



- Why Perform Bicyclist and Pedestrian Counts?
- Overall Approach
- Data Collected
- Results
- Next Steps
- Questions/Discussion



# Why Do Bike and Ped Counts?

1. Investments in bike/ped infrastructure and programs
2. Better understand traveler behavior
3. Support planning and prioritization of improvements

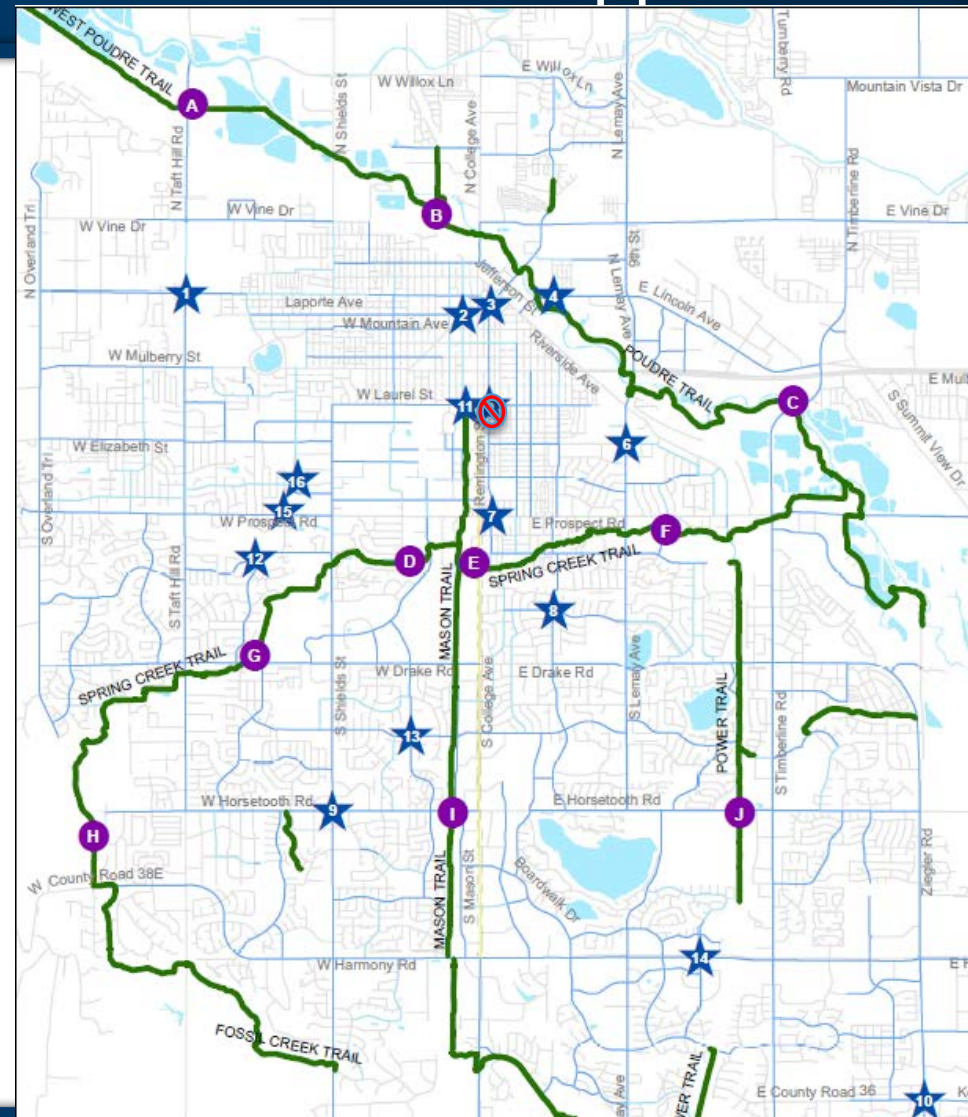


# Overall Approach

Date	Time Period
<b>Tuesday September 15</b> (intersection and trail)	7-9 a.m. 12-2 p.m. 5-7 p.m.
<b>Thursday September 17</b> (trail only)	7-9 a.m. 12-2 p.m. 5-7 p.m.
<b>Saturday September 19</b> (intersection and trail)	12-2 p.m.

## Count Locations

- 11 Trail
- 15 intersection







## TRAIL COUNT FORM

<b>Site ID:</b>	A			<b>Location:</b>	Poudre Trail @ Taft Hill Parking Lot		
<b>Date:</b>	9/15	9/17	9/19	<b>Time Period:</b>	7-9 a.m.	noon-2 p.m.	5-7 p.m.

<b>Volunteer Name:</b>							
<b>Weather</b> (circle all that apply):	Sunny	Cloudy	Rainy	Windy	Hot	Cold	
<b>Notes:</b>							

		Bicyclists		Walkers (inc. wheelchairs & strollers)		Runners/Joggers		Others (skateboarders & roller bladers)	
		Female	Male	Female	Male	Female	Male	Female	Male
:00- :14	EB								
	WB								
:15- :30	EB								
	WB								



**Bicyclists Wearing Helmets**



**Dogs On-Leash**



**Dogs Off-Leash**



**E-Bikes**



# Bicyclist Intersection Count Data

## BICYCLIST INTERSECTION COUNT FORM

Site ID:	16		Location:	Springfield Dr & City Park Ave		
Date (please circle):	9/15	9/19	Time Period (please circle):	7-9 a.m.	noon-2 p.m.	5-7 p.m.

Volunteer Name:

Weather (circle all that apply):

Sunny

Cloudy

Rainy

Windy

Hot

Cold

Notes:

Time Interval: 0:00-0:14				Time Interval: 0:15-0:29			



Tally: Bicyclists Wearing Helmets



Tally: Female Cyclists



Tally: Male Cyclists



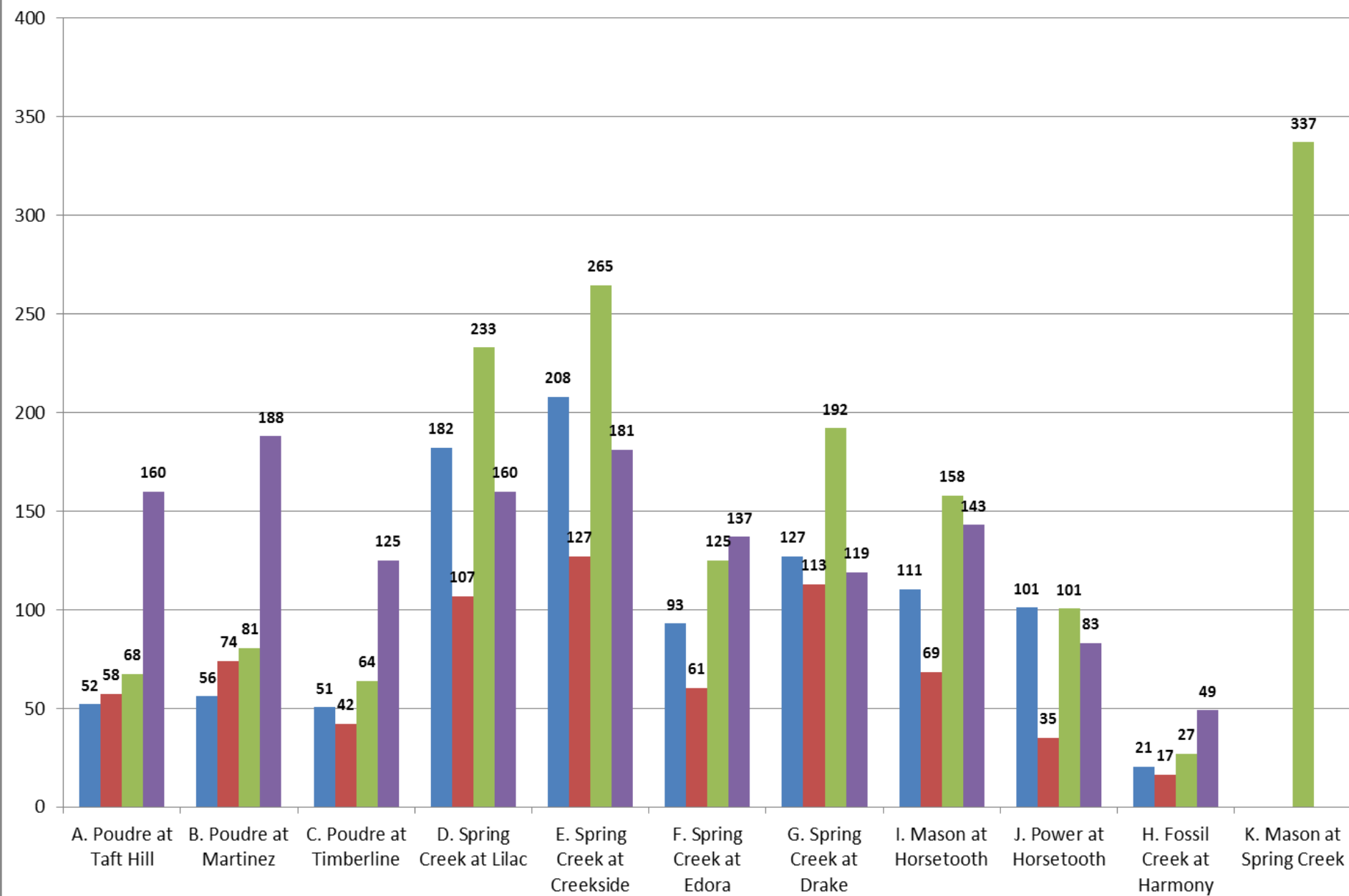
Tally: E-Bikes





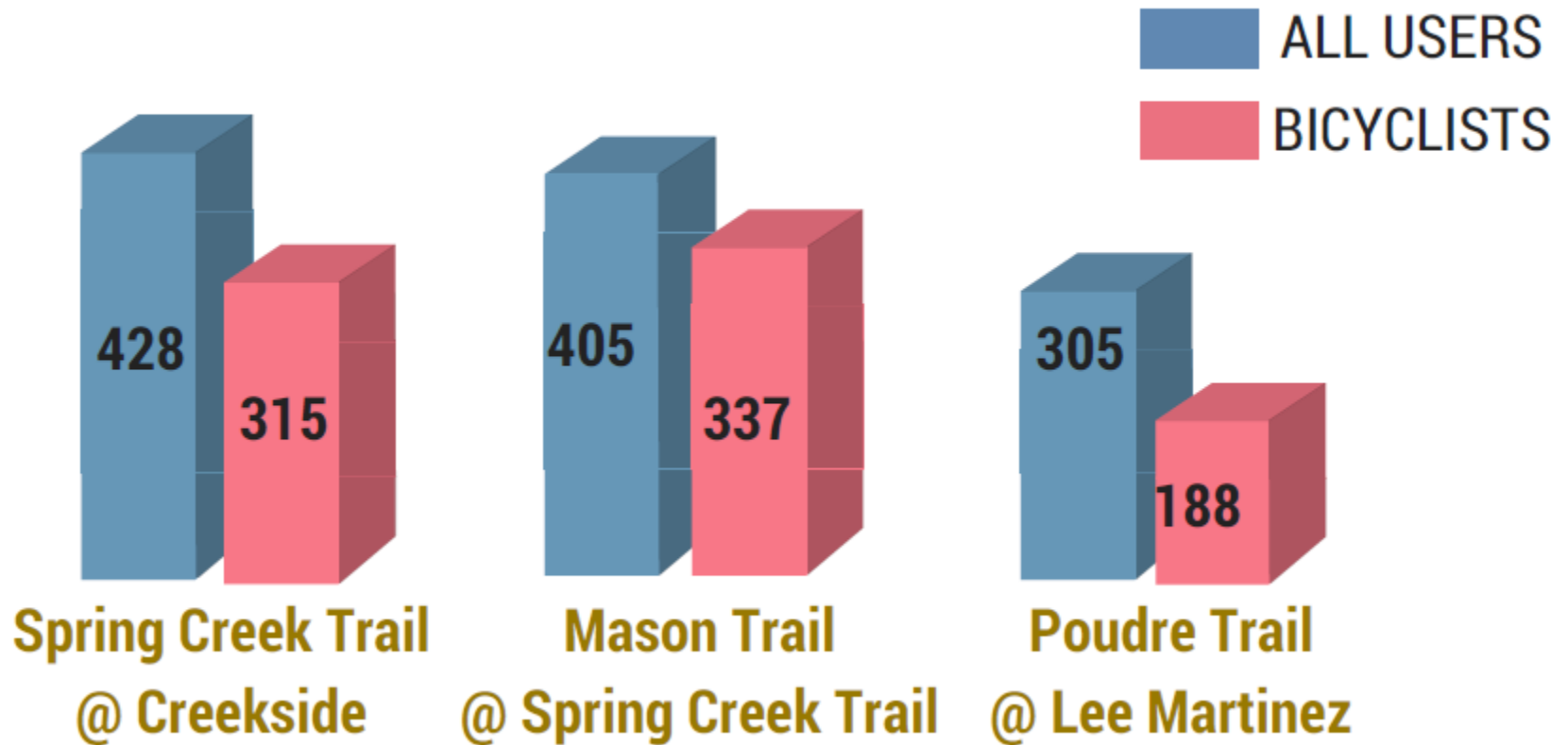
## 2015 Trail Counts (Bicyclists) – *Weekday counts averaged*

Weekday - 7-9a    Weekday - 12-2p    Weekday - 5-7p    Weekend - 12-2p





## Trail: Highest Count Locations

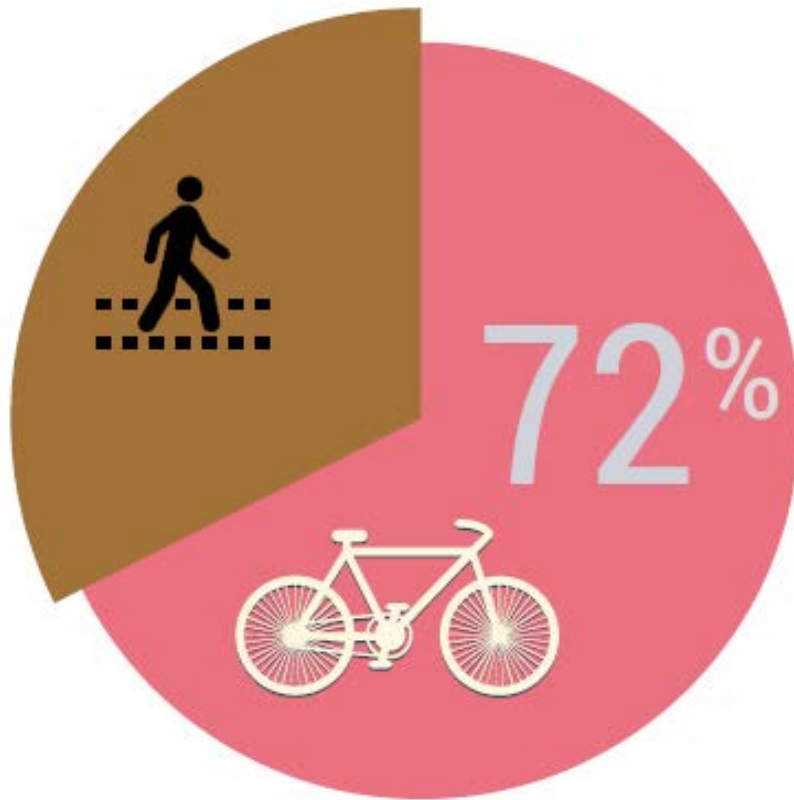




## ***Highest Pedestrian Count Locations***

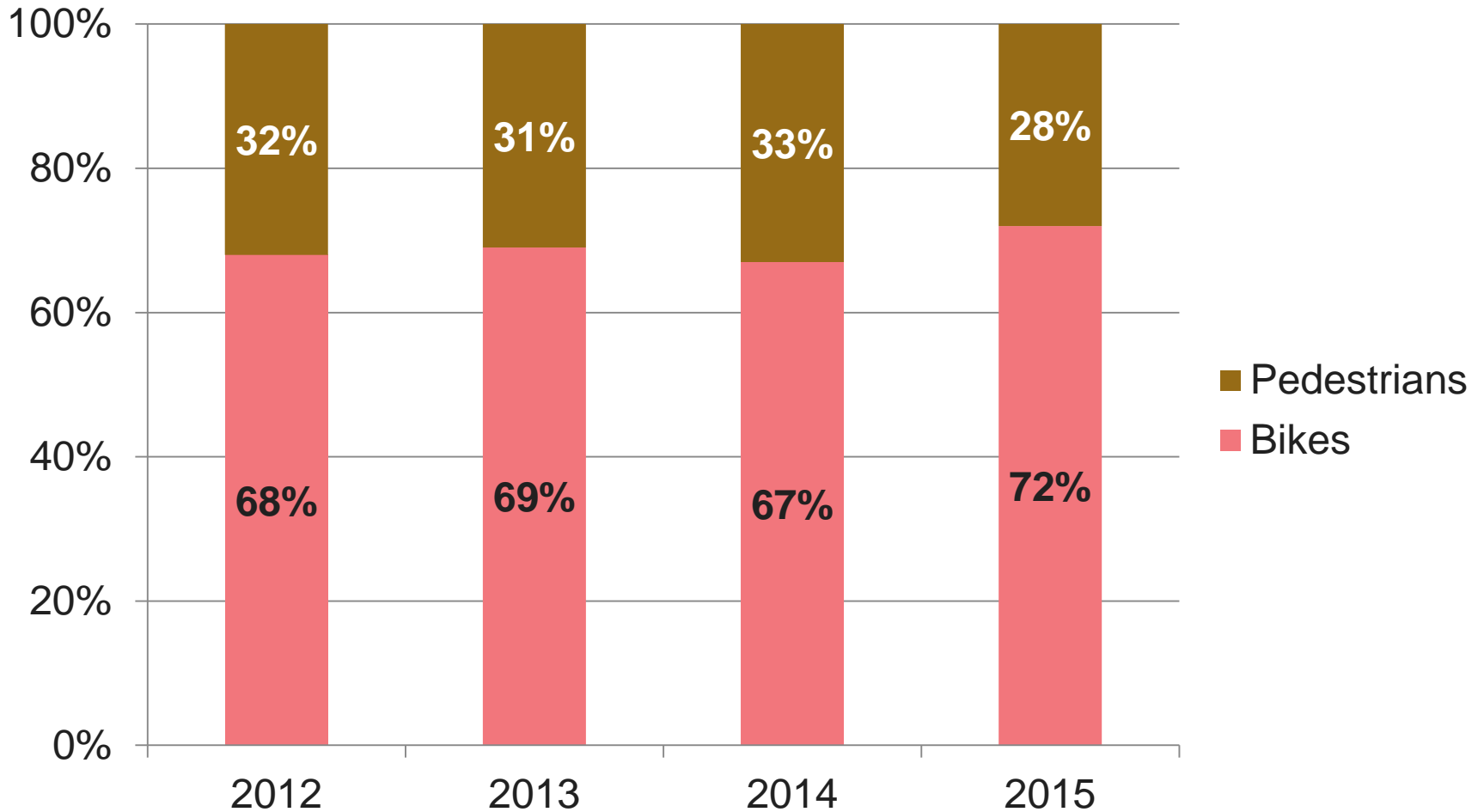
- Poudre Trail at Lee Martinez Park
  - **117** (Weekend, 12-2p)
- Spring Creek Trail at Creekside
  - **113** (Weekday, 5-7p)
- Spring Creek Trail at Edora Park
  - **70** (Weekday, 7-9a)

## Overall Bike/Ped Split



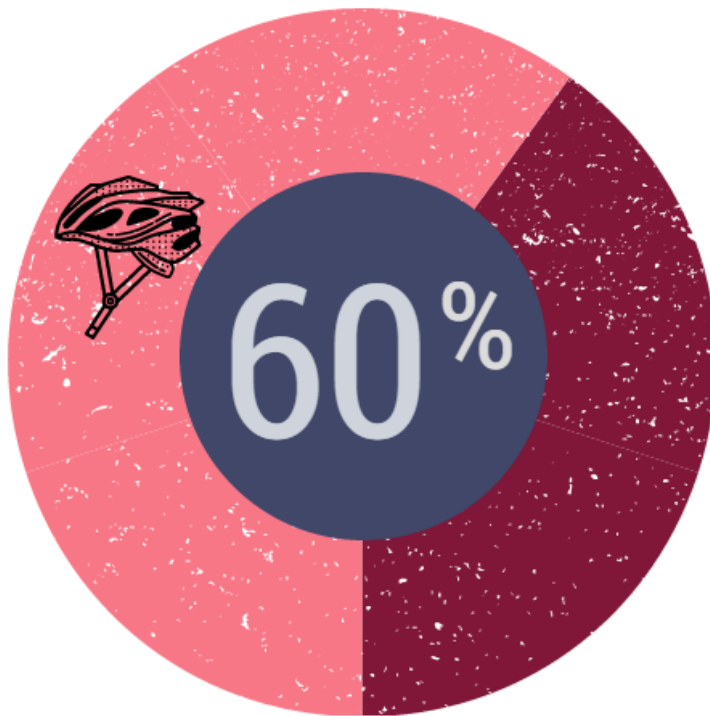
- **Overall: 72% / 28%**
- Weekday: 71% / 29%
- Weekend: 80% / 20%

## Trail Trends: Bike/Ped Split Over Time





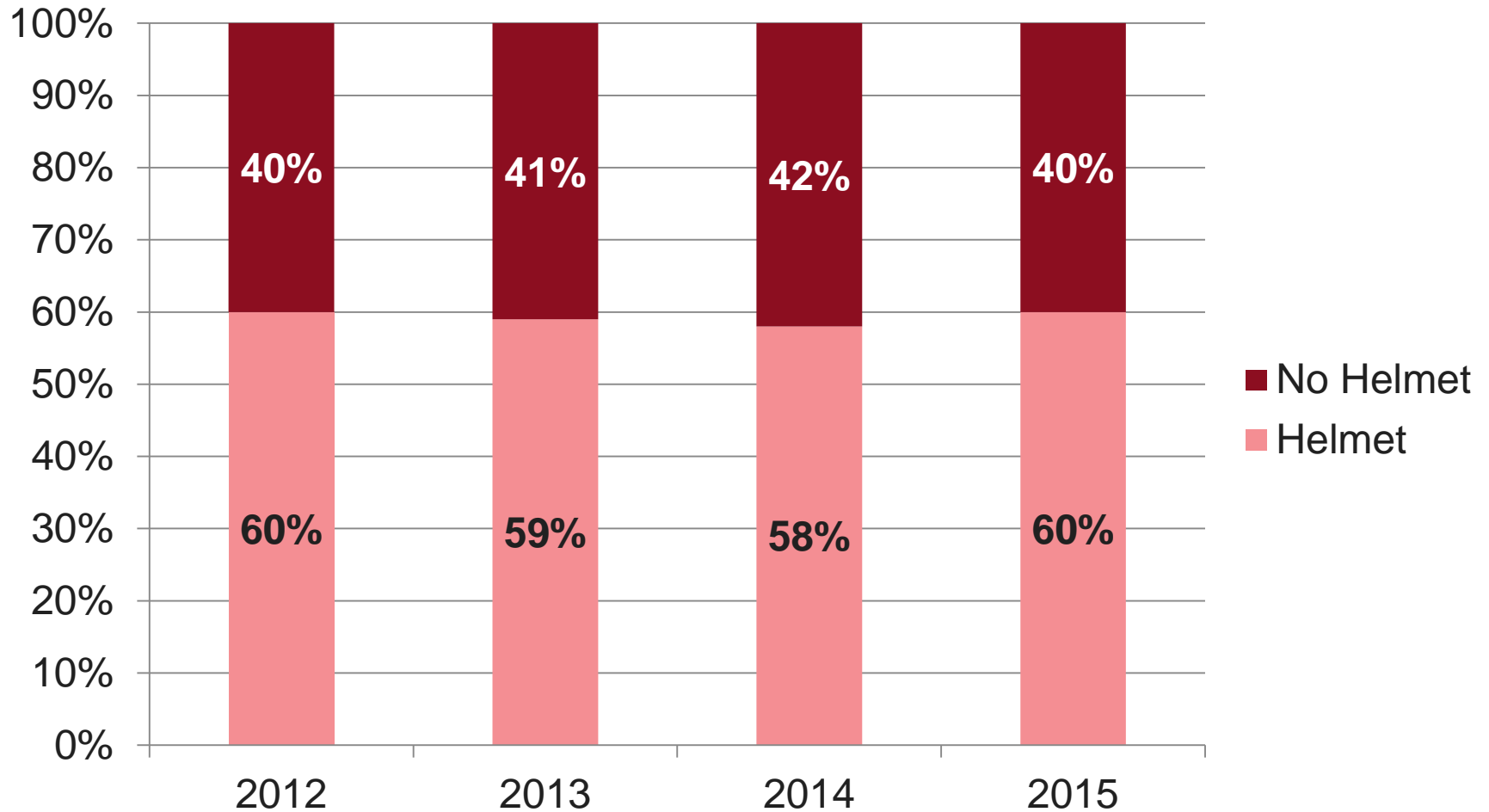
## Overall Helmet Use



- **Overall: 60%**
- Weekday: 60%
- Weekend: 61%

*\*Trail helmet use much higher than intersection helmet use (39%)*

## Trail Trends: Helmet Use Over Time



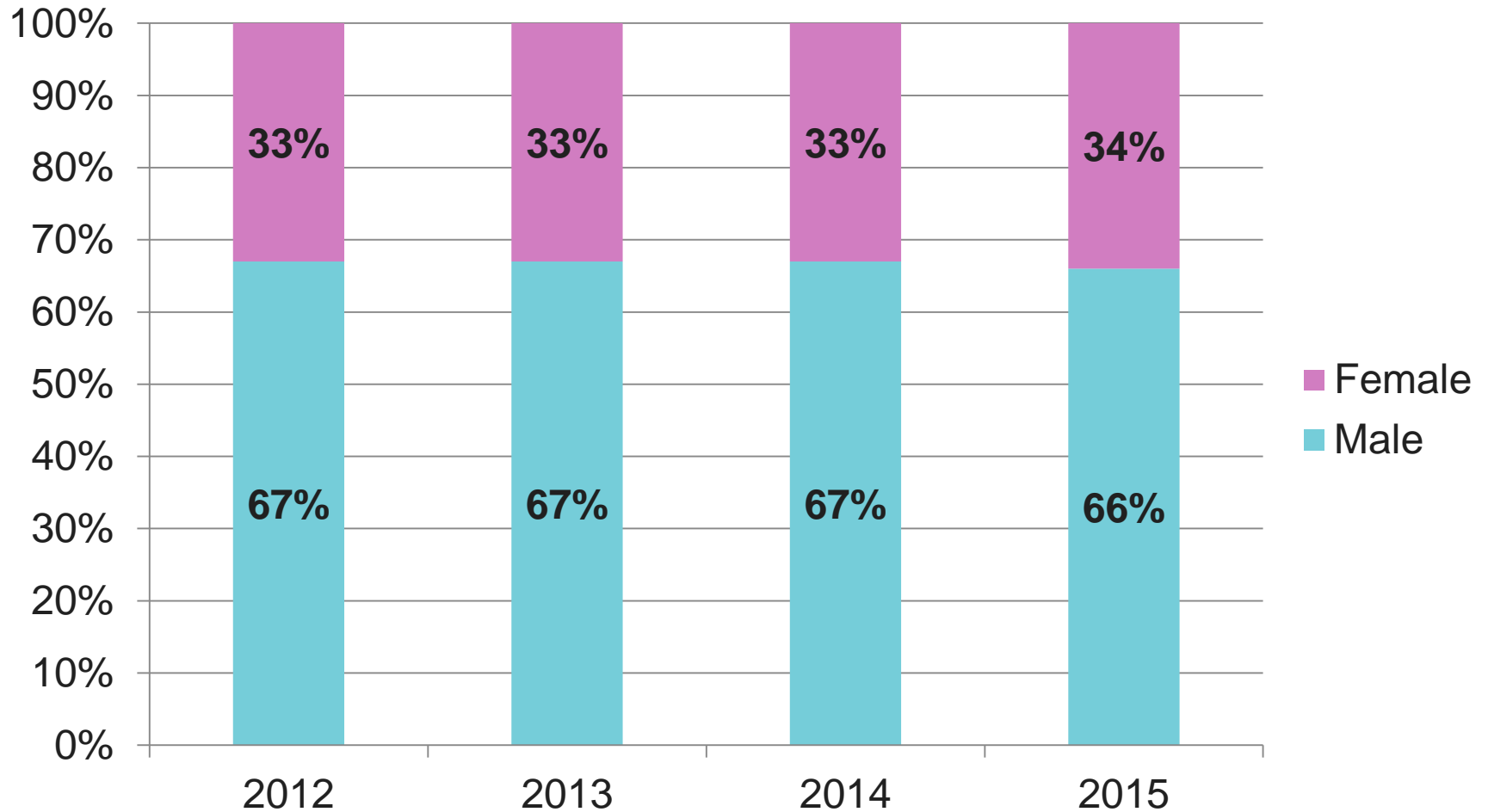
## Trail: Bicyclist Male/Female Split



### **Bicyclists**

- **Overall: 66% Male / 34% Female**
- Weekday: 67% / 33%
- Weekend: 61% / 39%

## Trail Trends: Bicyclist Male/Female Split

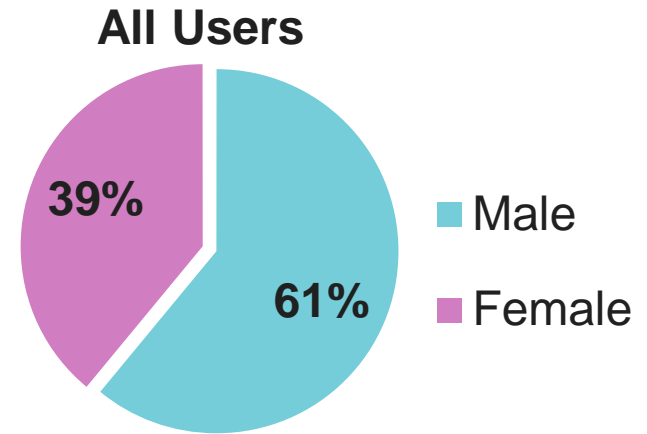




# Trail: Male/Female Split

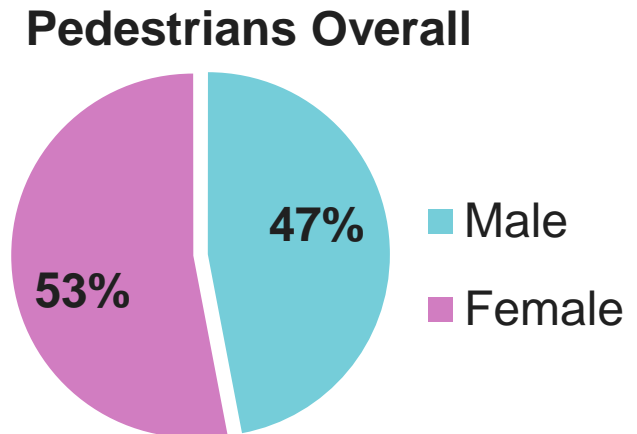
## All Users

- **Overall: 61% Male / 39% Female**
- Weekday: 61% Male / 39% Female
- Weekend: 59% Male / 41% Female

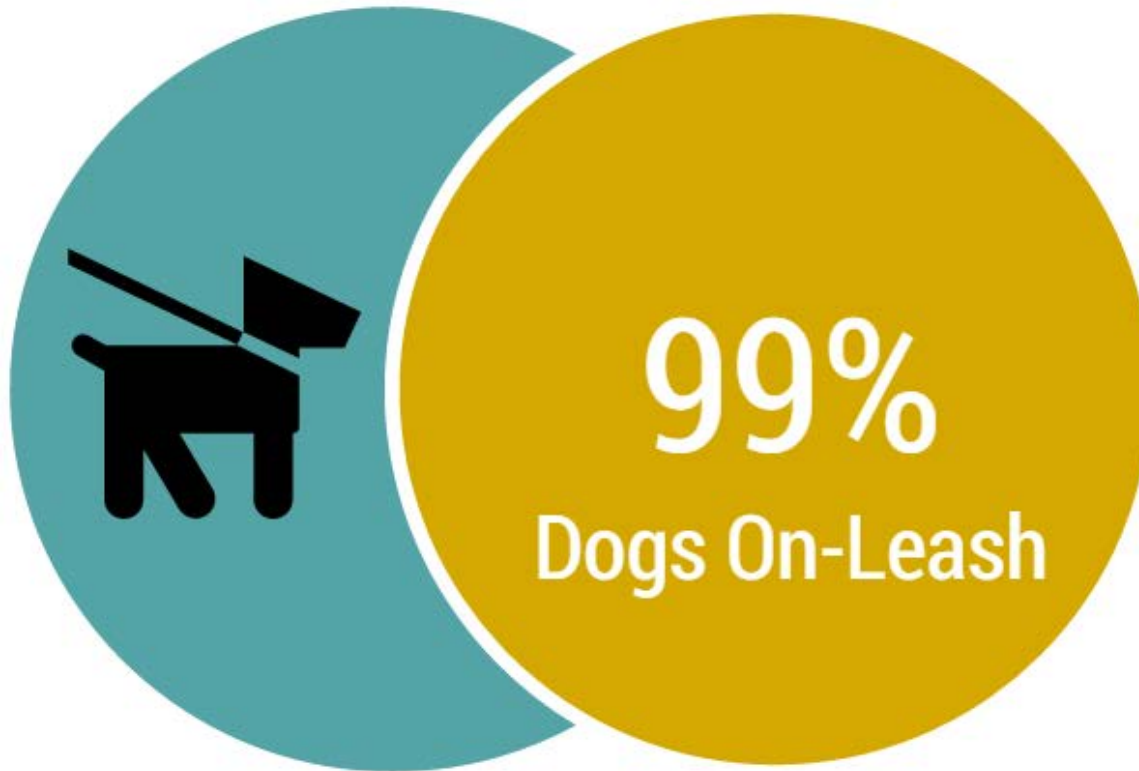


## Pedestrians

- **Overall: 47% Male / 53% Female**
- Weekday: 46% / 54%
- Weekend: 50% / 50%



## Trail Observations: Dogs



- **99% on-leash**
- 526 total
- 7 off-leash

## Trail Observations: E-Bikes

**<1%**

**E-Bikes**

- **14 observed on trails**
- 10 on intersections
- 24 total



# Trail Observations: Sex & Helmet Use

Location	% Male	% Female	Helmet %	
A. Poudre Trail at Taft Hill Parking Lot	<b>62%</b>	38%	65%	
B. Poudre Trail at Lee Martinez Park	<b>60%</b>	<b>40%</b>	62%	
C. Poudre Trail at Timberline	66%	34%	<b>73%</b>	
D. Spring Creek Trail at Lilac Park	66%	34%	<b>58%</b>	Lower than average (66%) male
E. Spring Creek Trail at Creekside Park	<b>64%</b>	36%	<b>55%</b>	Lower than average (34%) female
F. Spring Creek Trail at Edora Park	66%	34%	<b>58%</b>	Lower than average (60%) helmet use
G. Spring Creek Trail at Drake and Dunbar	<b>64%</b>	36%	63%	
H. Fossil Creek Trail at Harmony Underpass	70%	<b>30%</b>	<b>79%</b>	Higher than average
I. Mason Trail at W. Horsetooth Rd	69%	<b>31%</b>	<b>56%</b>	
J. Power Trail at E. Horsetooth Rd	76%	<b>24%</b>	67%	
K. Mason Trail at Spring Creek Trail	72%	<b>28%</b>	<b>54%</b>	
TOTAL	66%	34%	60%	

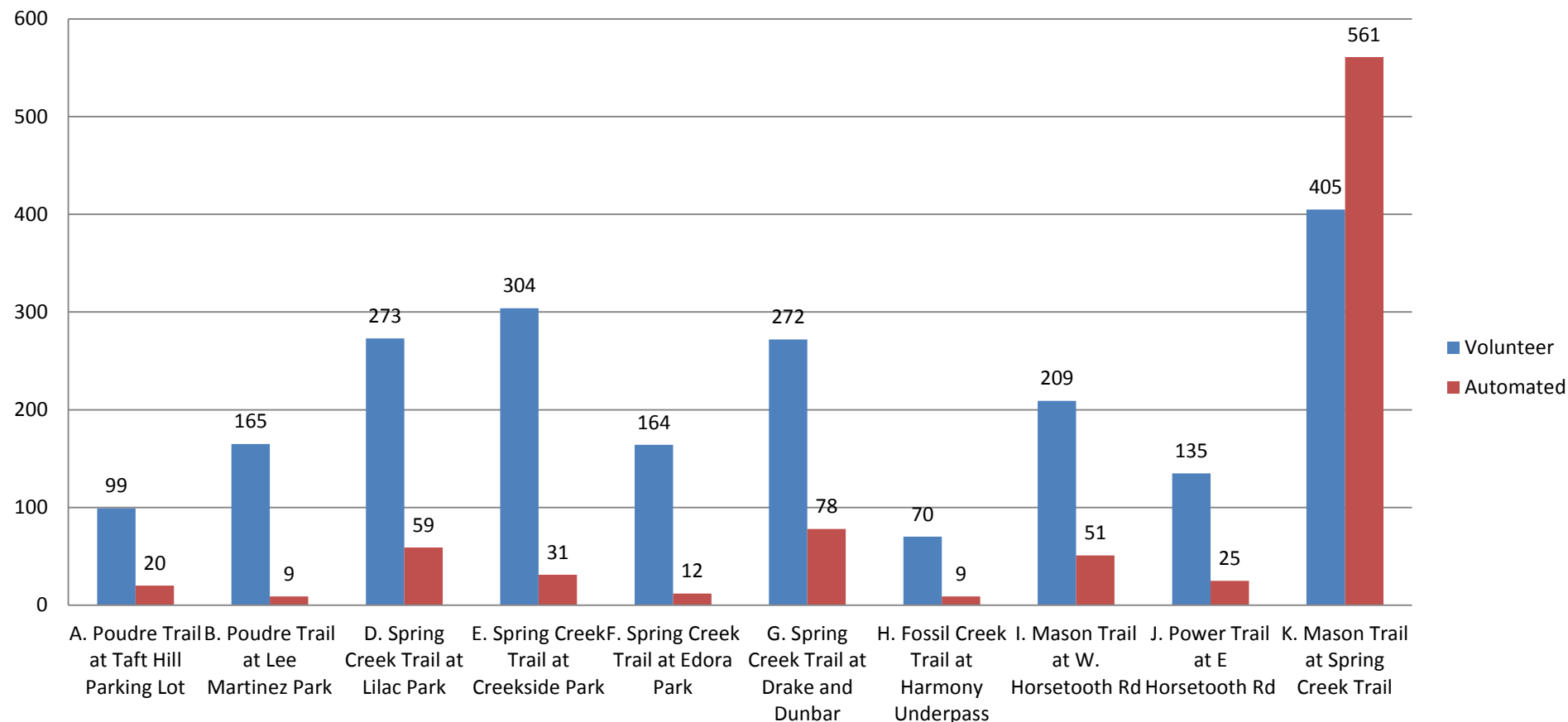




# Automated Trail Counter Validation

**9/17/15**

**5-7p**



*\*Site K automated counter managed by CDOT*

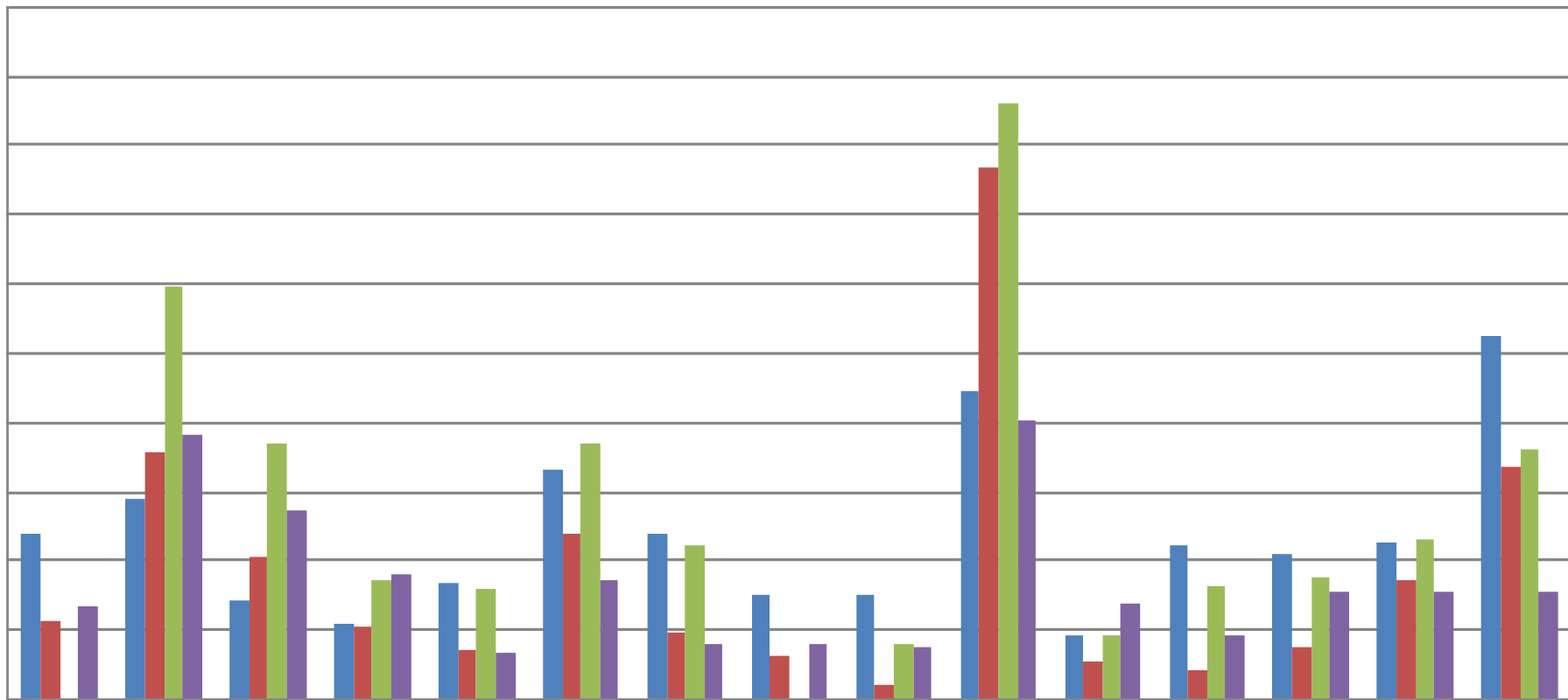


# Intersection Observations





Weekday 5-7p    Weekend 12-2p





# Highest 2-Hour Intersection Count



**Laurel & Mason**  
Highest 2-Hour Count  
Overall

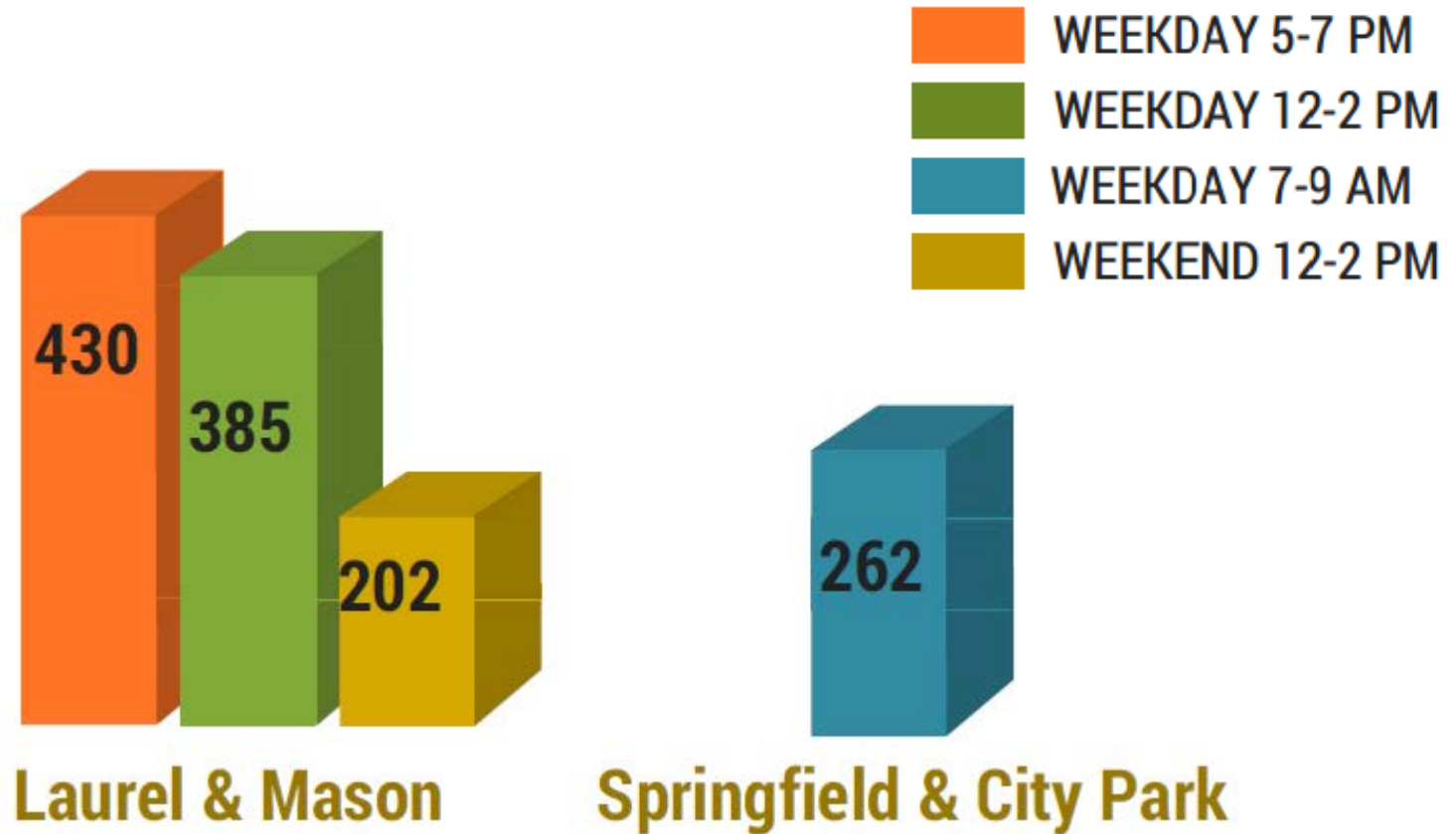
*1 bicyclist every 20 sec*

*\*Highest count ever recorded*

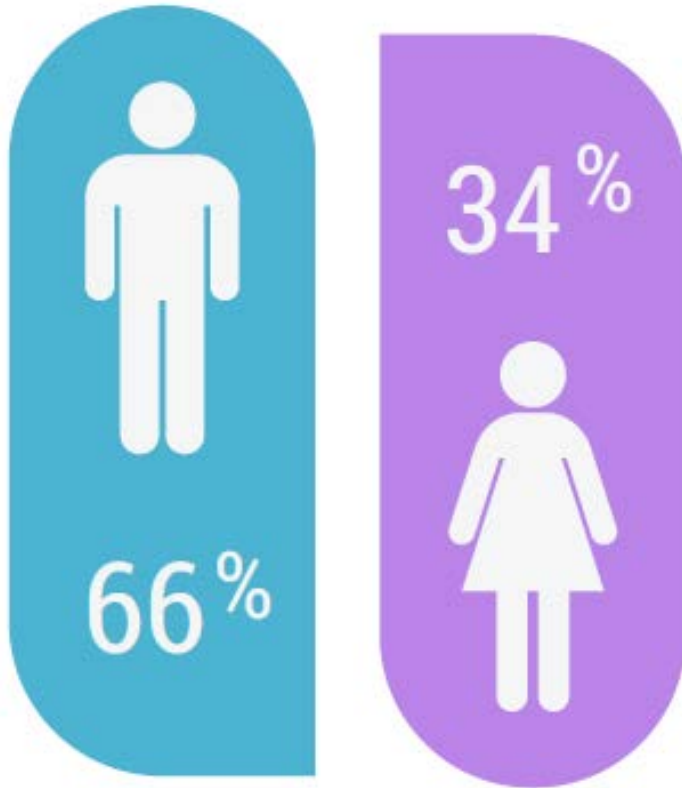




## Highest Intersection Count for Each Time Period

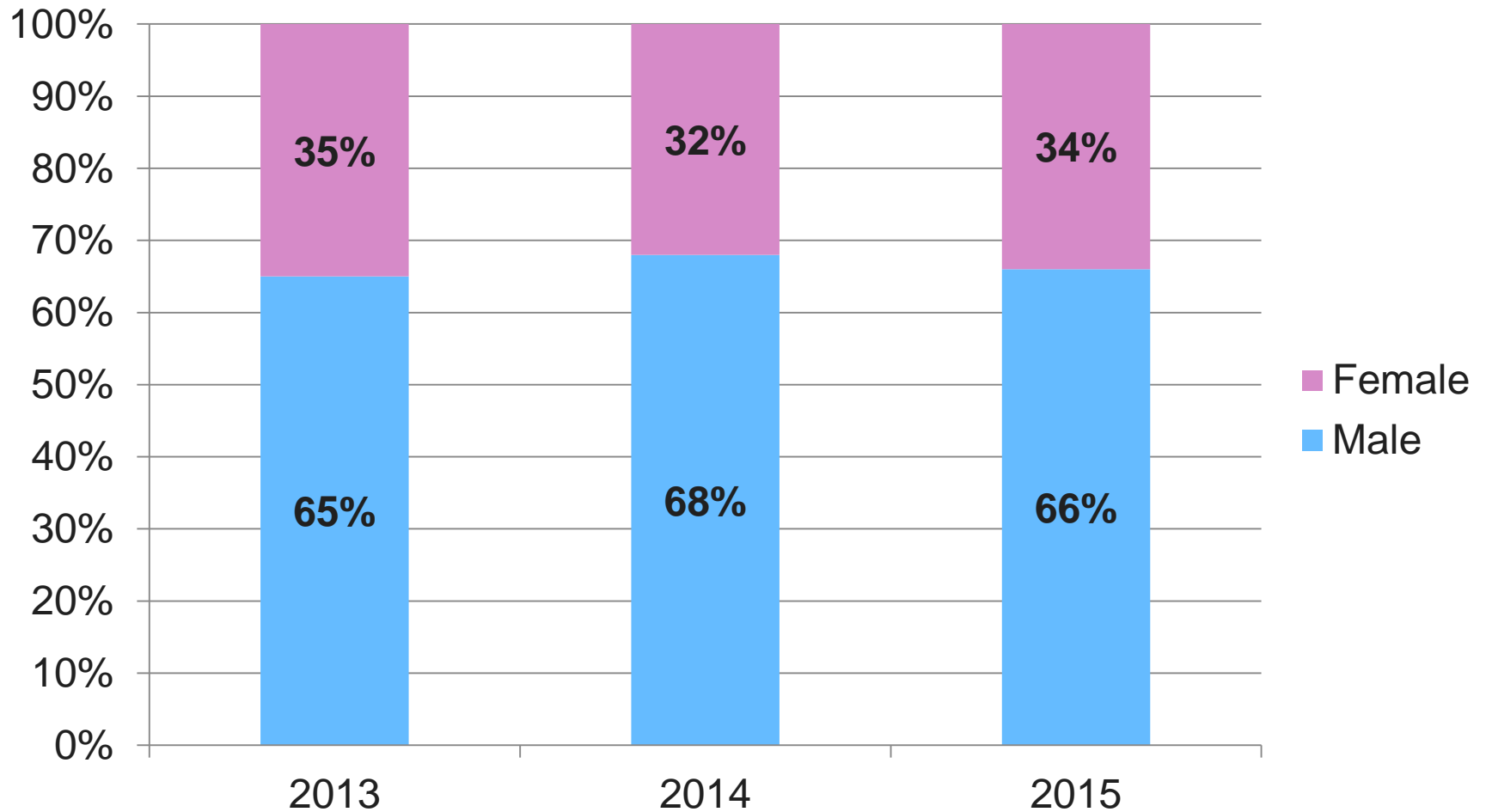


## Intersection Male/Female Split

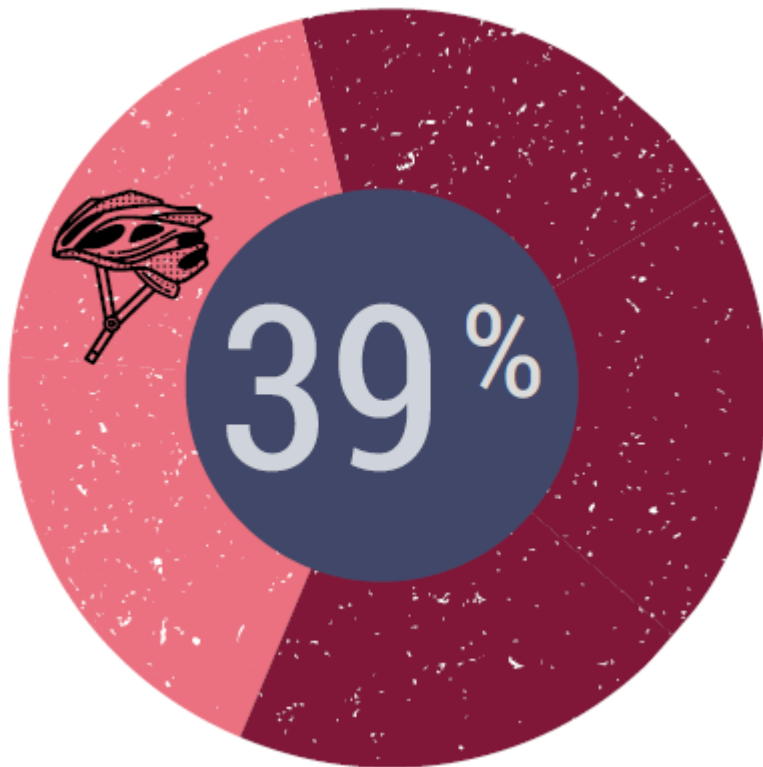


- **Overall: 66% male, 34% female**
- Weekday: 66% male, 34% female
- Weekend: 67% male, 33% female

## Intersection Male/Female Split Over Time



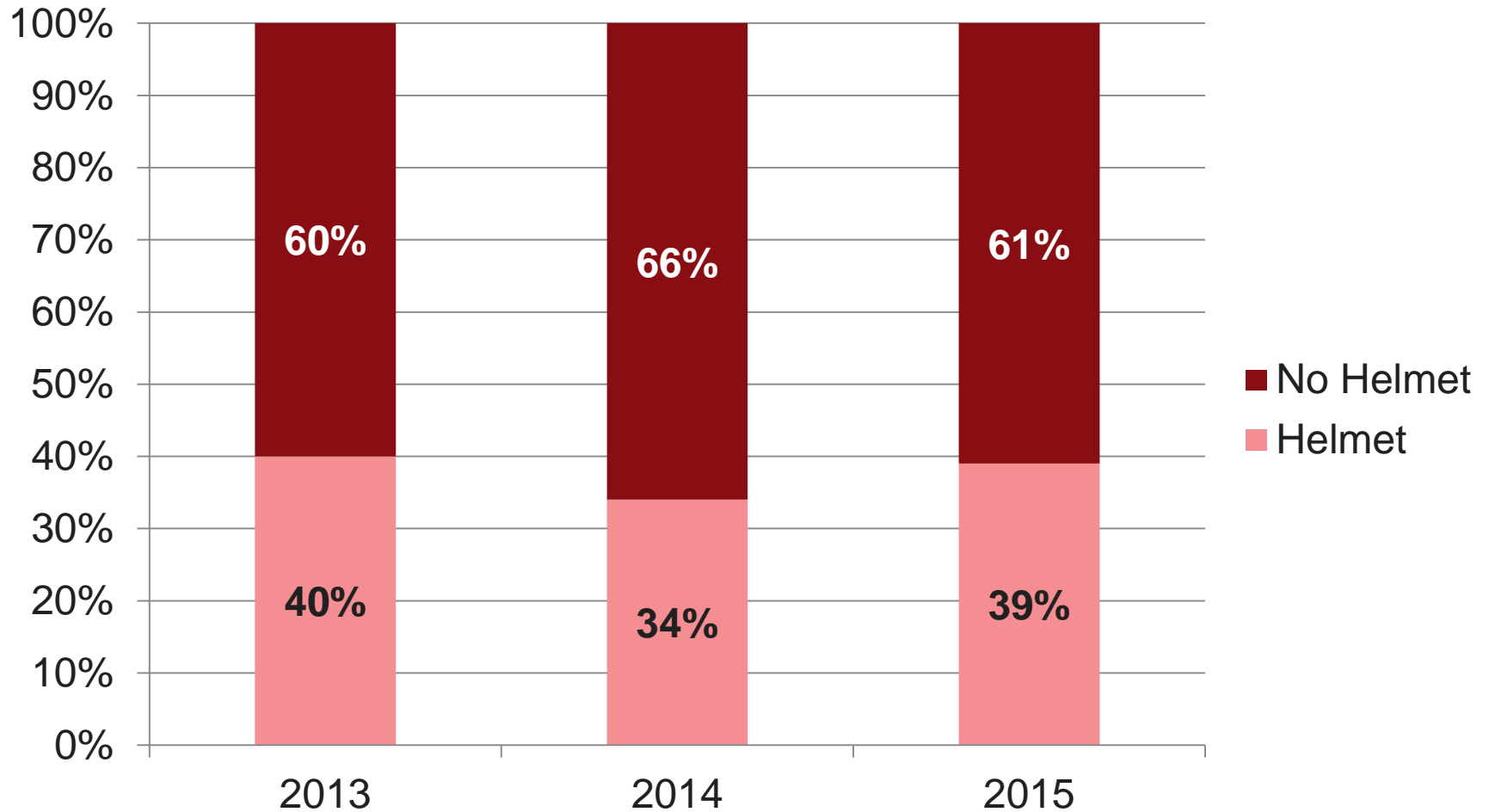
## Overall Helmet Use



- **Overall: 39%**
- Weekday: 39%
- Weekend: 40%

*\*Helmet use significantly lower compared to trails (60%)*

# Intersection Helmet Use Over Time







# Intersection: Sex and Helmet Use

Location	% Male	% Female	Helmet %
1. Laporte Ave. & N. Taft Hill Rd.	<b>65%</b>	35%	44%
2. W. Mountain Ave. & Mason St.	<b>61%</b>	<b>39%</b>	41%
3. Walnut St. & Linden St.	<b>64%</b>	36%	37%
4. E. Lincoln Ave. & 1st St.	75%	<b>25%</b>	<b>34%</b>
6. E. Elizabeth St. & S. Lemay Ave.	79%	<b>21%</b>	43%
7. E. Prospect Rd. & Remington St.	<b>60%</b>	40%	<b>38%</b>
8. Columbia Rd. & Stover St.	70%	<b>30%</b>	53%
9. W. Horsetooth Rd. & S. Shields St.	74%	<b>26%</b>	53%
10. Kechter Rd. & Ziegler Rd.	68%	<b>32%</b>	<b>74%</b>
11. W. Laurel St. & S. Mason St.	<b>64%</b>	36%	<b>29%</b>
12. W. Stuart St. & Constitution Ave.	<b>64%</b>	36%	48%
13. W. Swallow Rd. & Meadowlark Ave.	<b>65%</b>	35%	62%
14. E. Harmony Rd. & McMurry Ave.	74%	<b>26%</b>	<b>67%</b>
15. W. Prospect Rd. & Heatheridge/Lynnwood	66%	34%	<b>27%</b>
16. Springfield Dr. & City Park Ave.	73%	<b>27%</b>	66%
TOTAL	66%	34%	39%

Lower than average  
(66%) male

Lower than average  
(34%) female

Lower than average  
(60%) helmet use

Higher than average



- Sharing/reporting data
- Automated counter validation
- Use 24hr automated counter data
  - Create expansion factor
  - Yearly predictions on trail use
- Next year's count
  - Add travel survey at schools
  - Measure all modes of travel

***Thank You!***

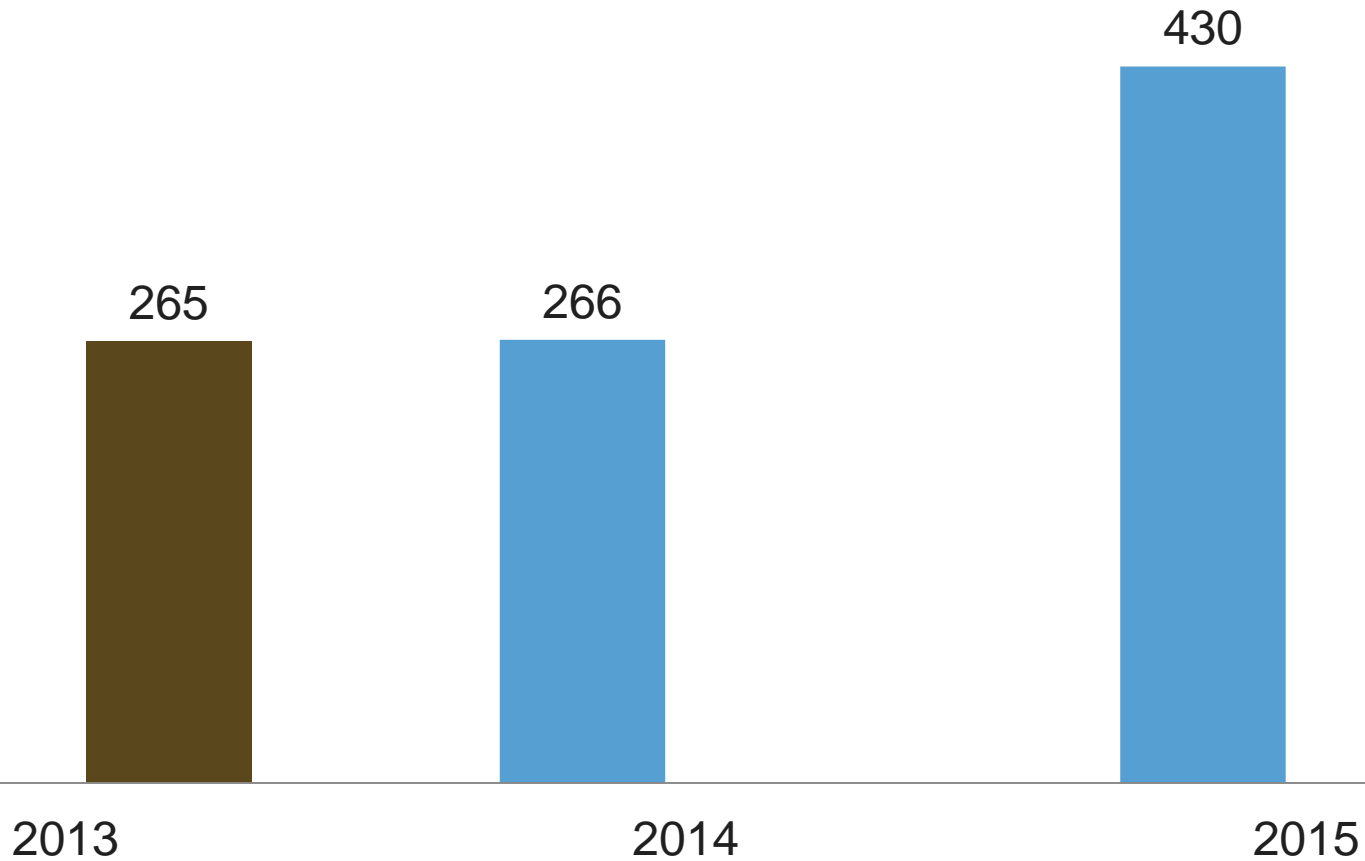
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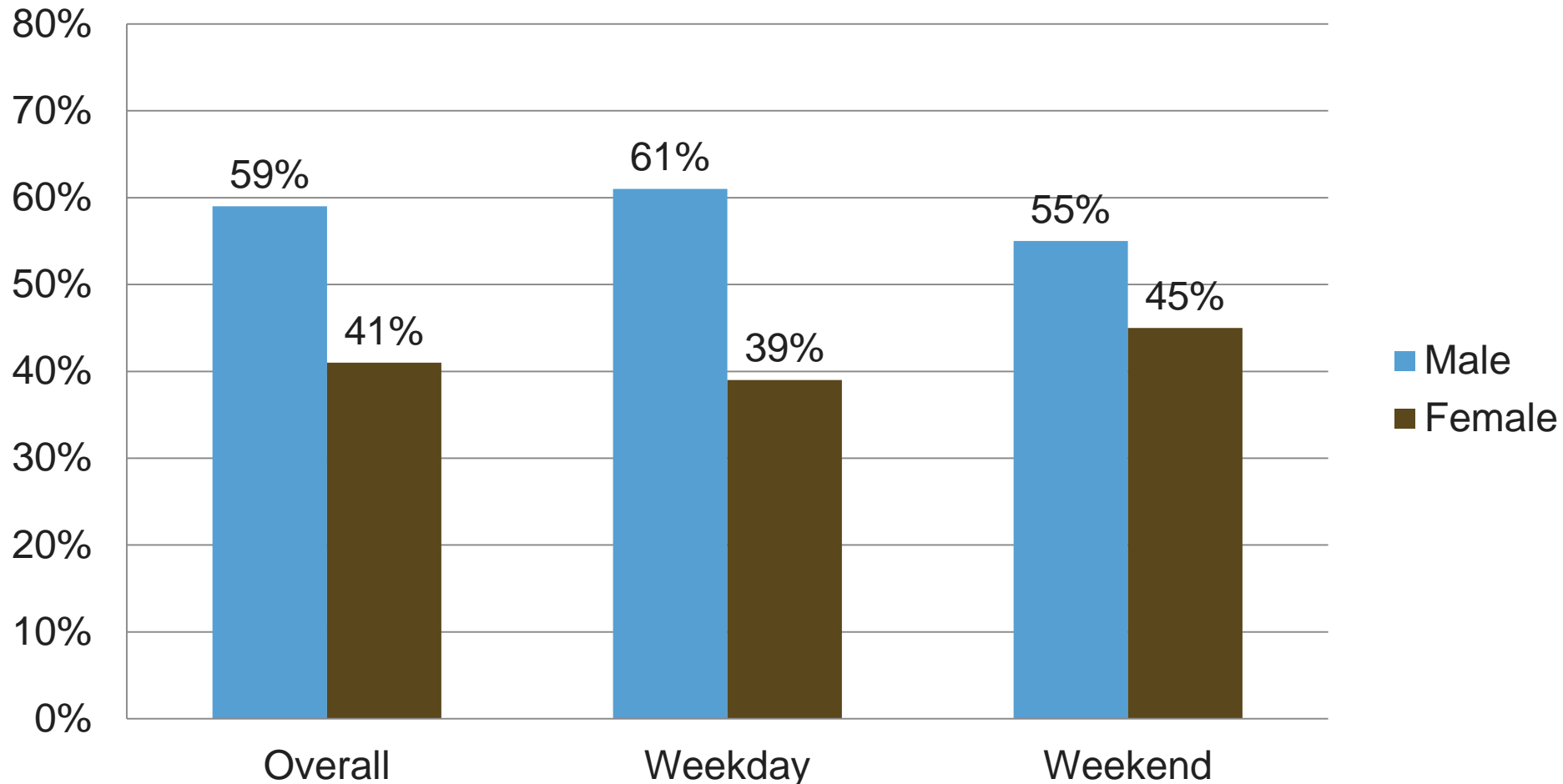
# Highest Intersection Counts Over Time

■ Laurel & Mason   ■ Prospect & Remington



# Trail Observations: All Users

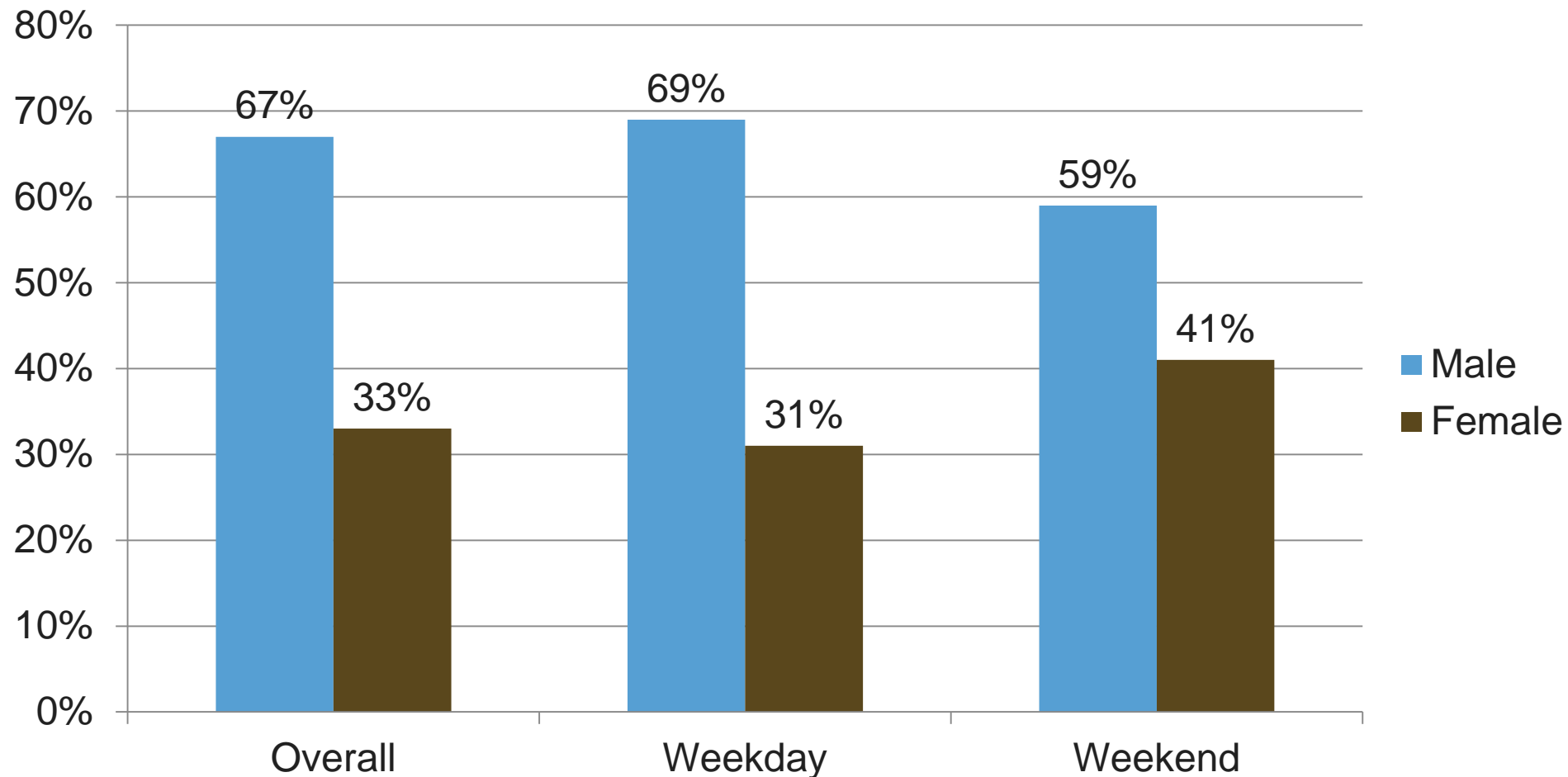
## Male/Female Trail User Split by Day of Week





# Trail Observations: Bicyclists

## Bicyclist Male/Female Split by Day of Week



# Automated Trail Counter Validation

## Difference (Volunteer – Automated)

Location	9/15/2015 7-9a	9/17/2015 7-9a	9/15/2015 12-2p	9/17/2015 12-2p	9/15/2015 5-7p	9/17/2015 5-7p	9/19/2015 12-2p
A. Poudre Trail at Taft Hill Parking Lot	33	-4	45	34	147	91	2
B. Poudre Trail at Lee Martinez Park	62	-23	117	54	289	141	54
D. Spring Creek Trail at Lilac Park	168	106	156	131	114	270	242
E. Spring Creek Trail at Creekside Park	240	163	166	137	185	397	254
F. Spring Creek Trail at Edora Park	148	N/A	92	N/A	157	220	N/A
G. Spring Creek Trail at Drake and Dunbar	98	2	31	75	86	174	128
H. Fossil Creek Trail at Harmony Underpass	30	-737	11	15	63	15	46
I. Mason Trail at W. Horsetooth Rd	61	59	-9	61	105	125	80
J. Power Trail at E Horsetooth Rd	105	N/A	4	-43	77	94	58
K. Mason Trail at Spring Creek Trail	N/A	N/A	N/A	N/A	N/A	-156	N/A

## % Difference ((Volunteer – Automated)/ Volunteer)

Location	9/15/2015 7-9a	9/17/2015 7-9a	9/15/2015 12-2p	9/17/2015 12-2p	9/15/2015 5-7p	9/17/2015 5-7p	9/19/2015 12-2p
A. Poudre Trail at Taft Hill Parking Lot	38%	-6%	65%	53%	90%	82%	2%
B. Poudre Trail at Lee Martinez Park	50%	-31%	76%	52%	95%	94%	33%
D. Spring Creek Trail at Lilac Park	69%	46%	91%	83%	62%	82%	89%
E. Spring Creek Trail at Creekside Park	85%	74%	87%	73%	86%	93%	84%
F. Spring Creek Trail at Edora Park	91%	N/A	100%	N/A	93%	95%	N/A
G. Spring Creek Trail at Drake and Dunbar	49%	1%	34%	41%	50%	69%	47%
H. Fossil Creek Trail at Harmony Underpass	68%	-2106%	52%	68%	95%	63%	66%
I. Mason Trail at W. Horsetooth Rd	41%	43%	-12%	58%	60%	71%	38%
J. Power Trail at E Horsetooth Rd	70%	N/A	6%	-88%	73%	79%	43%
K. Mason Trail at Spring Creek Trail	N/A	N/A	N/A	N/A	N/A	-39%	N/A

# Automated Trail Counter Validation

9/15/15  
7-9a

