



El Paso County

Furrow Road Consultant Engineering Safety
Evaluation Project – From Hwy 105 to Higby Road

Safety Moment

Covid 19:

While mask usage is encouraged, they are not required for any individual inside our school buildings. D38 will promote and ensure a supportive and welcoming environment for all those who choose to wear a mask.



Introductions

- El Paso County: Chris Bland, P.E., Joshua Palmer, P.E.



- Stantec Consulting Services: Dave Krauth, P.E., Brent Hypnarowski, E.I.T.



Agenda

1. Introductions
2. Agenda Review
3. Project Scope Overview
4. Data Review
 - Volumes
 - Crash Analysis
 - Speed Data
5. Major Transportation Corridors Plan
6. Alternatives/Treatments
 - Acceptable vs Not Acceptable
7. Q & A

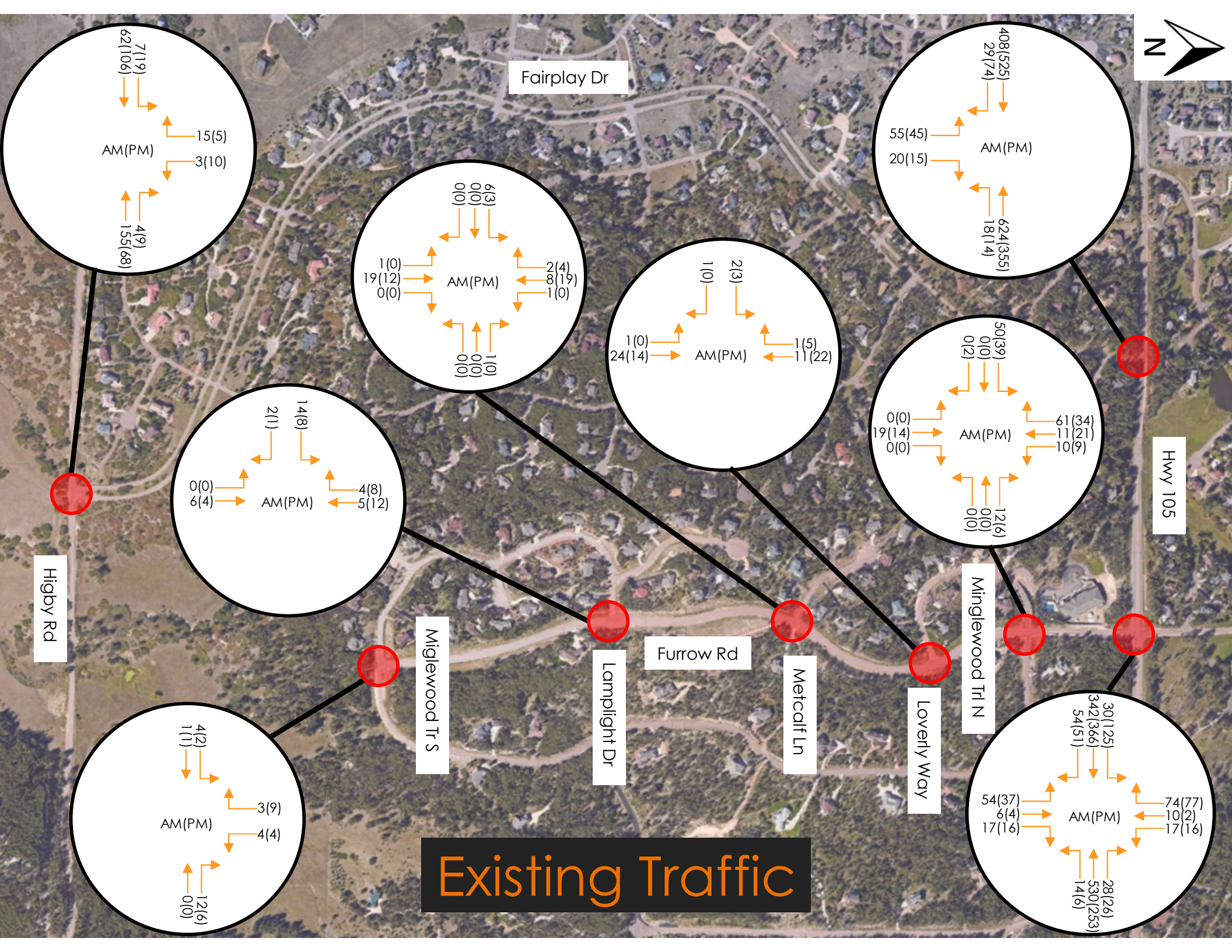
Project Scope

GOAL - Provide El Paso County with data and analysis to make an informed decision on solution(s) to issues raised by the neighborhood.

- *Evaluate Existing and Future Traffic Operations
 - *Volumes, Crashes, Speeds, Operational Issues, Geometric Issues**
- *Engage Residents – Two Public Meetings*
- *Develop Recommendations of treatments*
- *Conceptual Design and Cost Estimating*
- *Final Report*

Traffic Volumes

- 24-hour average daily traffic (ADT) and speed counts
- 12-hour turning movement counts (TMC)



Fairplay Dr

Hwy 105

Highy Rd

Minglewood Tr S

Lamplight Dr

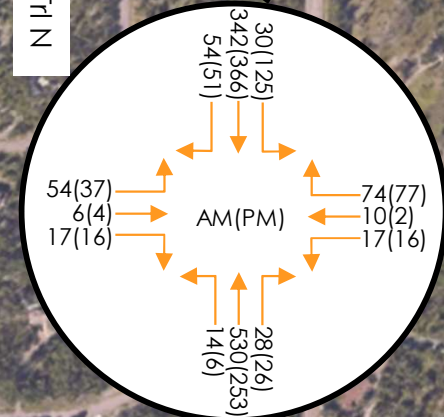
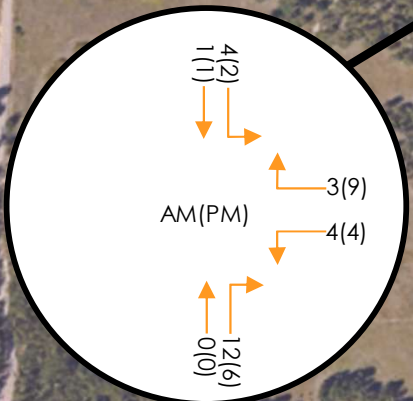
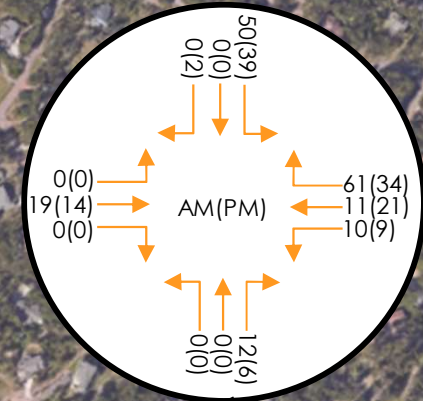
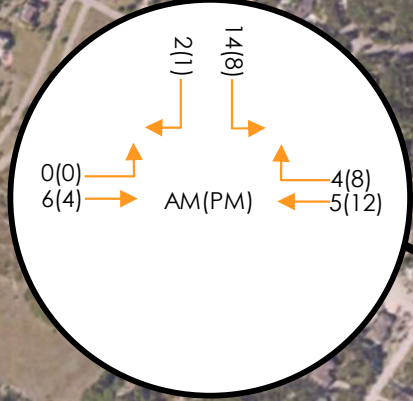
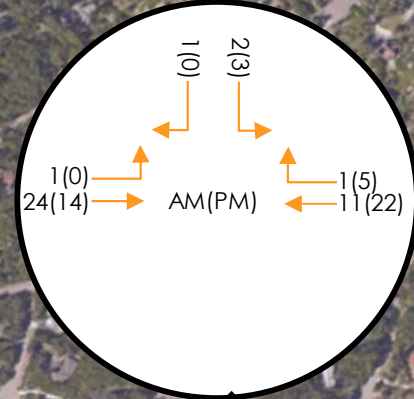
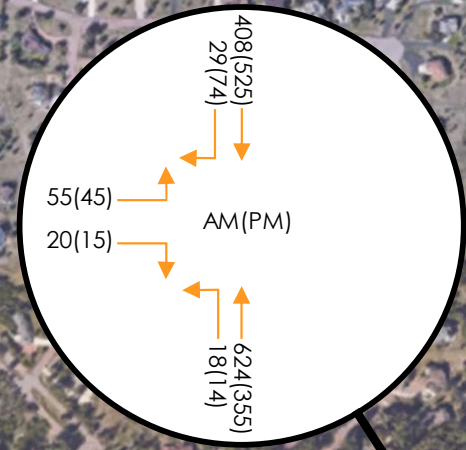
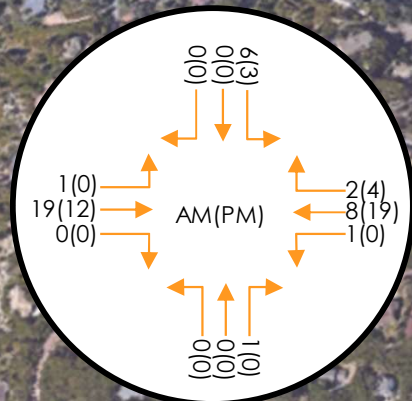
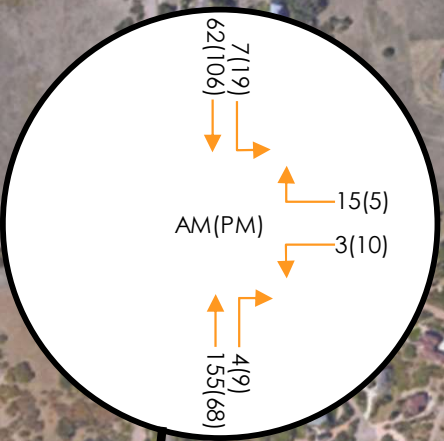
Furrow Rd

Metcalf Ln

Lovely Way

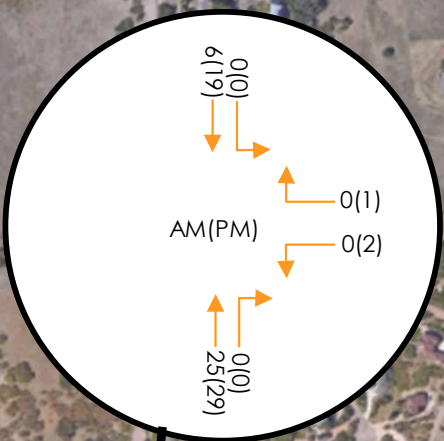
Minglewood Tr N

Existing Traffic

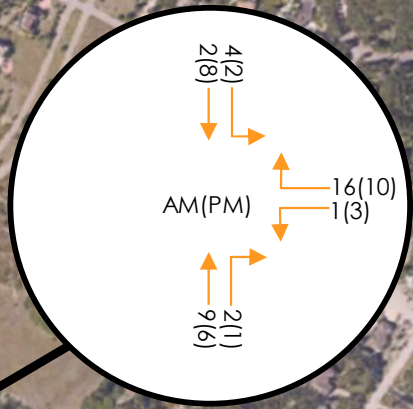




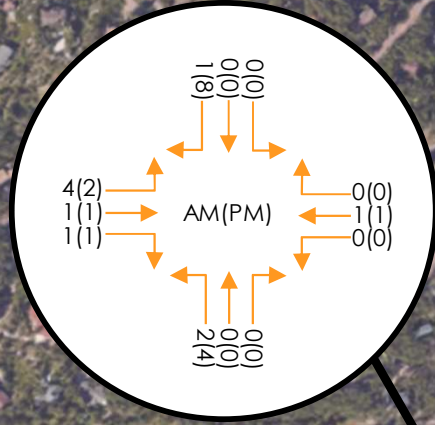
Fairplay Dr



Higby Rd



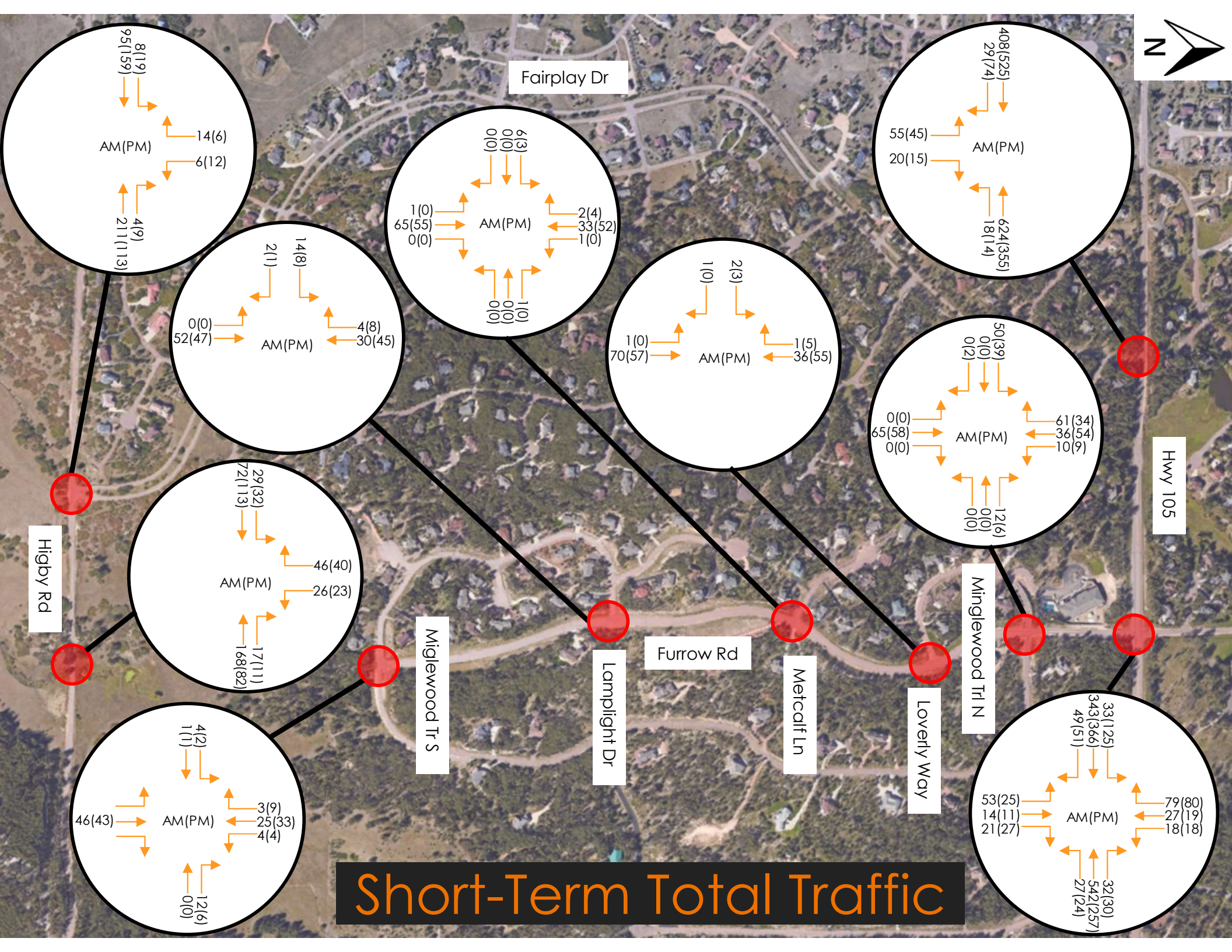
Furrow Rd



Hwy 105

Short-Term Grandwood Trips

(Grandwood Ranch Traffic Impact Study, 2020)



Fairplay Dr

Hwy 105

Higby Rd

Minglewood Tr S

Lamplight Dr

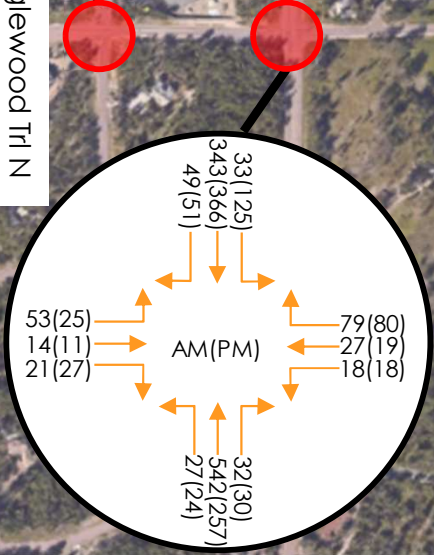
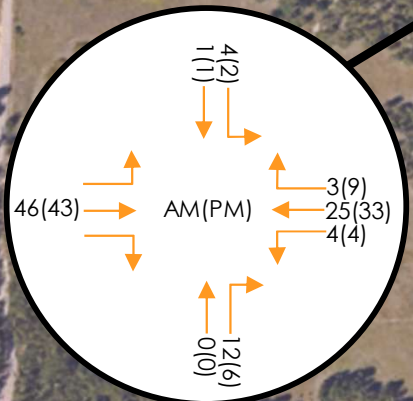
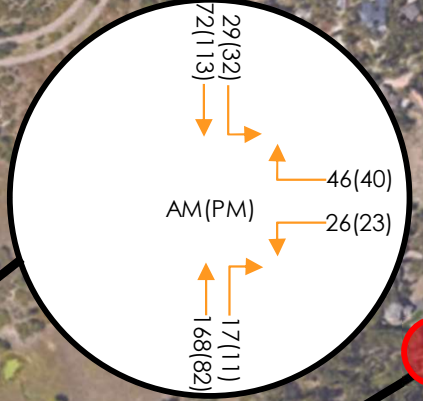
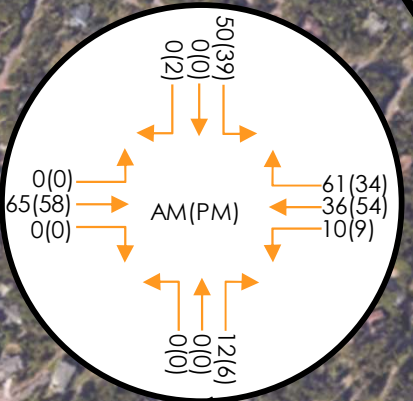
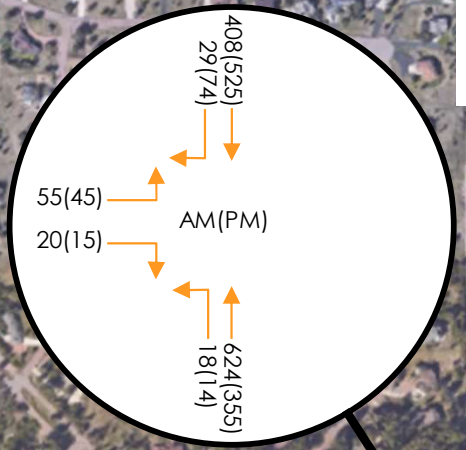
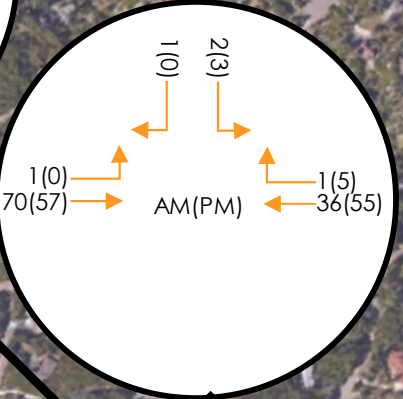
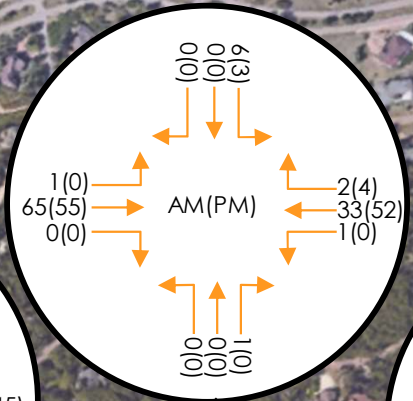
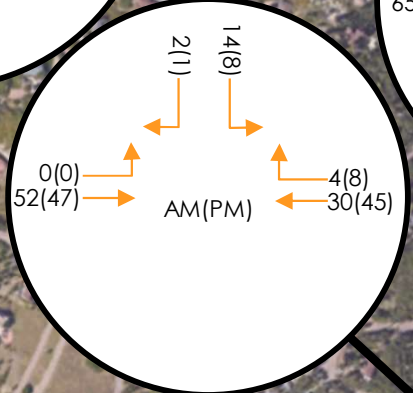
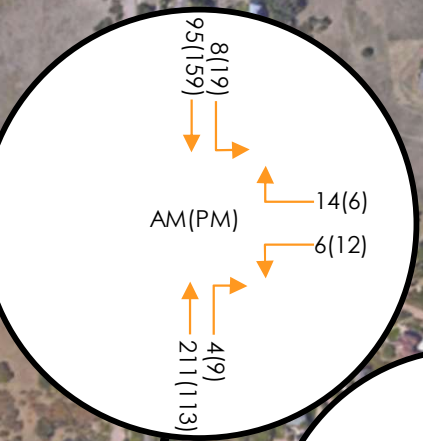
Furrow Rd

Metcalf Ln

Lovely Way

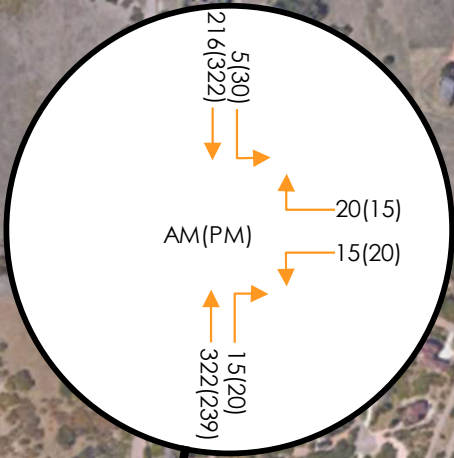
Minglewood Tr N

Short-Term Total Traffic

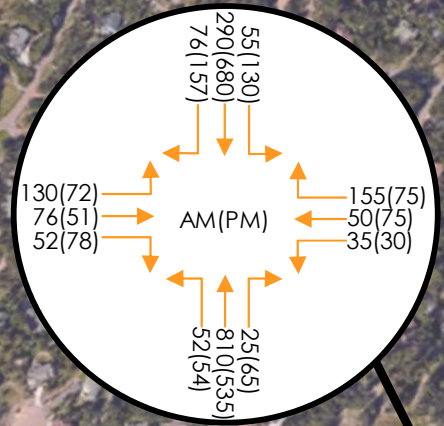




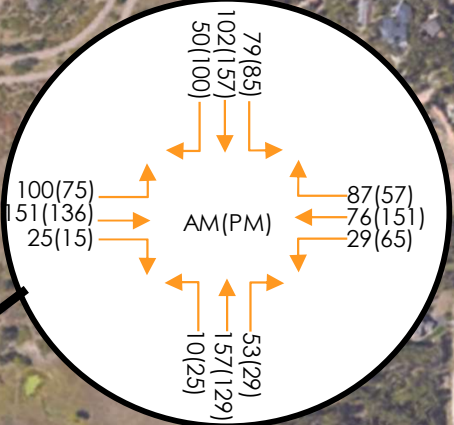
Fairplay Dr



Hwy 105



Higby Rd



Furrow Rd

2040 Total Traffic

(Grandwood Ranch Traffic Impact Study, 2020)



Fairplay Dr

ADT = 1,962
85th Speed EB = 49 mph
85th Speed WB = 47 mph

ADT = 324
85th Speed NB = 34 mph
85th Speed SB = 31 mph

ADT = 8,207
85th Speed WB = 53 mph
85th Speed EB = 59 mph

Higby Rd

Hwy 105

Furrow Rd

Metcalf Ln

ADT & 85th Percentile Speeds

Crash Analysis

- 5 year crash history
- **Furrow Rd:** from Hwy 105 to Minglewood Tr S
- **Fairplay Dr:** from Hwy 105 to Higby Rd
- **Hwy 105:** from Jackson Creek Pkwy to 1 mile East of Furrow Rd
- **Higby Rd:** from Jackson Creek Pkwy to 1 mile East of Furrow Rd
- 0 recorded fatalities

Highway 105 Reported Crashes

2015-2019
(CDOT)



Intersection	Crash Type										Total Crashes
	Rear End		Broadside		Approach-Turn		Head-On		Fixed Object		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
2nd St									2	100%	2
3rd St	1	50%	1	50%							2
Jackson Creek Pkwy	13	81%	1	6%	1	6%	1	6%			16
Knollwood Blvd	4	80%	1	20%							5

Higby Rd Reported Crashes

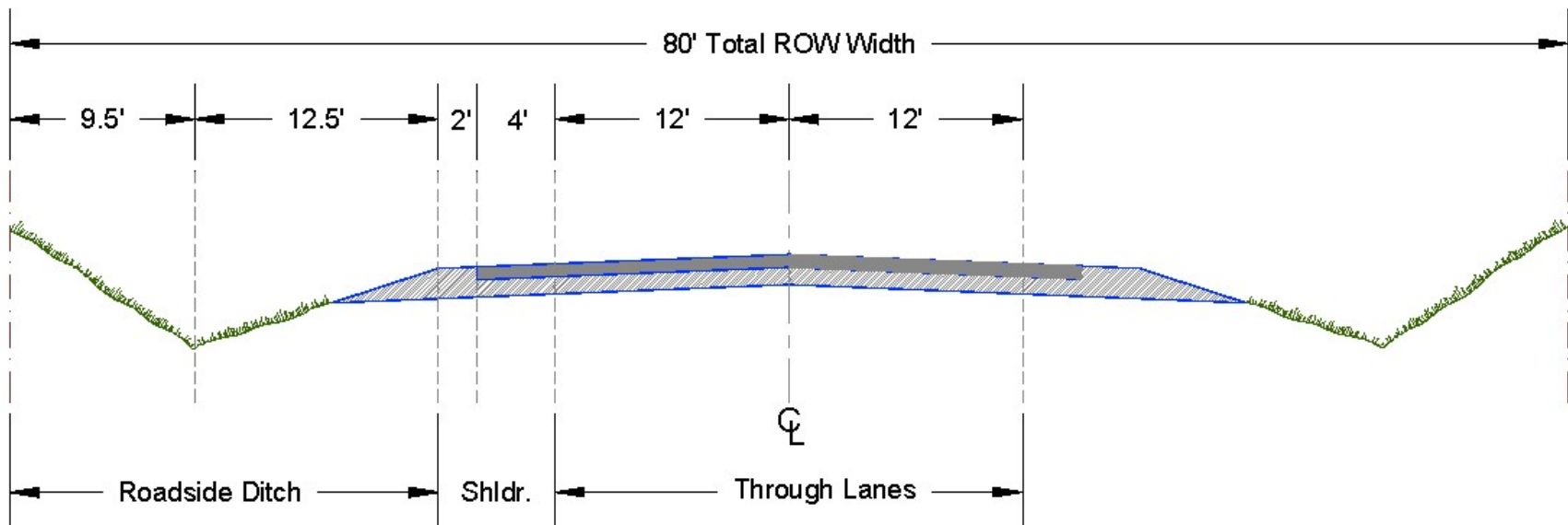
2015-2019
(CDOT)



Intersection	Crash Type										Total Crashes
	Rear End		Broadside		Head-On		Ped/Bicycle		Fixed Object		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Jackson Creek Pkwy	7	50%	2	14%	2	14%	2	14%	1	7%	14
Fairplay Dr									1	100%	1

What is a Collector?

- Collector: “Roadways that serve as links between local access facilities and arterial facilities over medium-to-long distances, outside of or adjacent to subdivision developments. Collectors are managed to maximize the safe operation of through-movements and to distribute traffic to local access.” – *2016 Major Transportation Corridors Plan Update, El Paso County*



Alternatives Analysis

Modifications for Evaluation	
A	Bike - pedestrian lanes
B	Chicanes
C	Continuous center two-way left turn lanes
D	Correction of sight distance limitations
E	Curb bump-outs
F	Designation of a corridor-wide speed limit
G	Designation of pedestrian crossings
H	Designation of separate bicycle lanes
I	Horizontal deflections
J	Mini, compact, and single-lane roundabouts
K	MUTCD standard signing
L	Narrow travel lanes
M	Urban cross-section with curb, gutter, and sidewalk
N	Pedestrian infrastructure, ramps, landing areas, and sidewalk
O	Raised median pedestrian refuge islands for pedestrian crossings
P	Raised median islands
Q	Regulatory intersection traffic control signing, including two-way or all-way stop control
R	Separate bicycle and pedestrian multi-use paths



Roundabout



Mini Roundabout



Pedestrian Crossing



Pedestrian Crossing



Bike Lanes & Mixed-Use Paths



“Complete Street”

Questions?

Please email El Paso County DOT:
Add “Furrow Road” in the subject line

DOTweb@elpasoco.com