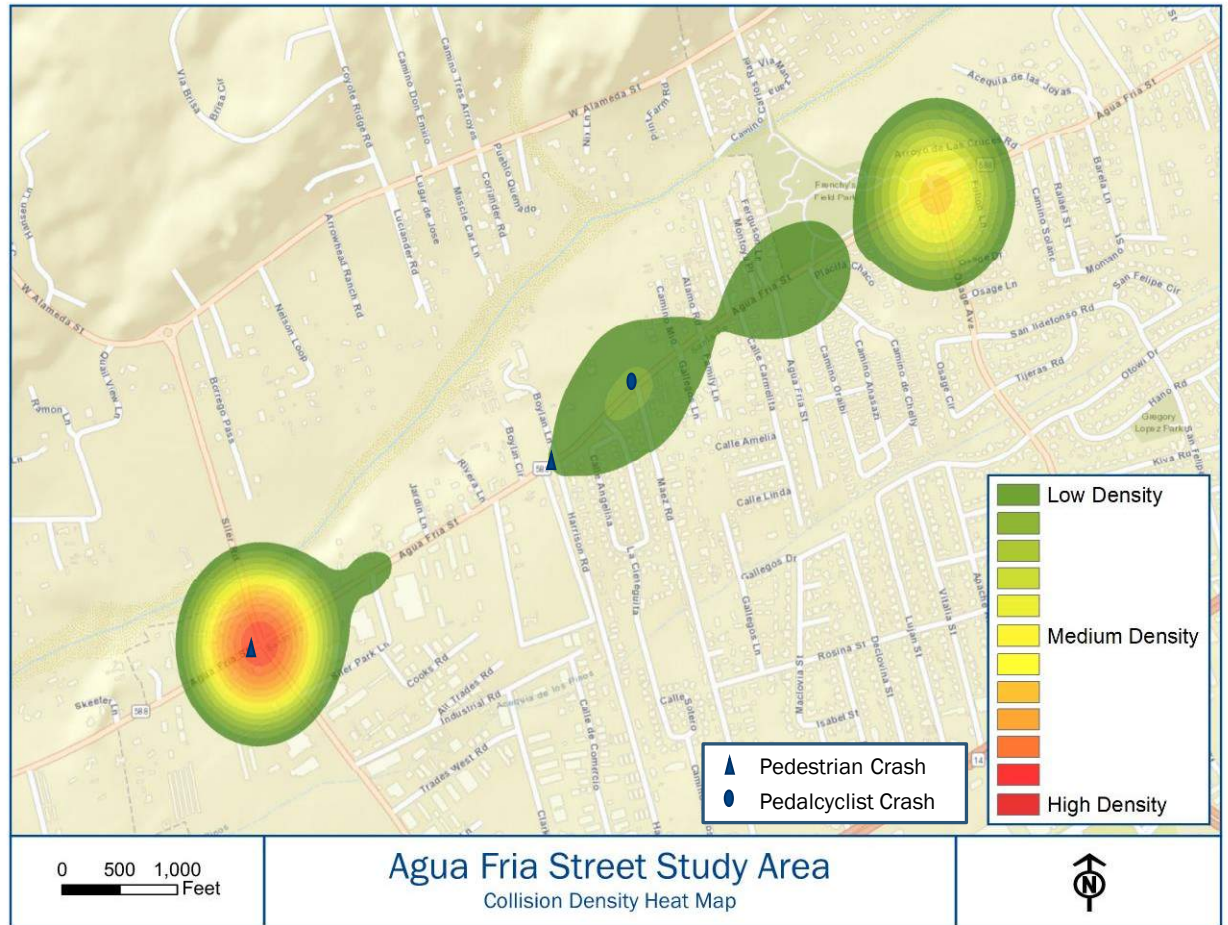
- Crash data 2010-2020
- 308 total crashes
- No fatalities
- Average 29 crashes per year

Year	Crash Severity			Total
	Fatal	Injury	PDO*	
2010	0 (0%)	10 (33%)	20 (67%)	30 (100%)
2011	0 (0%)	12 (37%)	20 (63%)	32 (100%)
2012	0 (0%)	5 (28%)	13 (72%)	18 (100%)
2013	0 (0%)	6 (29%)	15 (71%)	21 (100%)
2014	0 (0%)	4 (17%)	19 (83%)	23 (100%)
2015	0 (0%)	17 (53%)	15 (47%)	32 (100%)
2016	0 (0%)	23 (42%)	32 (58%)	55 (100%)
2017	0 (0%)	7 (30%)	16 (70%)	23 (100%)
2018	0 (0%)	6 (21%)	22 (79%)	28 (100%)
2019	0 (0%)	9 (35%)	17 (65%)	26 (100%)
2020	0 (0%)	4 (20%)	16 (80%)	20 (100%)
Total	0 (0%)	103 (33%)	205 (67%)	308 (100%)



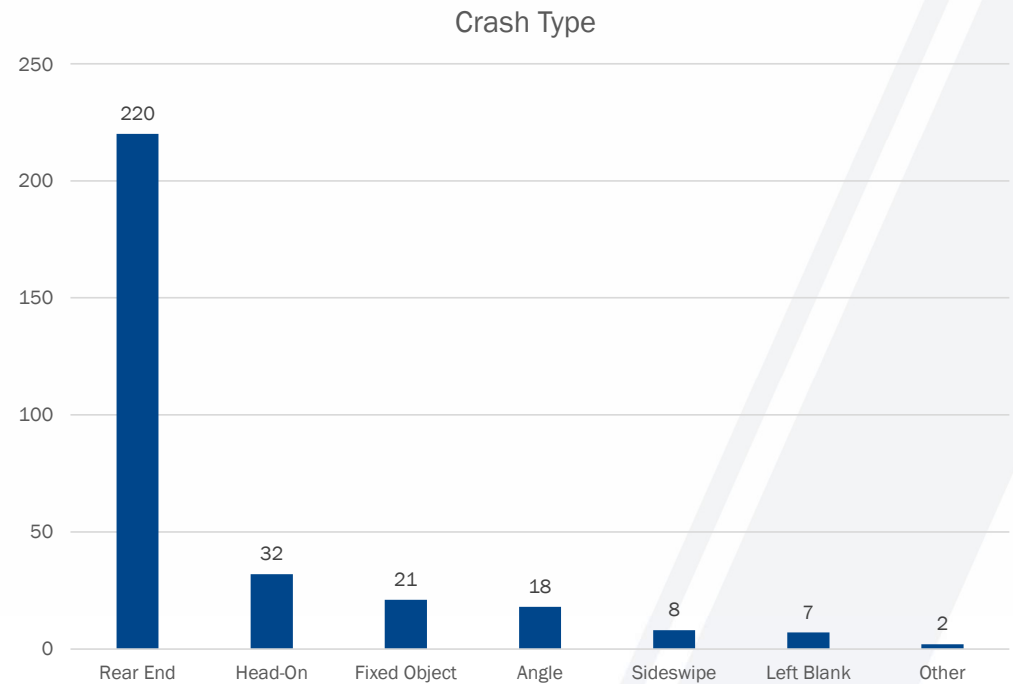
Collision Heat Map

- Within the study area, majority of crashes occurred at the Siler Road intersection



Crash Analysis

- 80% crashes occurred in daylight
- 94% of crashes occurred in clear weather conditions
- 71% of crashes were rear end collisions
- Majority of crashes were due to following too close



Public Meeting #1

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Public Meeting #1

- December 13, 2022
- 26 attendees, including City and Wilson staff
- Comments received in-person, comment form, and email



Public Input

- Add raised medians
 - Vehicles pass in two-way left-turn lane
- Blind corner at Maez and Calle Carmelita
- Crosswalk warning at Camino de Chelly
- Crashes at Osage intersection
- Speeding
- Traffic congestion
- Multimodal improvements
 - Pedestrian refuges
- Developments
- Roundabouts

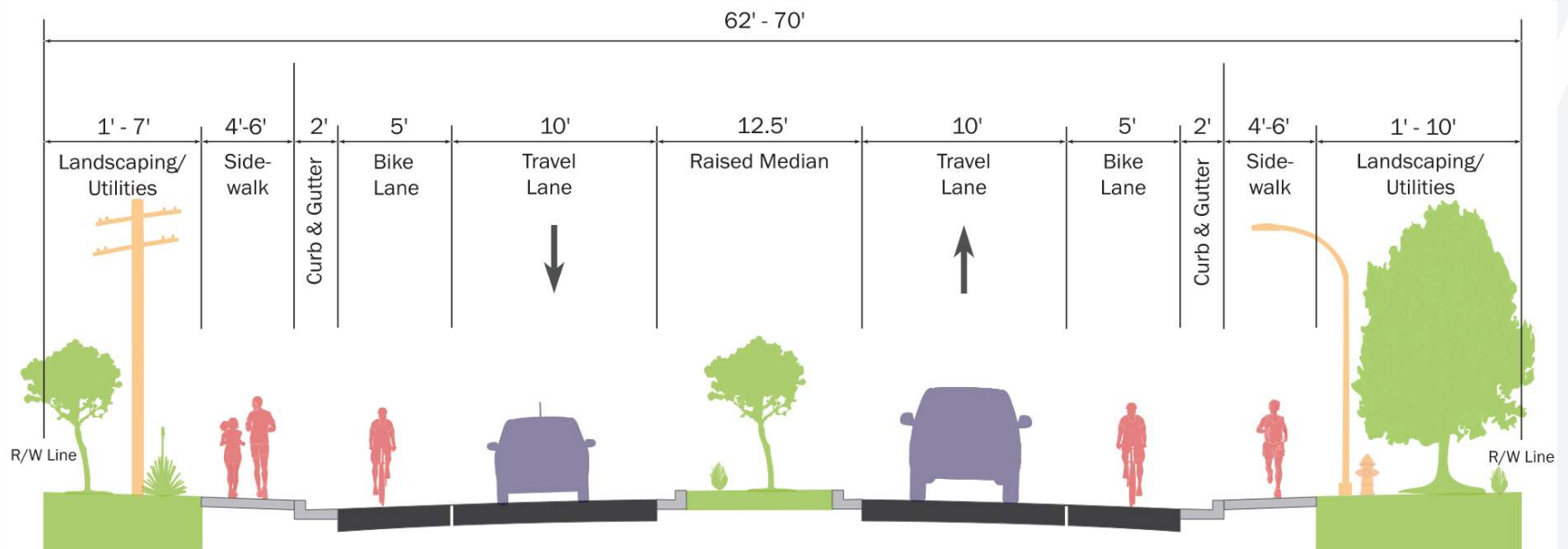
Comment Category					
Traffic and Safety	Speeding	Pedestrian and Multimodal	Development	Alternatives	Other
8	7	13	10	13	5



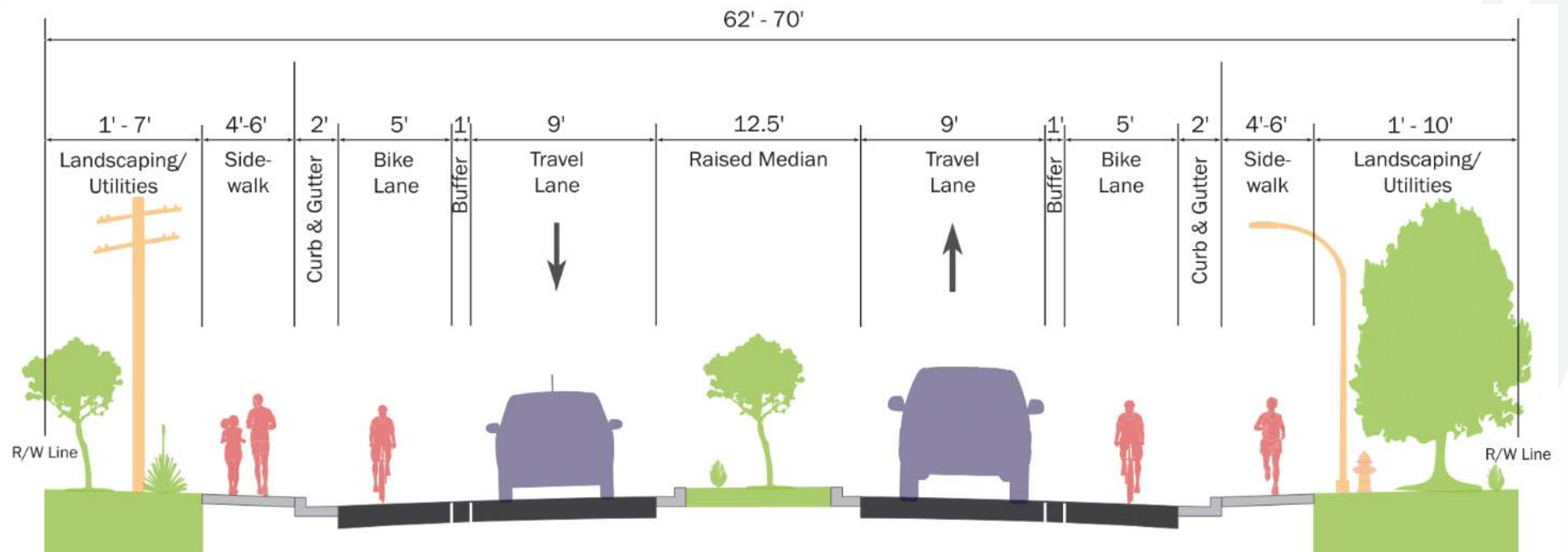
Proposed Alternatives



Alternative A – 10-ft Lanes with Raised Medians



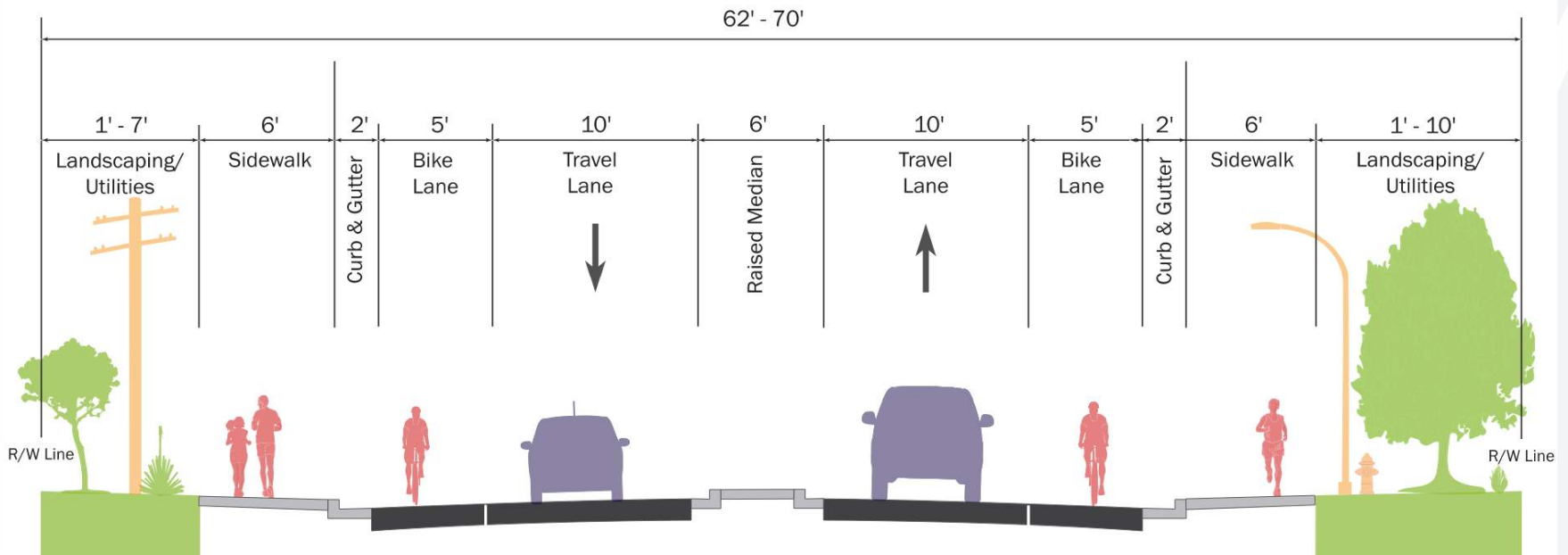
Alternative B – 9-ft Lanes with Raised Medians



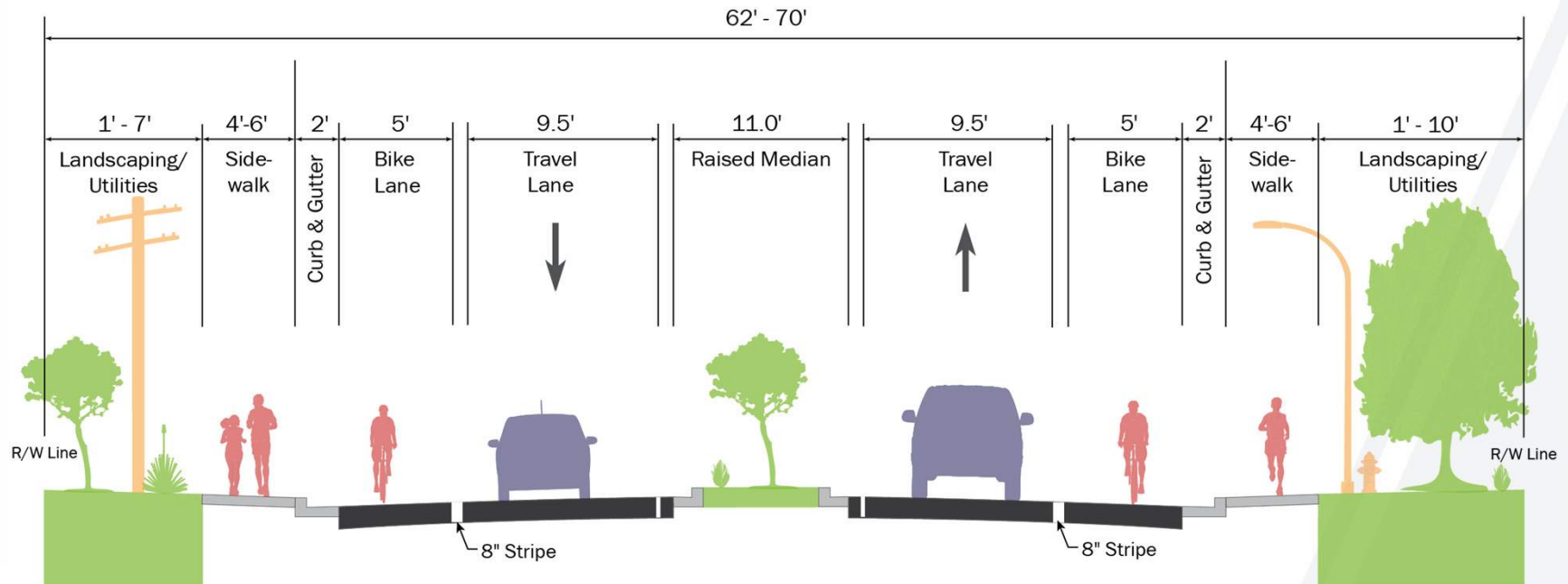
City of Santa Fe and Santa Fe Metropolitan
Planning Organization Alternative



Alternative C – 10-ft Lanes without Left Turn Bays



Additional Alternative



Raised Medians / Pedestrian Refuge Islands

Benefits

- Traffic calming
- Reduces number of conflict points
- Reduces crossing distances for pedestrians

Cons

- Expensive
- May impact access points
- Maintenance (weeds)
- May create drainage issues



Signing and Striping

Benefits

- Delineates traffic
- Inexpensive

Cons

- Maintenance



Turn Lanes

Benefits

- 14-26% in crash reduction based on FHWA *Proven Safety Countermeasures*
- Increases roadway capacity

Cons

- Expensive - infrastructure removal and relocations
- May require right-of-way
- May lengthen crossing distance for pedestrians



Turn Lanes

- NMDOT State Access Management Manual turn lane warrant
- Warrants are based on the amount of thru traffic and the number of vehicles turning
- Left turn lanes warranted:
 - All intersections
- Right turn lanes warranted:
 - Most intersections
- Right of Way Constraints



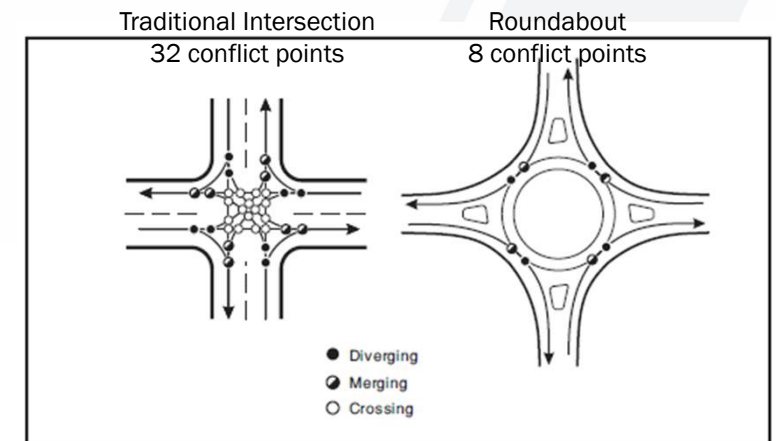
Roundabouts

Benefits

- Lower vehicle speeds
- Reduce conflict points

Cons

- Expensive – infrastructure removal and relocations
- May require additional right-of-way
- Osage Avenue intersection – operates well
- Maez Road intersection – operates well
- Siler Road intersection – does not operate well



Posted Speed Reduction

- Reduce posted speed limit to 30 mph
- Improve sight distances at:
 - Maez Road
 - Camino Carlos Rael
 - Camino Carmelita
 - Ferguson Lane



8%



20%



46%

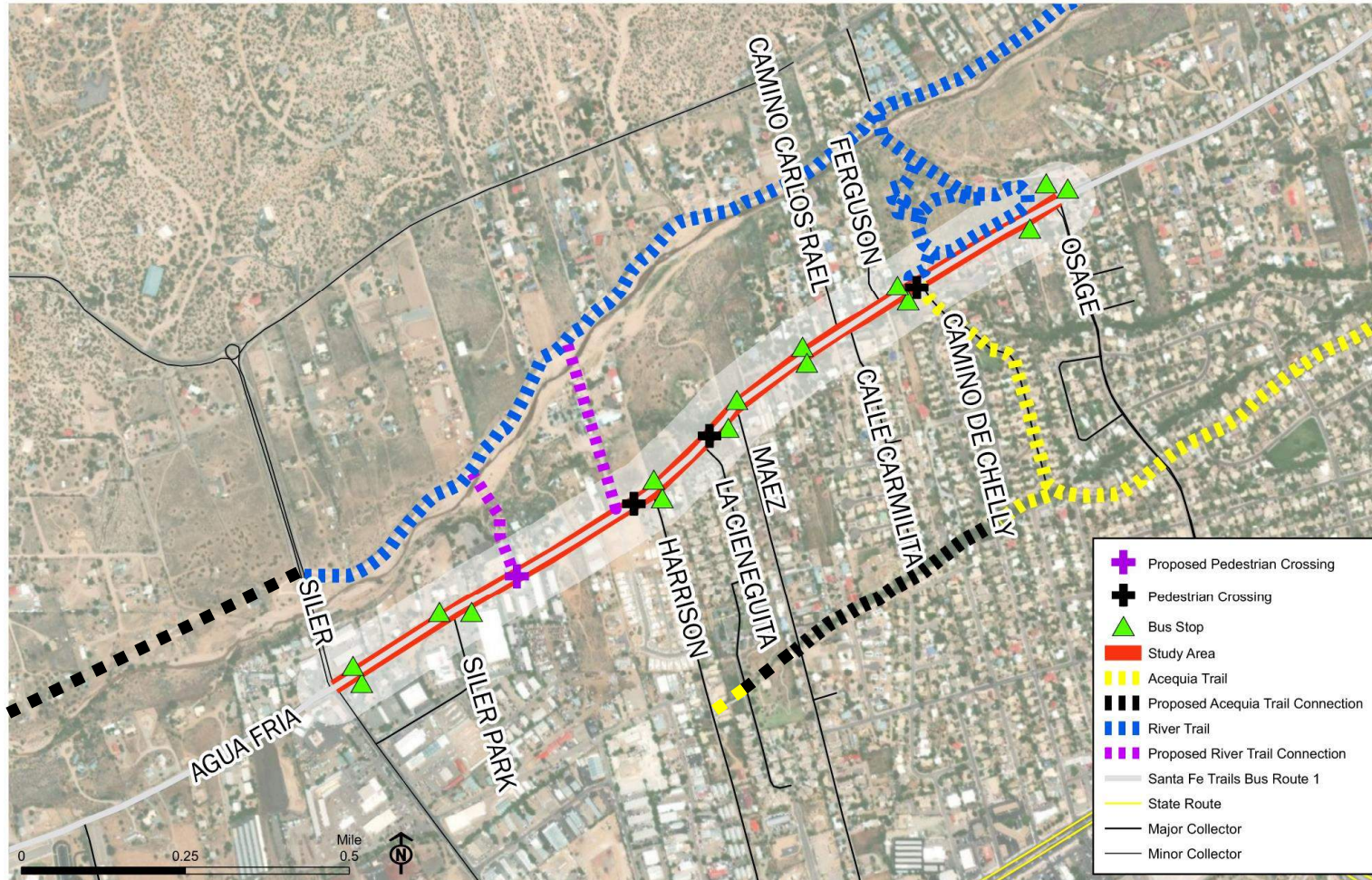


Likelihood of death for people walking if hit at these speeds

Source: AAA Foundation, Tefft, B.C. (2011)



Pedestrian and Bicycle Connectivity



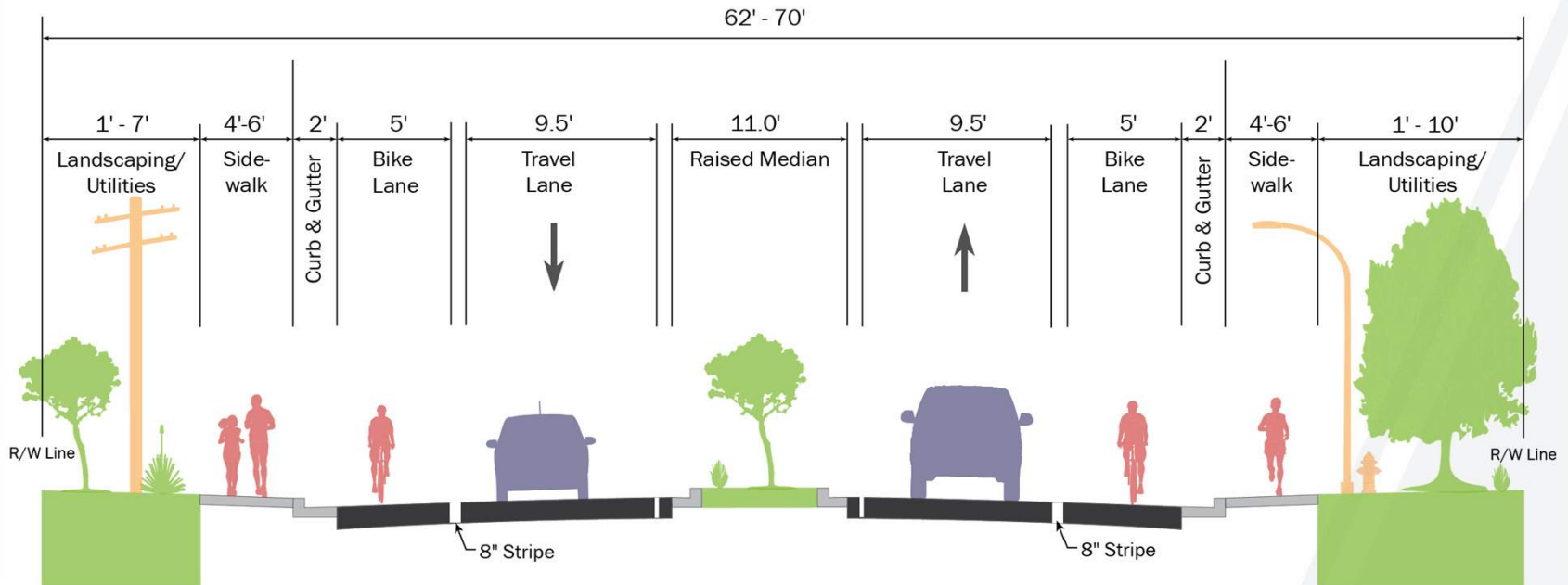
Alternatives Matrix

	No-Build Alternative	Alternative A - 10-ft w/ Raised Medians	Alternative B - 9-ft Lane w/ Raised Medians	Alternative C - No Left-Turn Lanes	Additional Alternative	Roundabout Option
Traffic calming	(o)	(+)	(++)	(++)	(++)	(++)
Multimodal	(-)	(++)	(++)	(+)	(++)	(+)
Safety	(-)	(+)	(o)	(o)	(+)	(+)
Traffic operations	(+)	(o)	(-)	(-)	(o)	(o)
Maintenance	(+)	(-)	(-)	(-)	(-)	(-)
Cost	(+)	(-)	(-)	(--)	(-)	(--)
Overall score	1	2	1	-1	3	1

Positive, Good	(++)	2
Above Average	(+)	1
Average	(o)	0
Below Average	(-)	-1
Negative, Poor	(--)	-2



Additional Alternative



Next Steps

- Final report – end of November
- Seek design funding
- Design
- Construction



Public Input

Wilson & Company, Inc., Engineers & Architects



Questions/Comments

- Provide comments tonight
 - Vocal or via comment form
- Email comments to jawolfenbarger@santafenm.gov or audra.gallegos@wilsonco.com
- Deadline for comments October 31, 2023



Thank you!

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Historical Traffic Volumes

STATION DATA Show Data

Directions: **2-WAY** **NEG** **POS** ?
1 1

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2022	10,417	1,166	11	52	9,782 (94%)	635 (6%)	
2021	11,217	1,180	11	50	10,578 (94%)	639 (6%)	
2020	10,021	1,120	11	52	9,320 (93%)	701 (7%)	
2019	11,705		11	53	11,213 (96%)	492 (4%)	
2018	11,416	1,236	11	53	11,019 (97%)	397 (3%)	

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2017	12,144	1,253	10	51	11,524 (95%)	620 (5%)	
2016	13,897	1,505	11	53	12,922 (93%)	975 (7%)	
2015	11,469		11	52			
2014	11,492		10	51			
2013	11,843		10	52			

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Year	AADT	DHV-30	K %	D %	PA	BC	Src
2012	12,724		11	51			
2011	13,033		12	51			
2010	12,849		11	51			
2009	15,009		11	51			
2008	16,477						

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Year	AADT	DHV-30	K %	D %	PA	BC	Src
2007	16,063						
2006	15,660						
2005	15,393						

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