



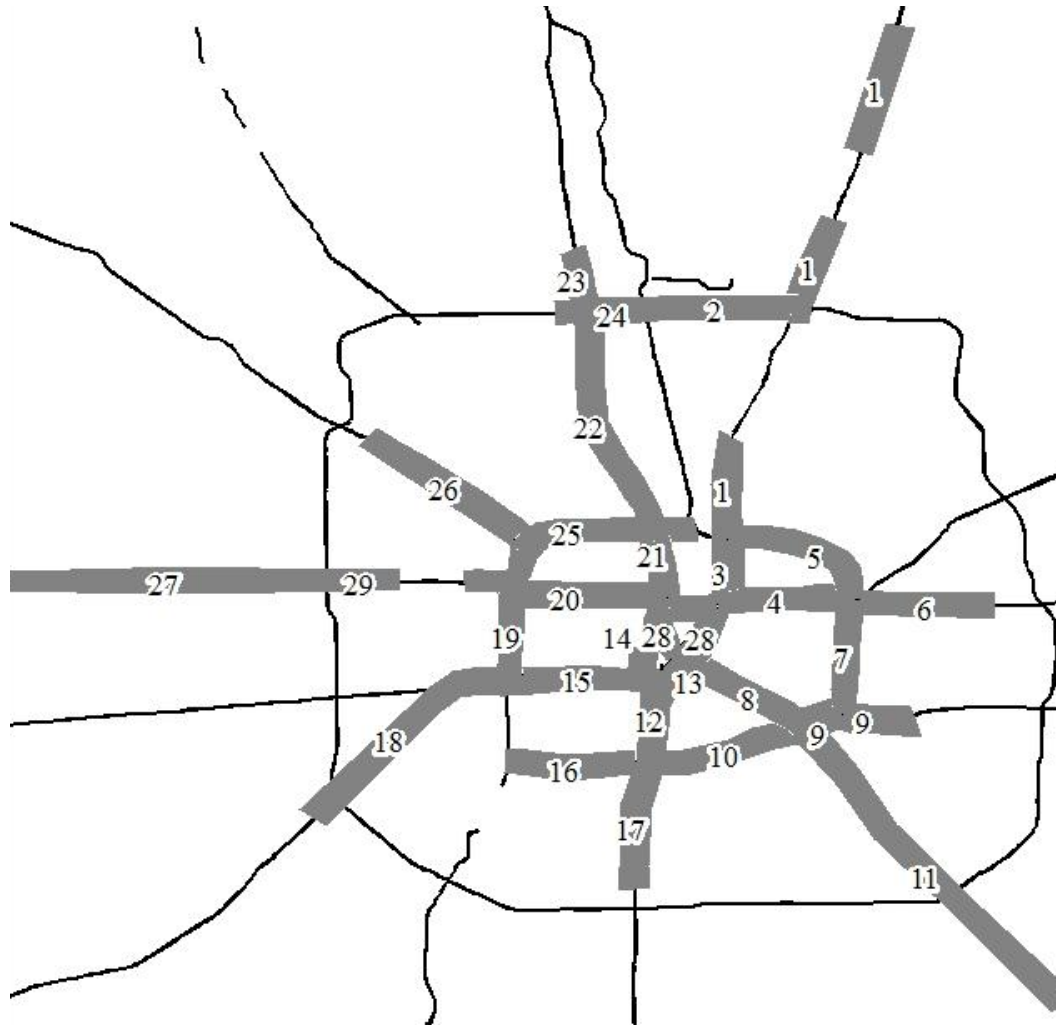
SafeClear

Rapid Response

Analysis

Houston Action Research Team (HART):
Alexander Heath, Jacob Jaffe,
Jarvis Miller, Carolina Osuna

SafeClear Program



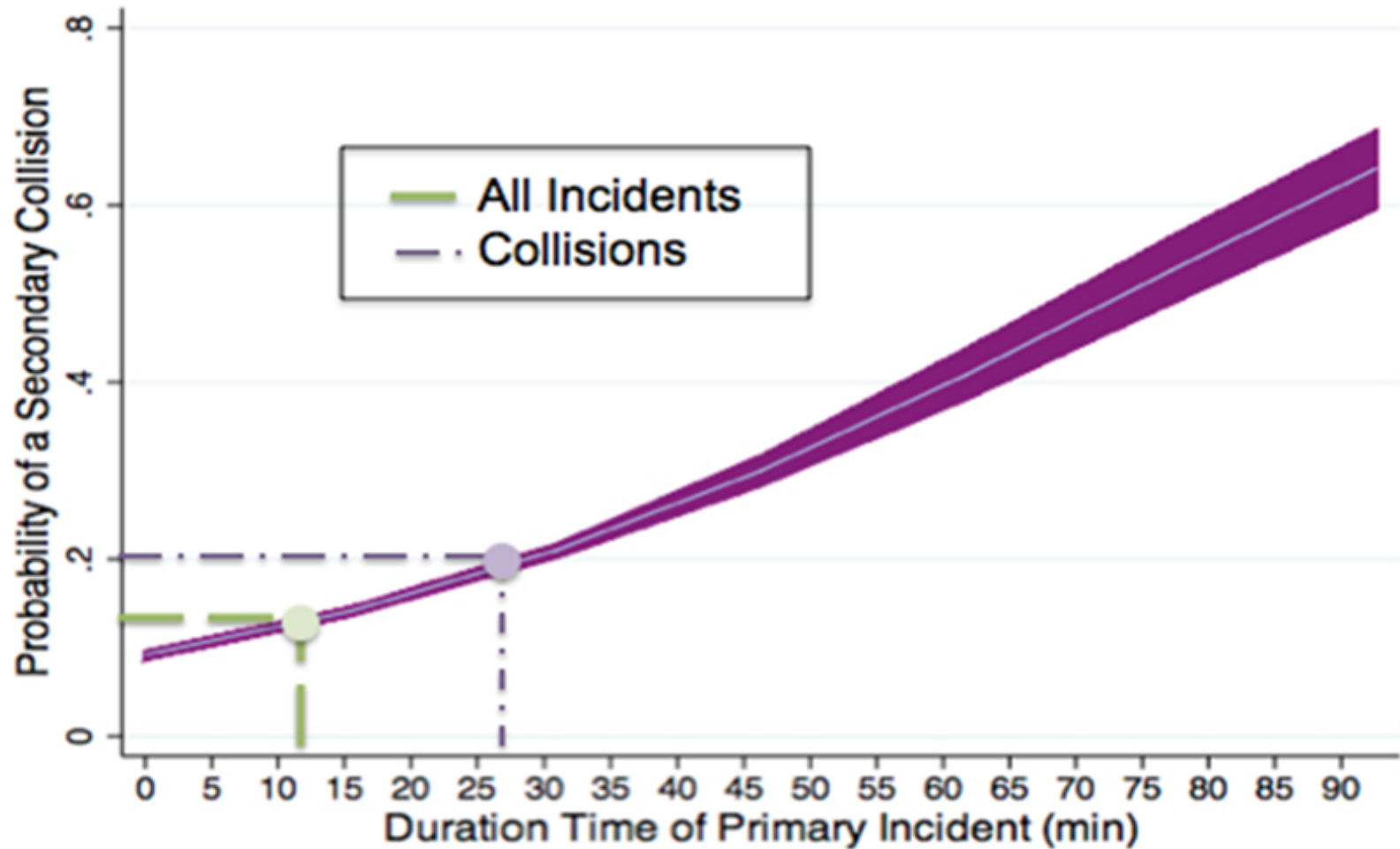
SafeClear Program Goals

- Increase public safety through decreased collisions
 - Decrease duration time of incidents through quick arrival of tow operators to disabled vehicles
 - These goals are being met
-

Recommendations for Improving SafeClear Program Performance

- Program improvements still possible
 - Focus on rapid removal of disabled vehicles
 - Strategic placement of HPD rapid response units
-

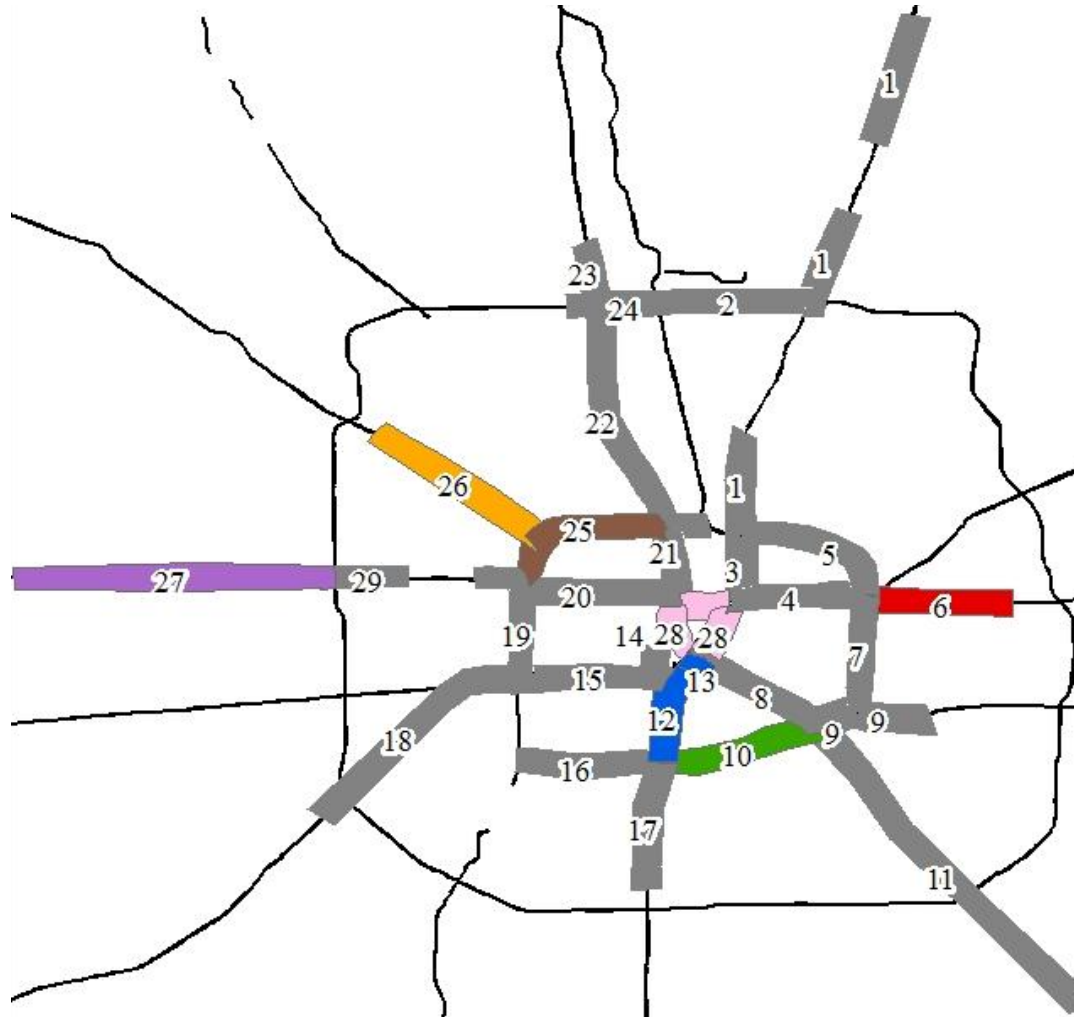
Chance of Secondary Collisions as Duration Time Increases



Criteria for Rapid Response Unit Placement

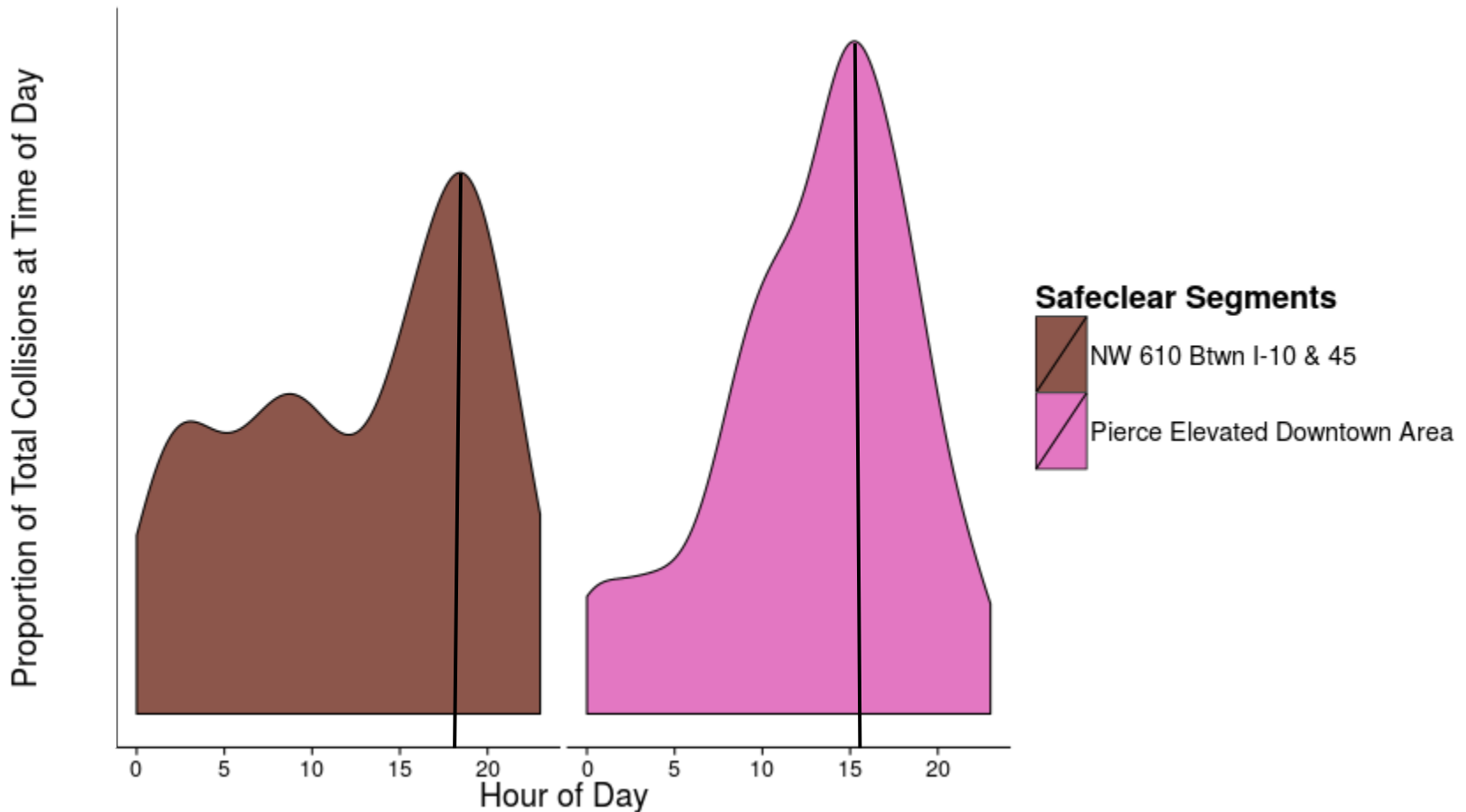
- Where
 - Significant Segments
 - High overall duration time
 - High number of collisions
 - Direction of Traffic
 - When
 - Time of Day
 - Time of Week
 - Time of Year
-

Segments with Significantly Longer Duration Times



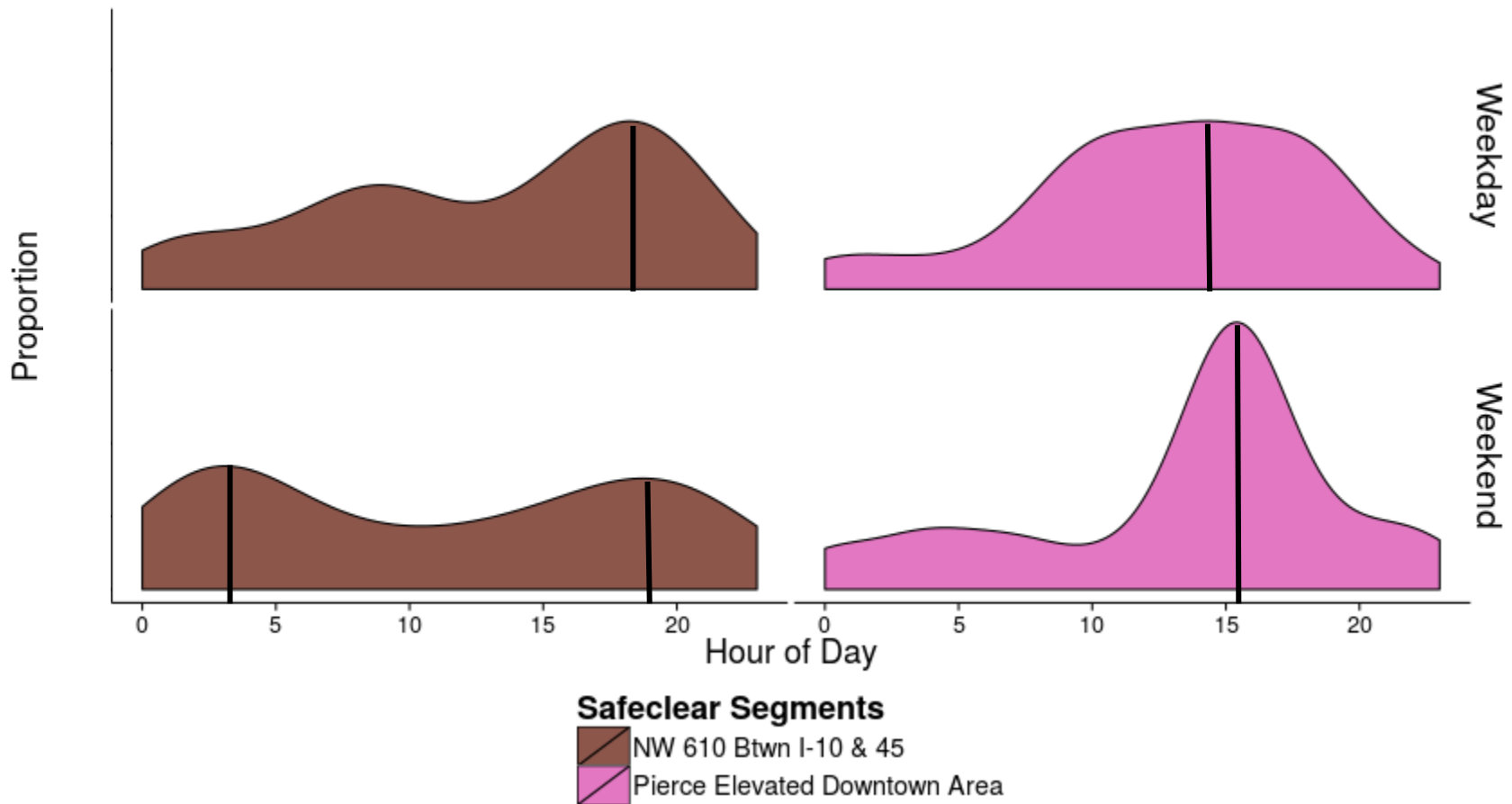
Afternoon is Worse than Morning

Proportion of Total Collisions per Segment at Time of Day



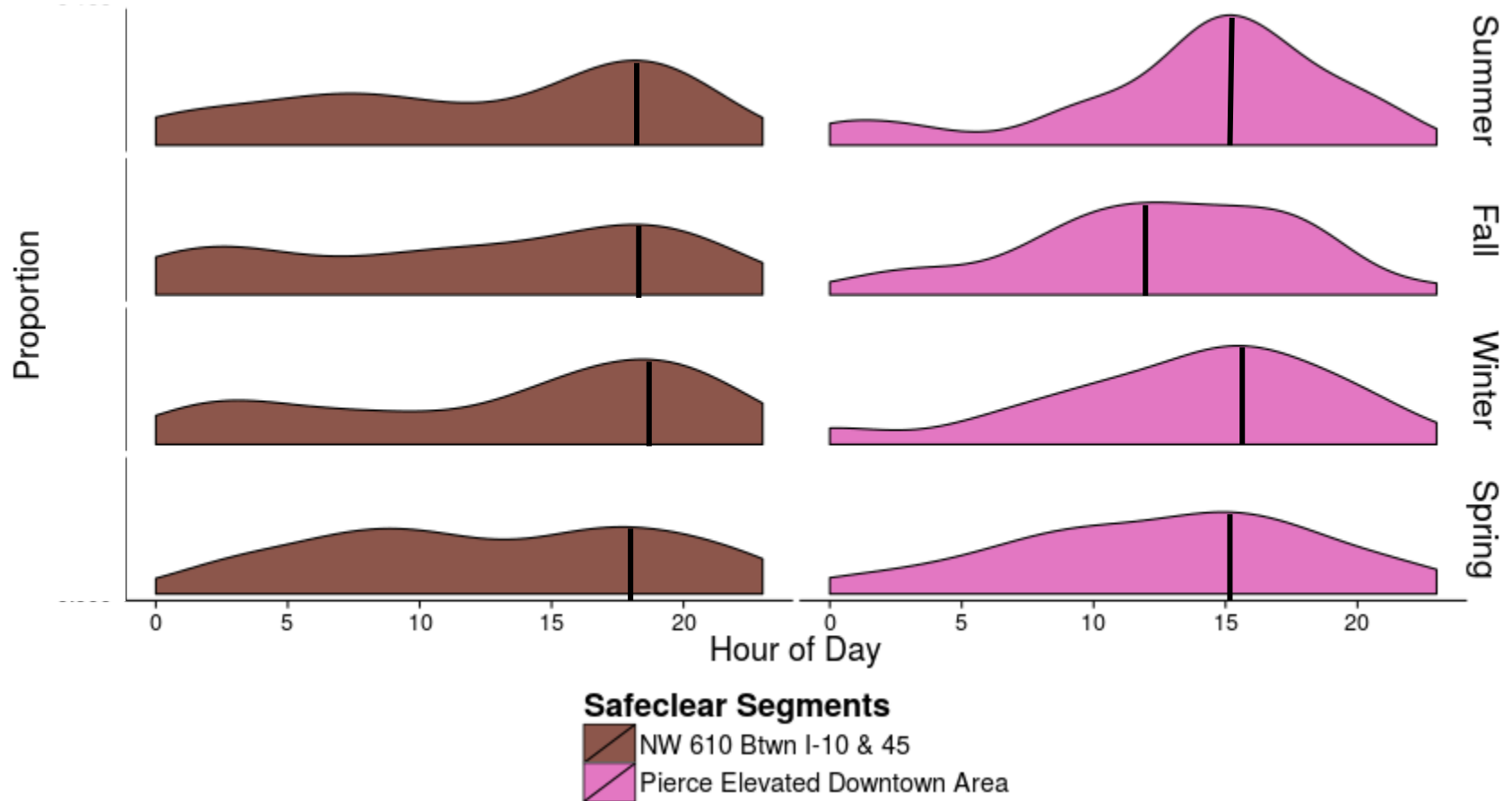
Weekdays and Weekends are Similar

Proportion of Total Collisions at Time of Day

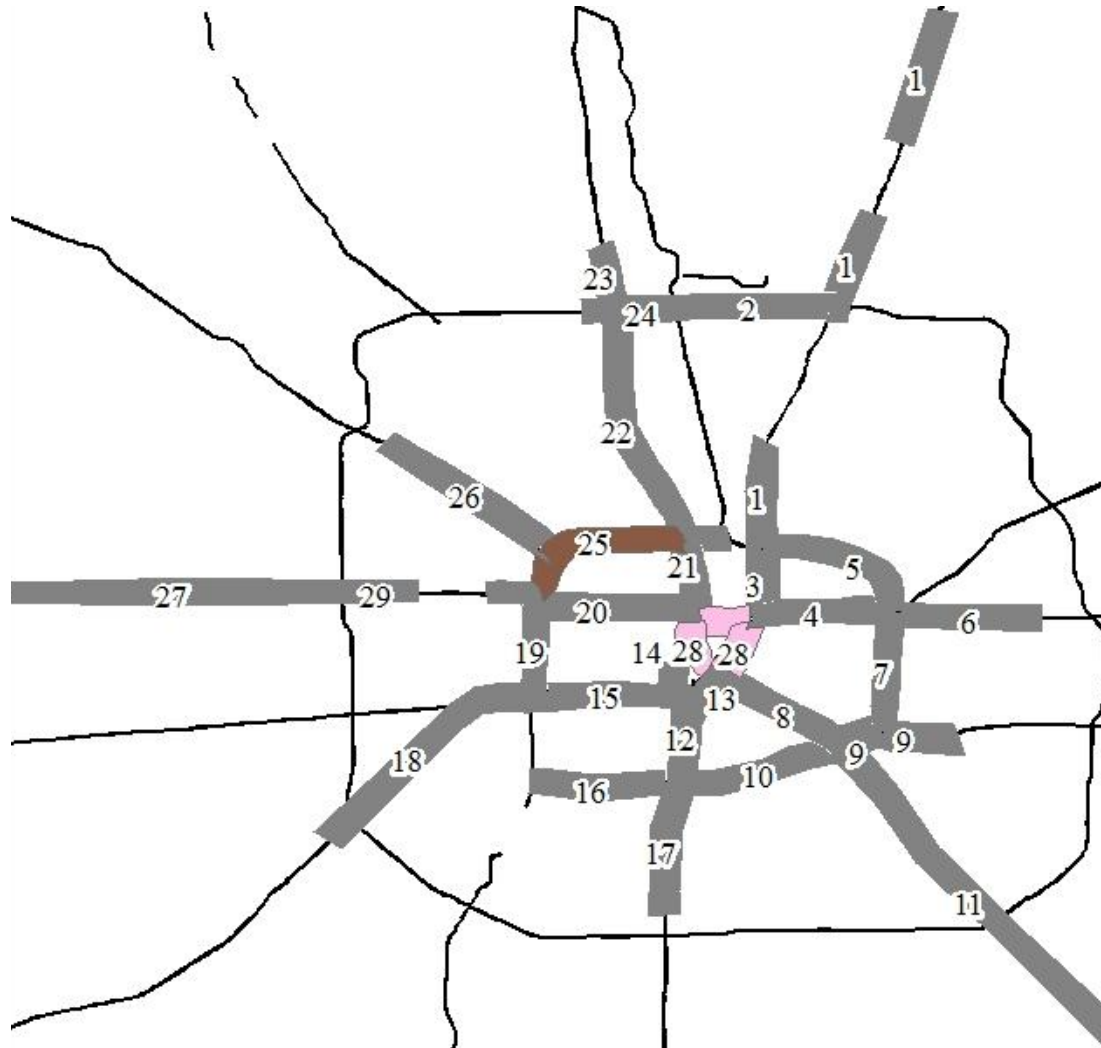


Season has little impact on Collisions

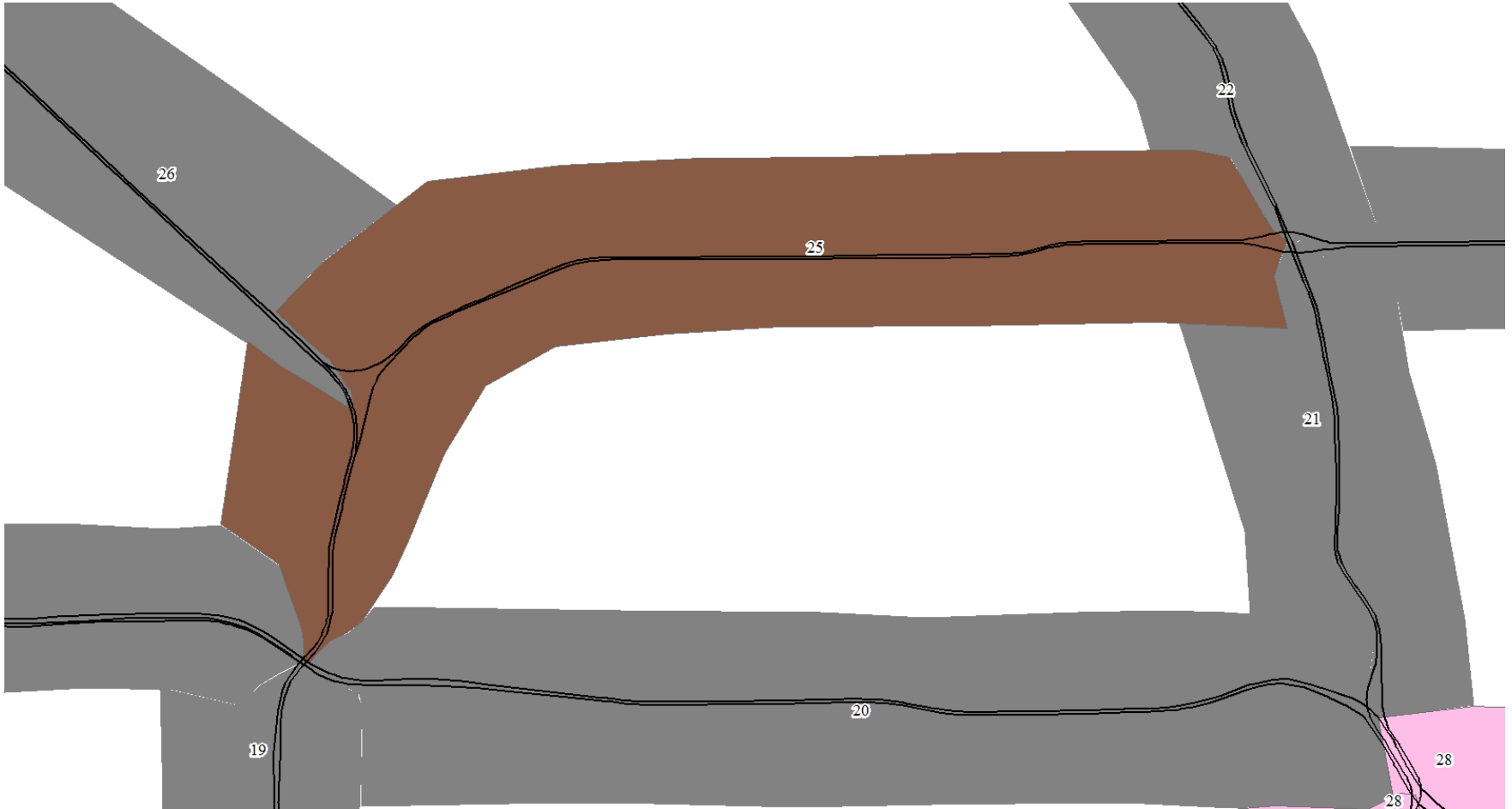
Proportion of Total Collisions at Time of Day



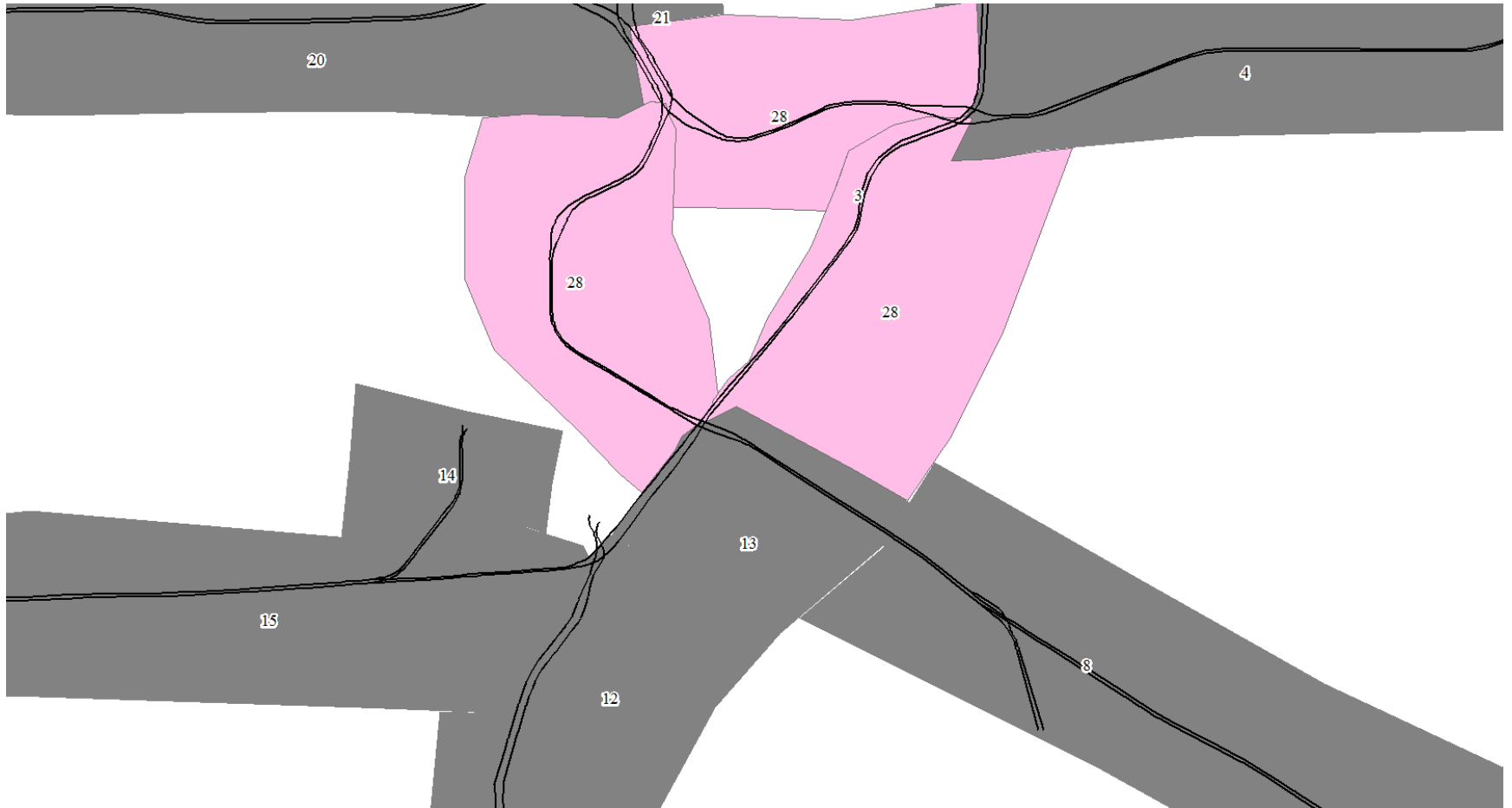
Rapid Response Placement



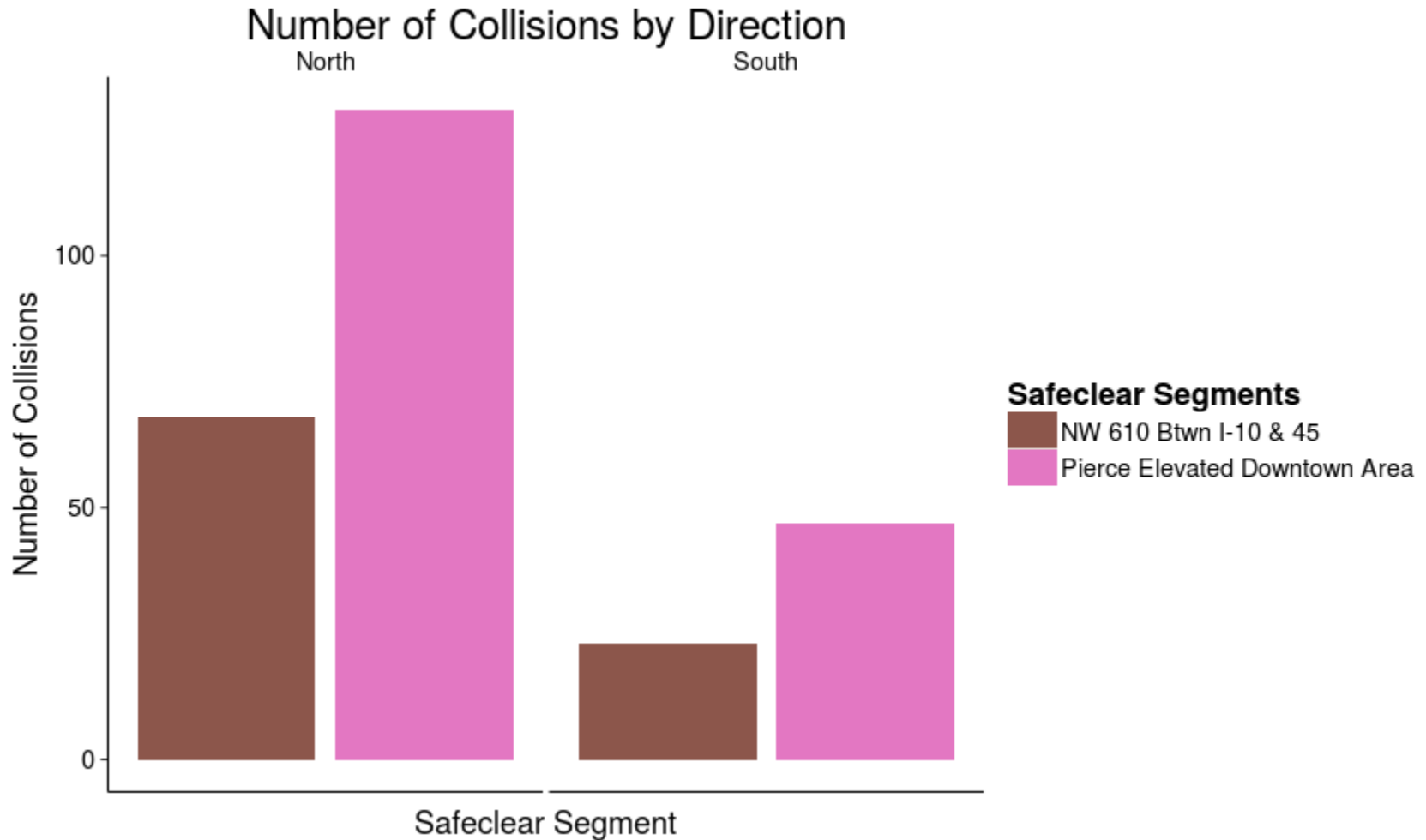
NW 610



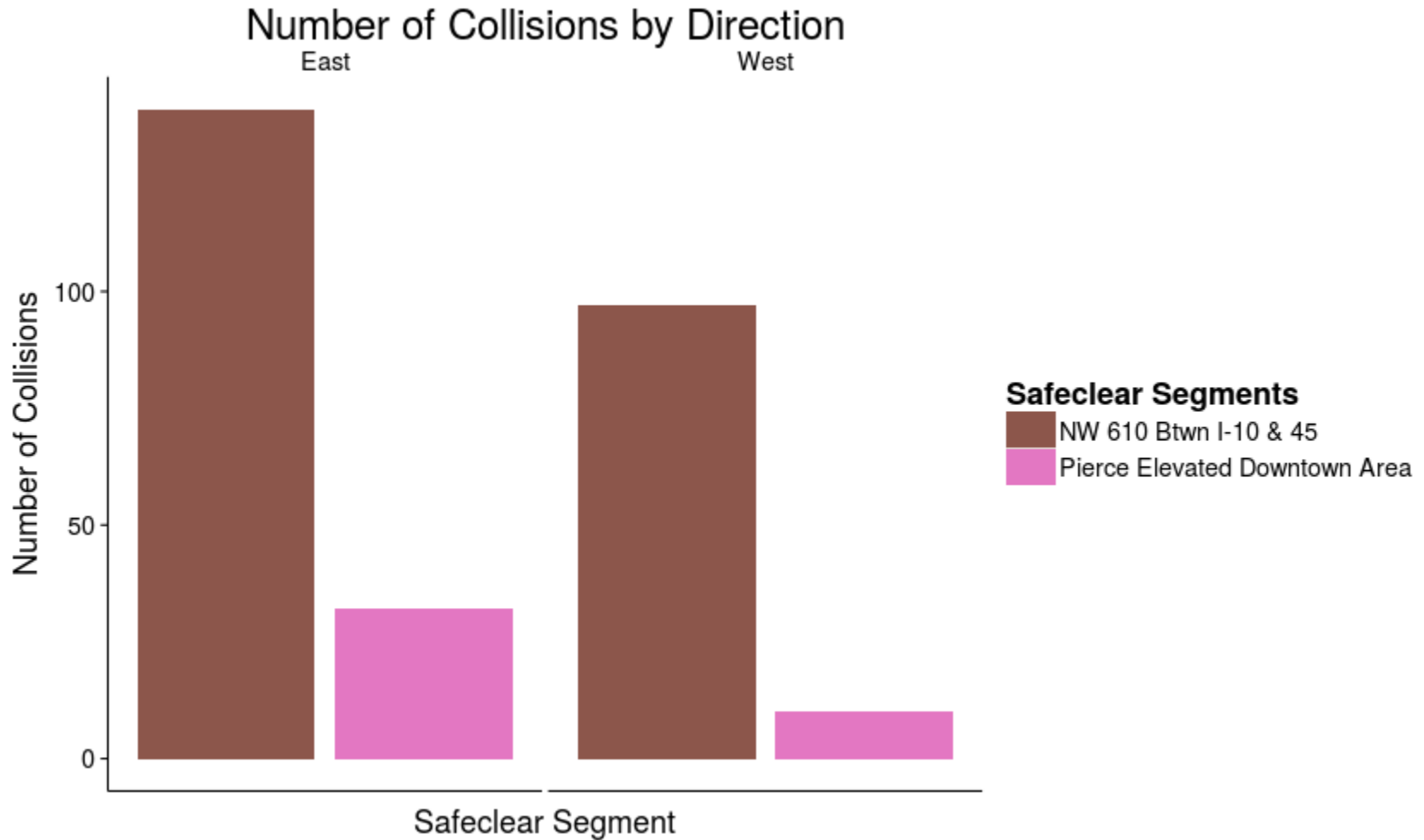
Pierce Elevated/US 59/I-10



Collisions more Frequent in Northbound Traffic



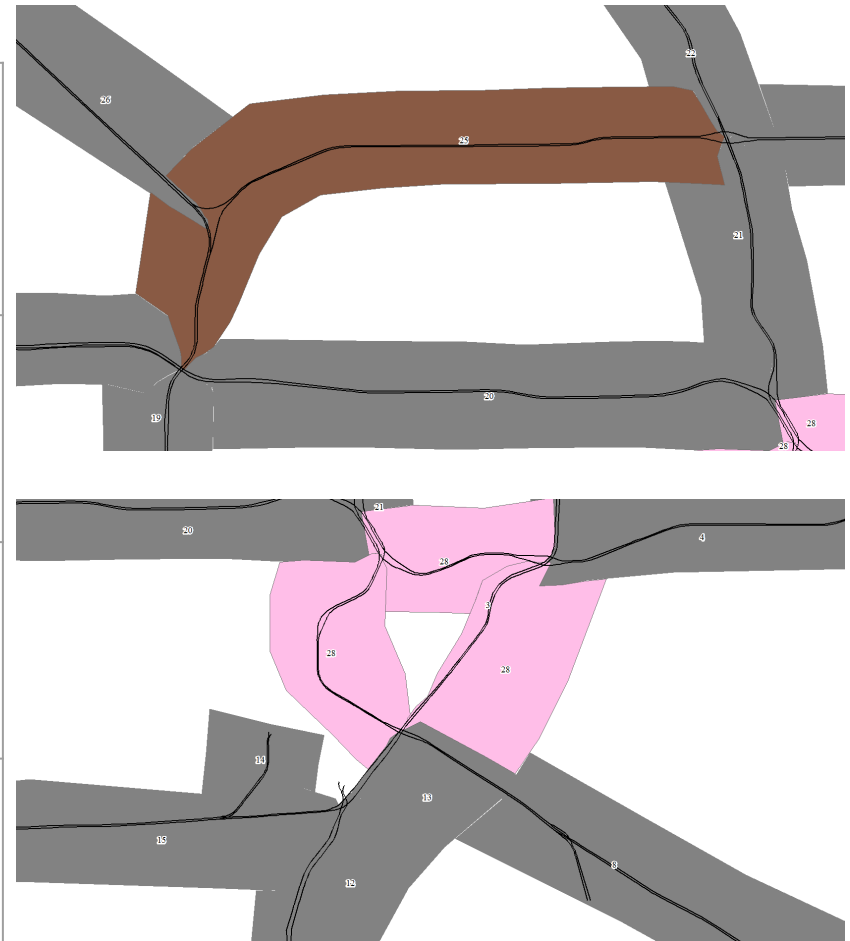
Collisions more Frequent in Eastbound Traffic



Conclusion

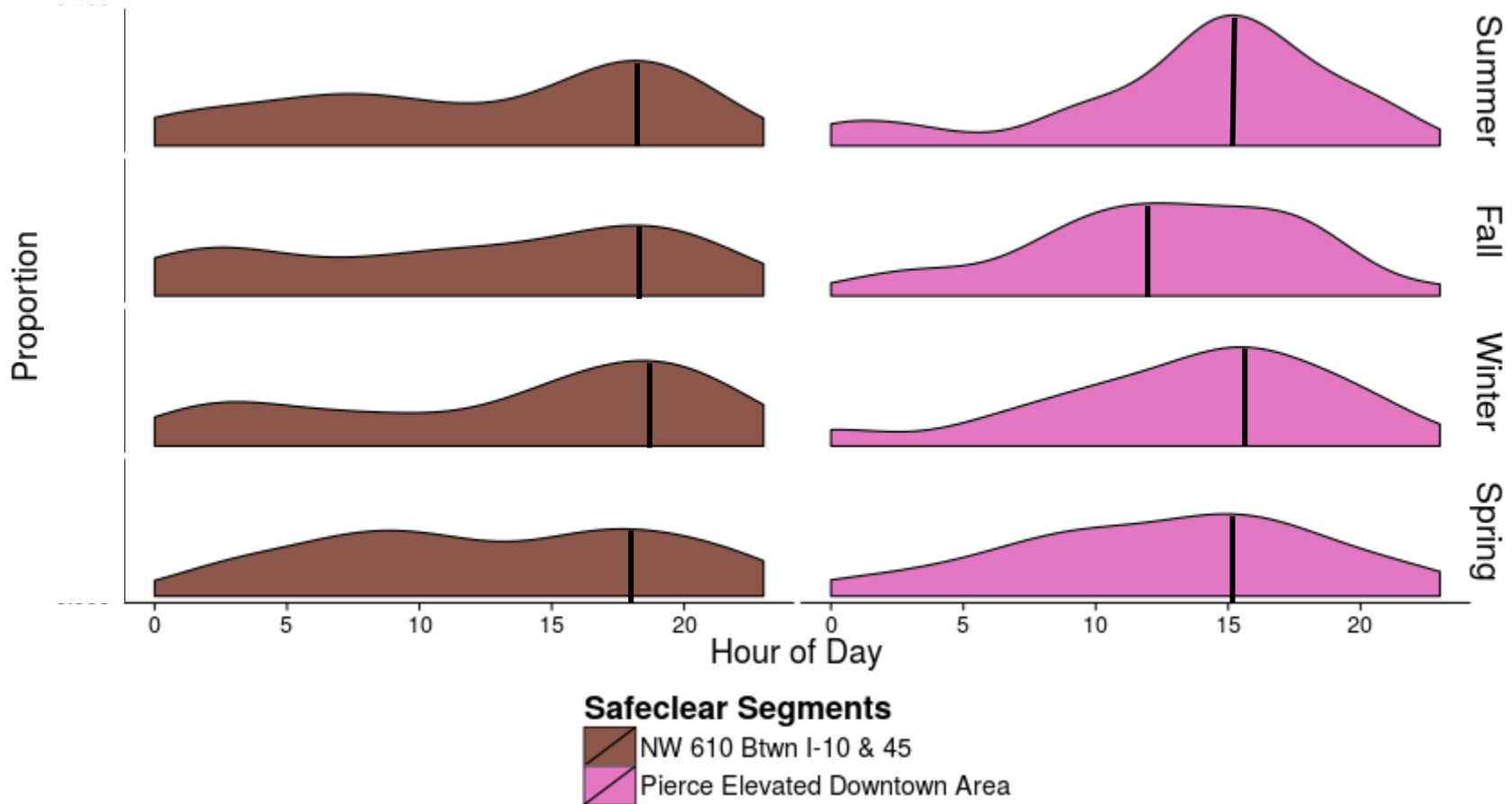
Recommendation:

	NW 610 Btwn I-10 and 45	Pierce Elevated Downtown Area
Season	Any	Any
Time of Day	Weekday: 4-8 pm Weekend: 4-8 pm	Weekday: 1-5 pm Weekend: 1-5 pm
Direction	North/Eastbound	Northbound

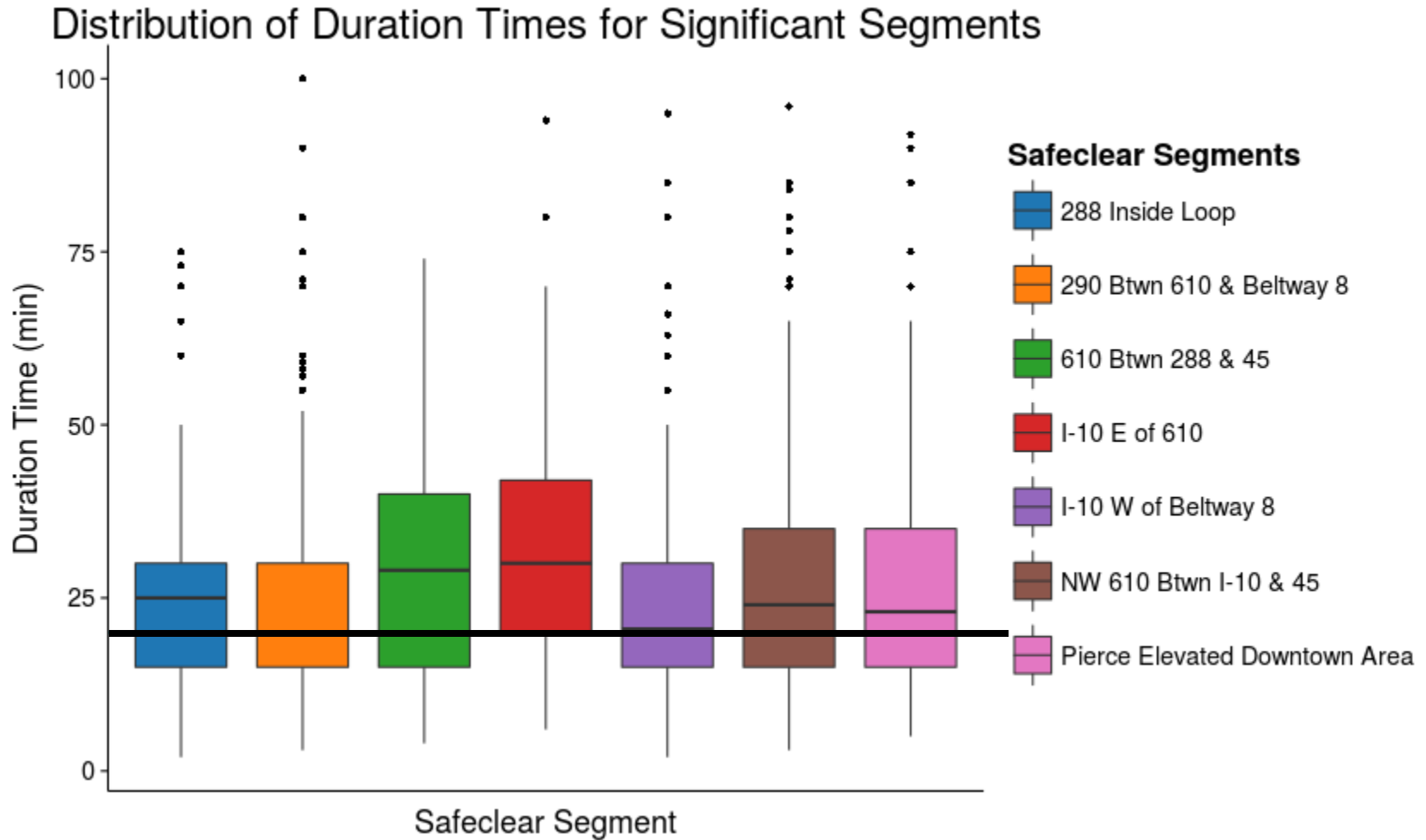


Afternoon Collisions are Worse Regardless of Season

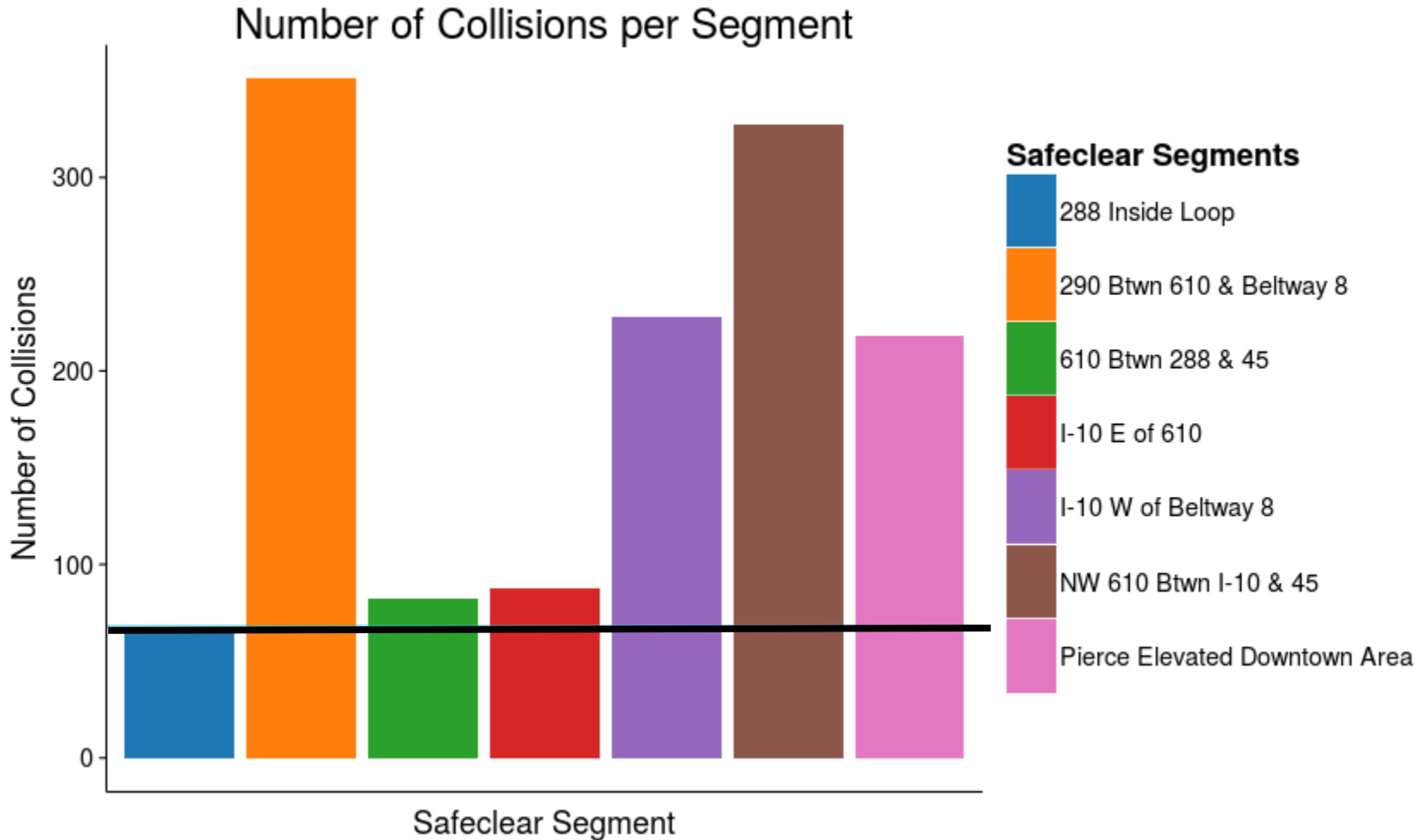
Proportion of Total Collisions at Time of Day



Distribution of Duration Times for Significant Segments

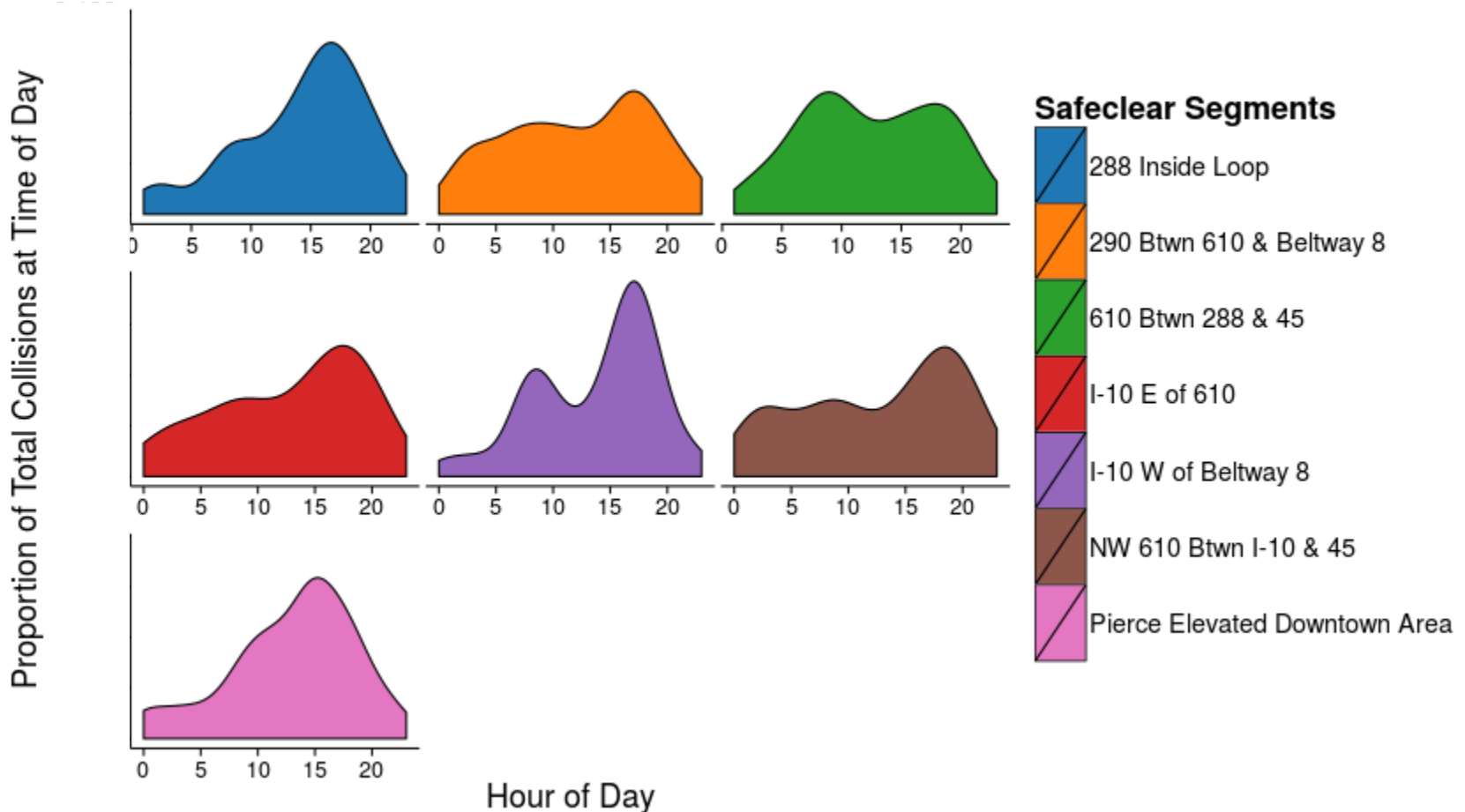


Number of Collisions per Segment



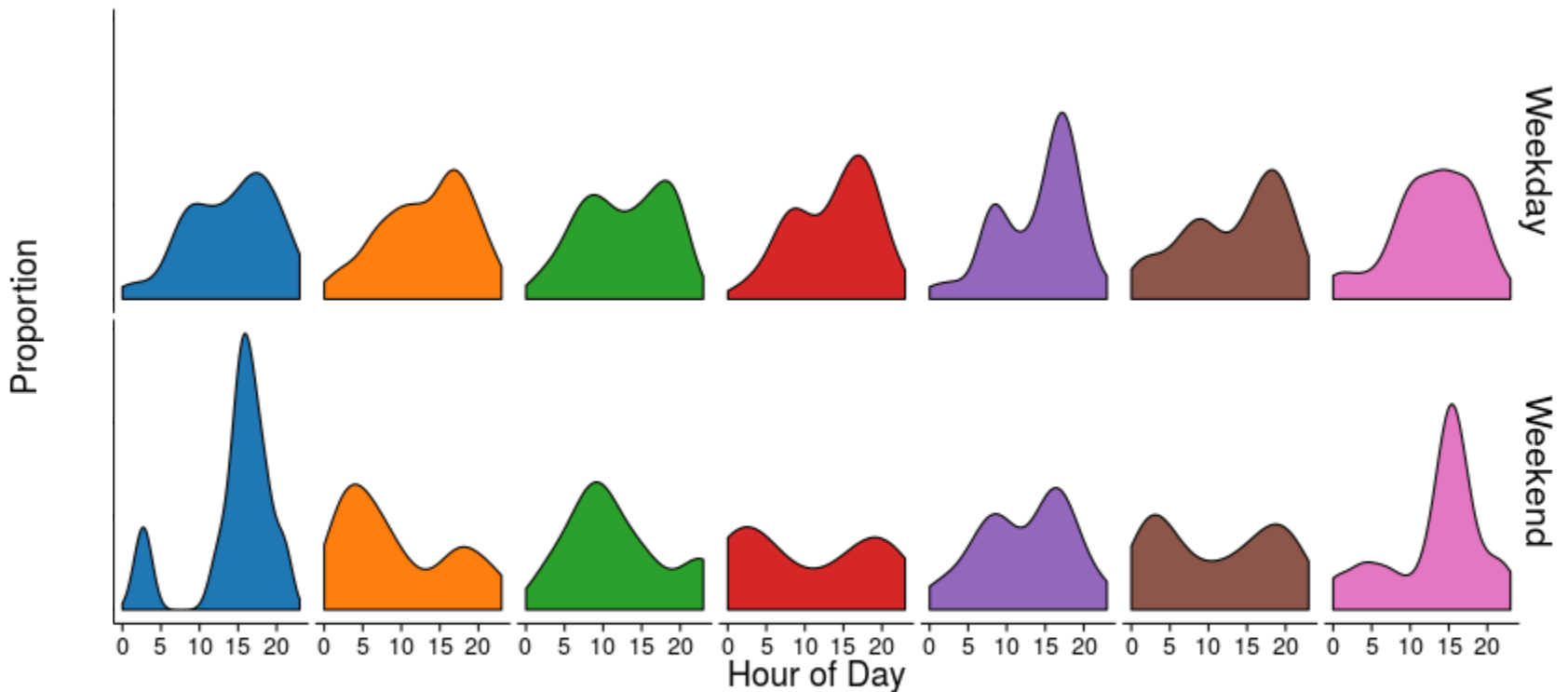
Time of Day

Proportion of Total Collisions per Segment at Time of Day



Time of Week

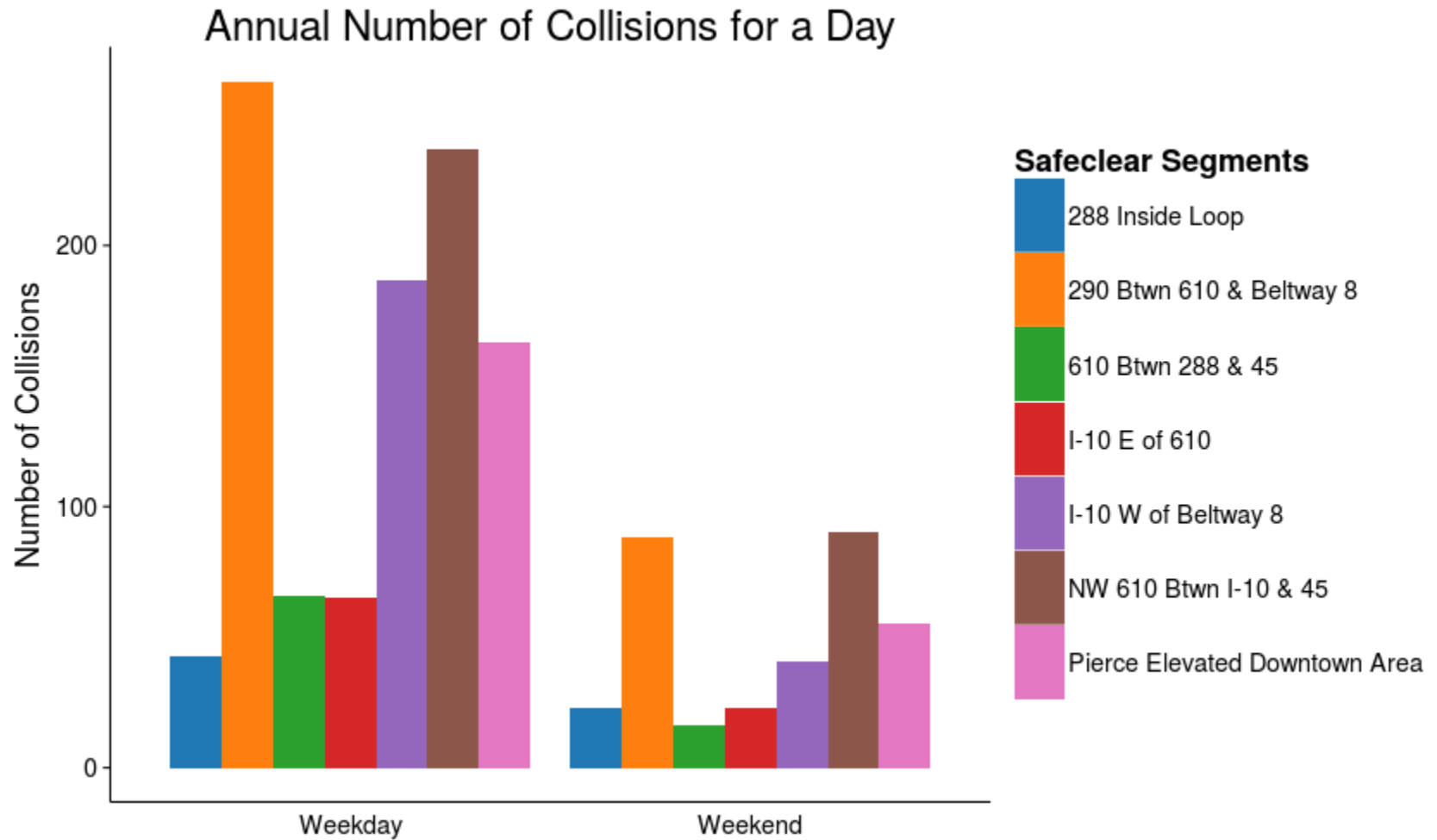
Proportion of Total Collisions at Time of Day



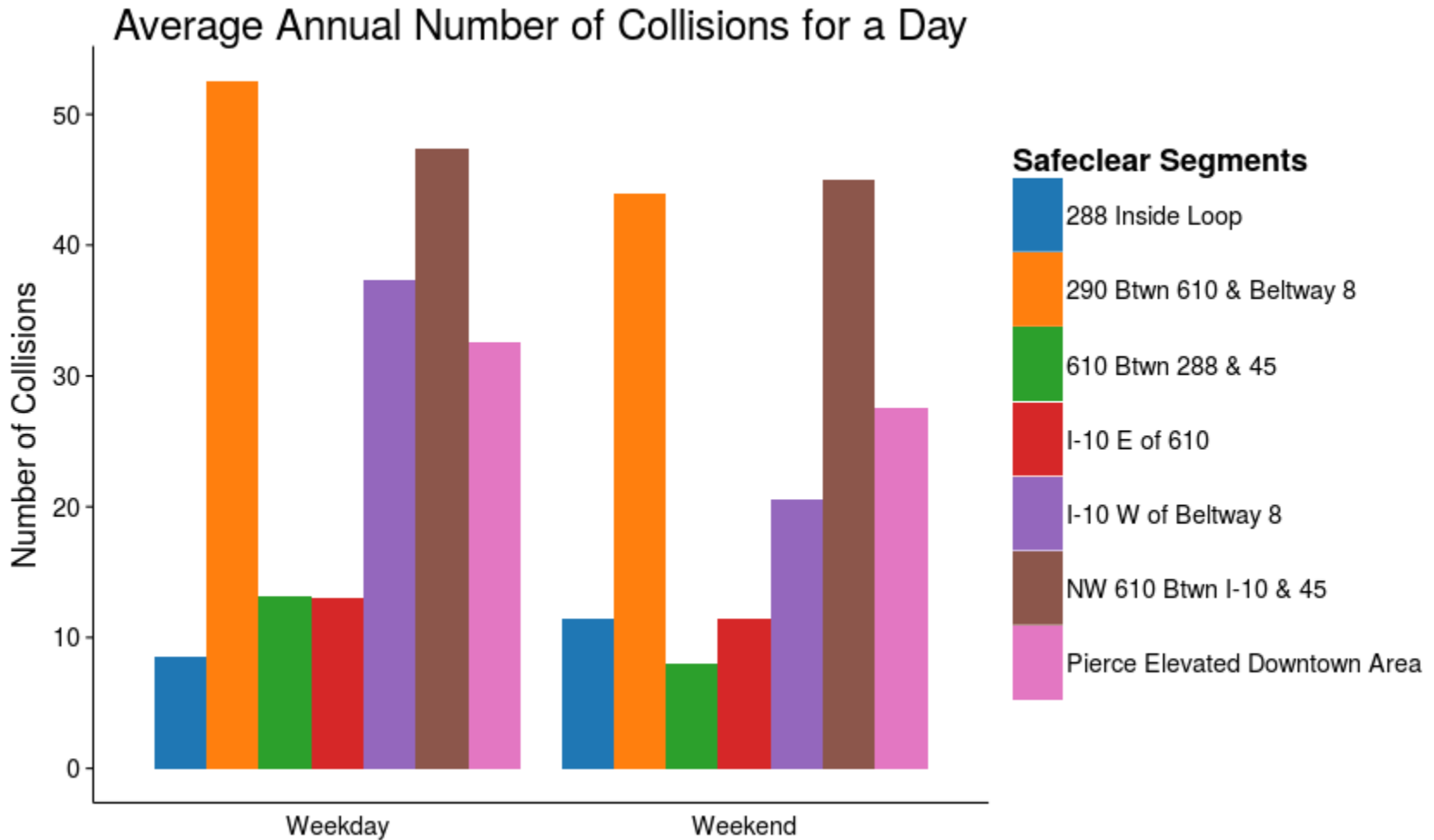
Safeclear Segments



Time of Week

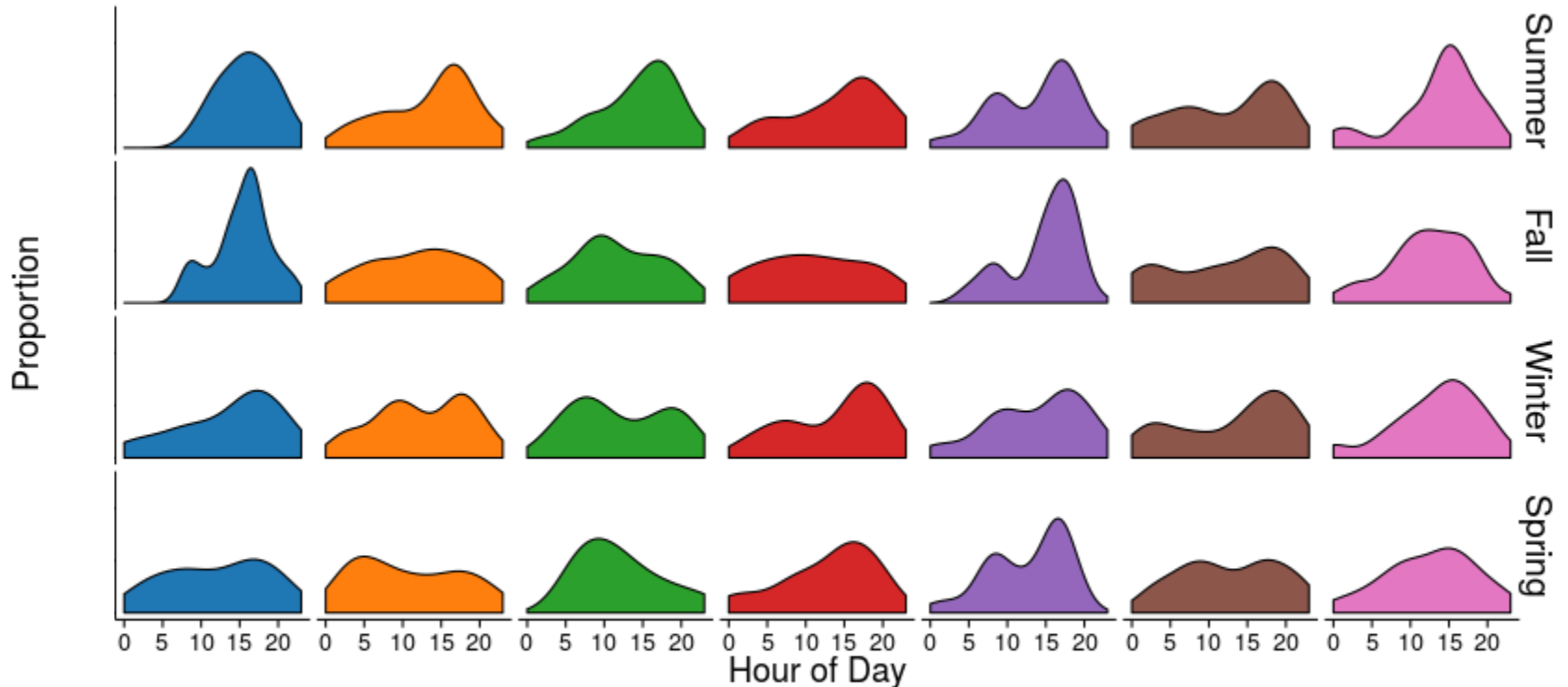


Time of Week



Time of Year

Proportion of Total Collisions at Time of Day

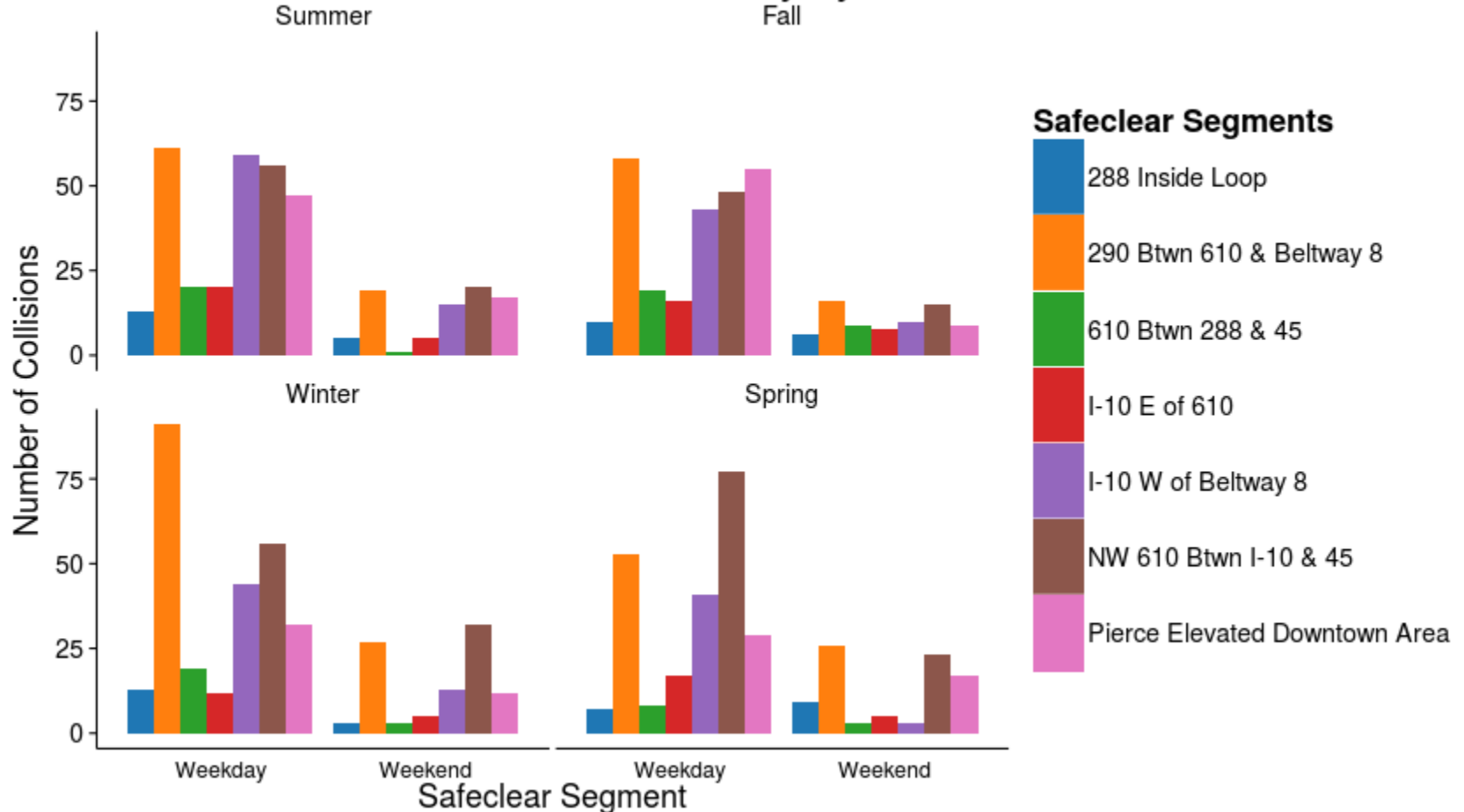


Safeclear Segments



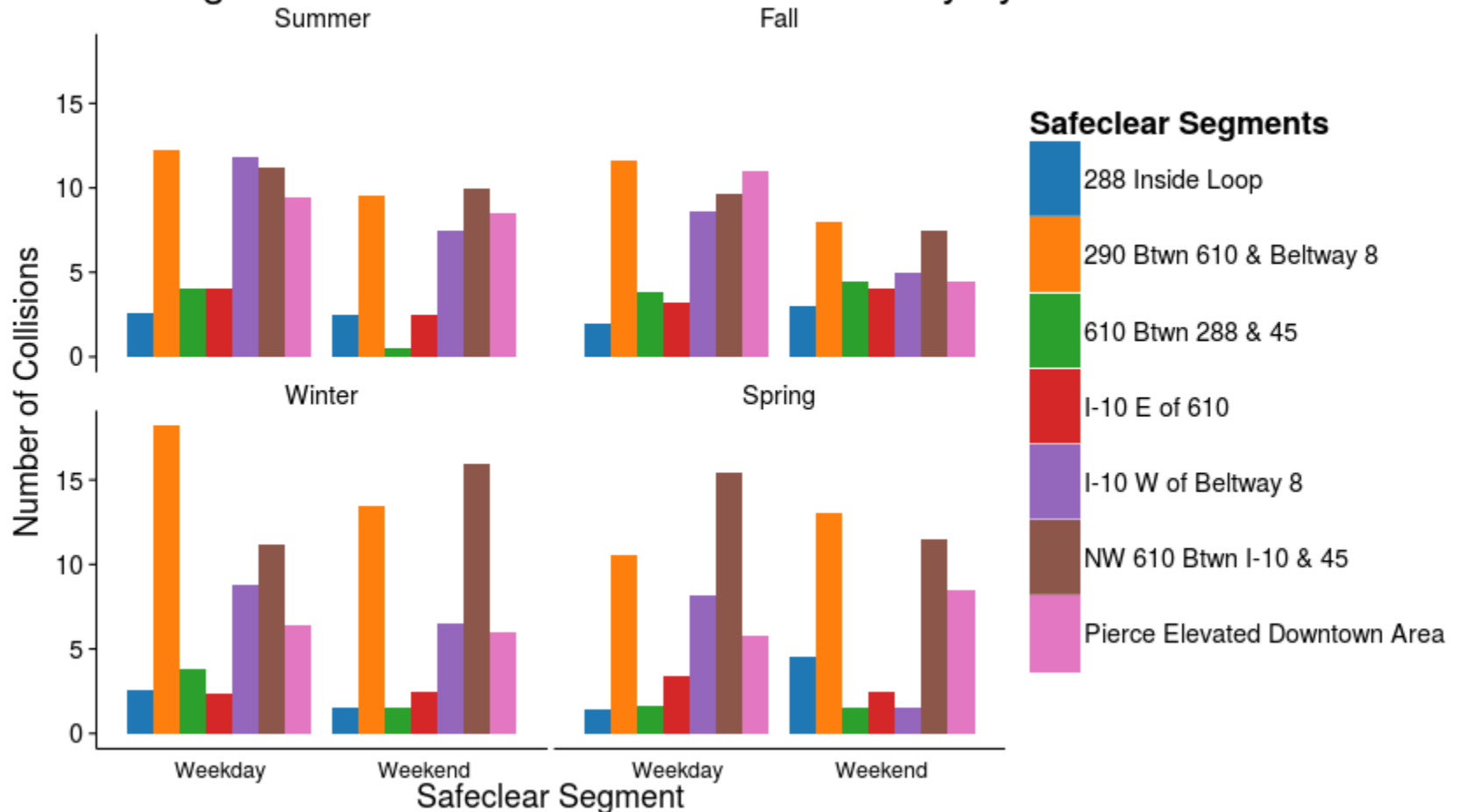
Time of Year

Annual Number of Collisions for a Day by Season



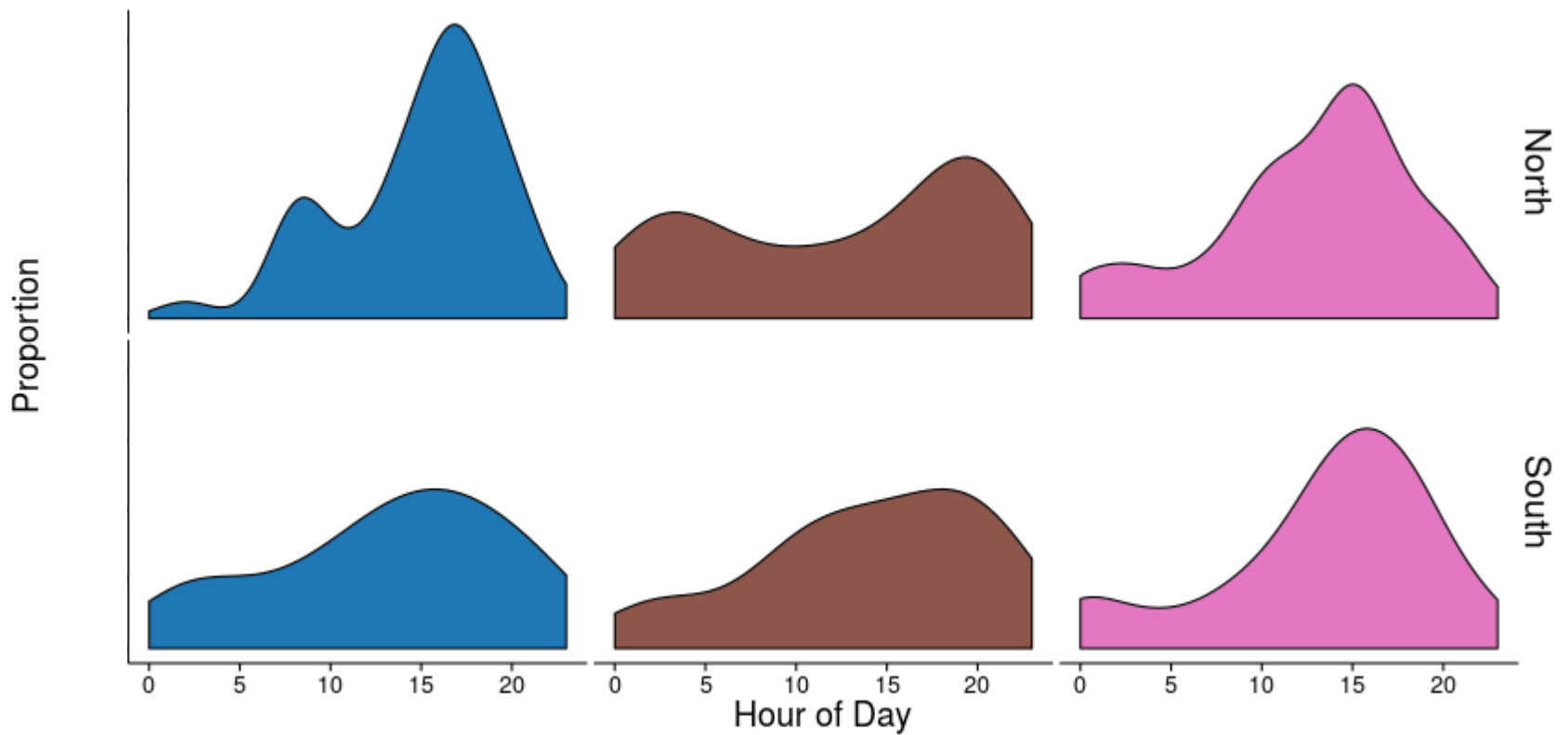
Time of Year

Average Annual Number of Collisions for a Day by Season



Direction - Time of Day

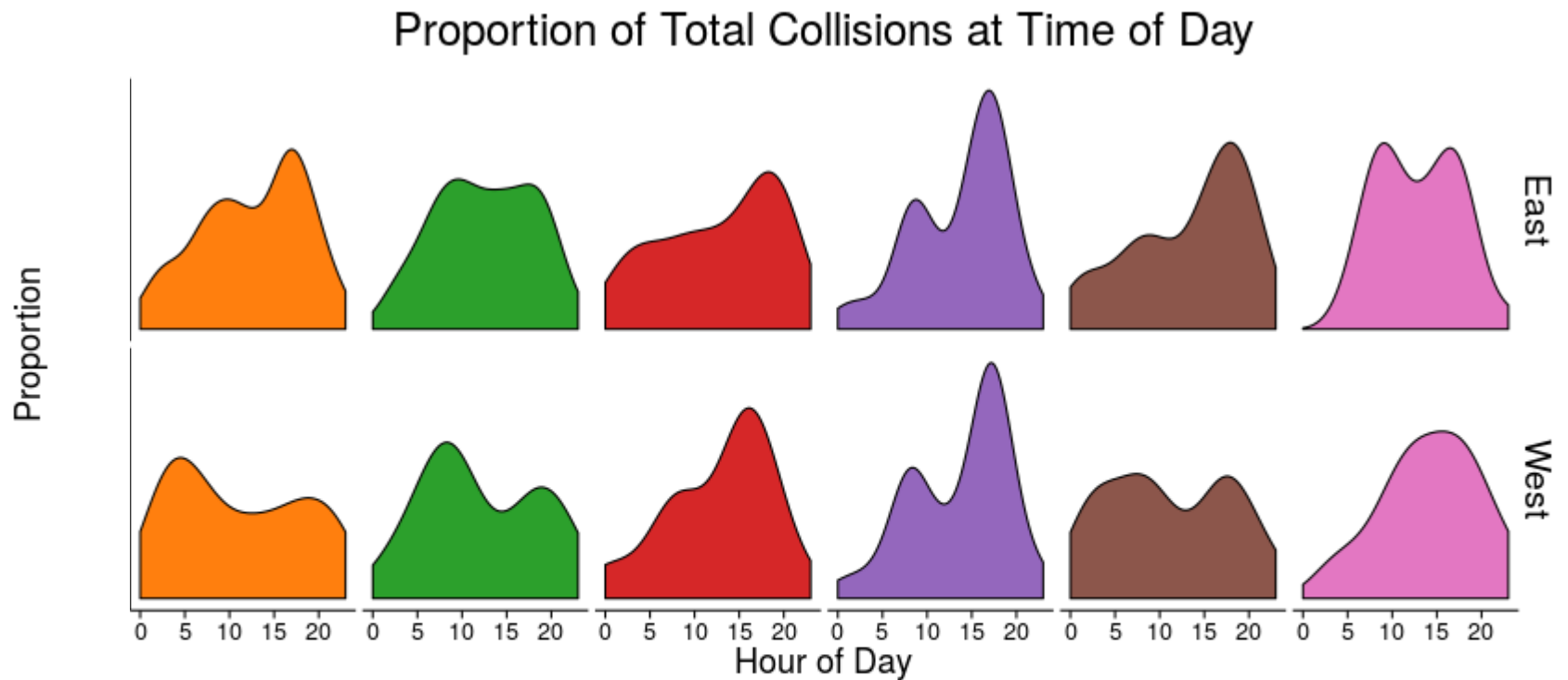
Proportion of Total Collisions at Time of Day



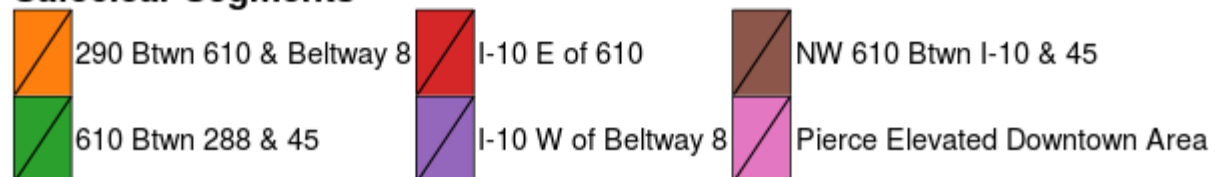
Safeclear Segments

- 288 Inside Loop
- NW 610 Btwn I-10 & 45
- Pierce Elevated Downtown Area

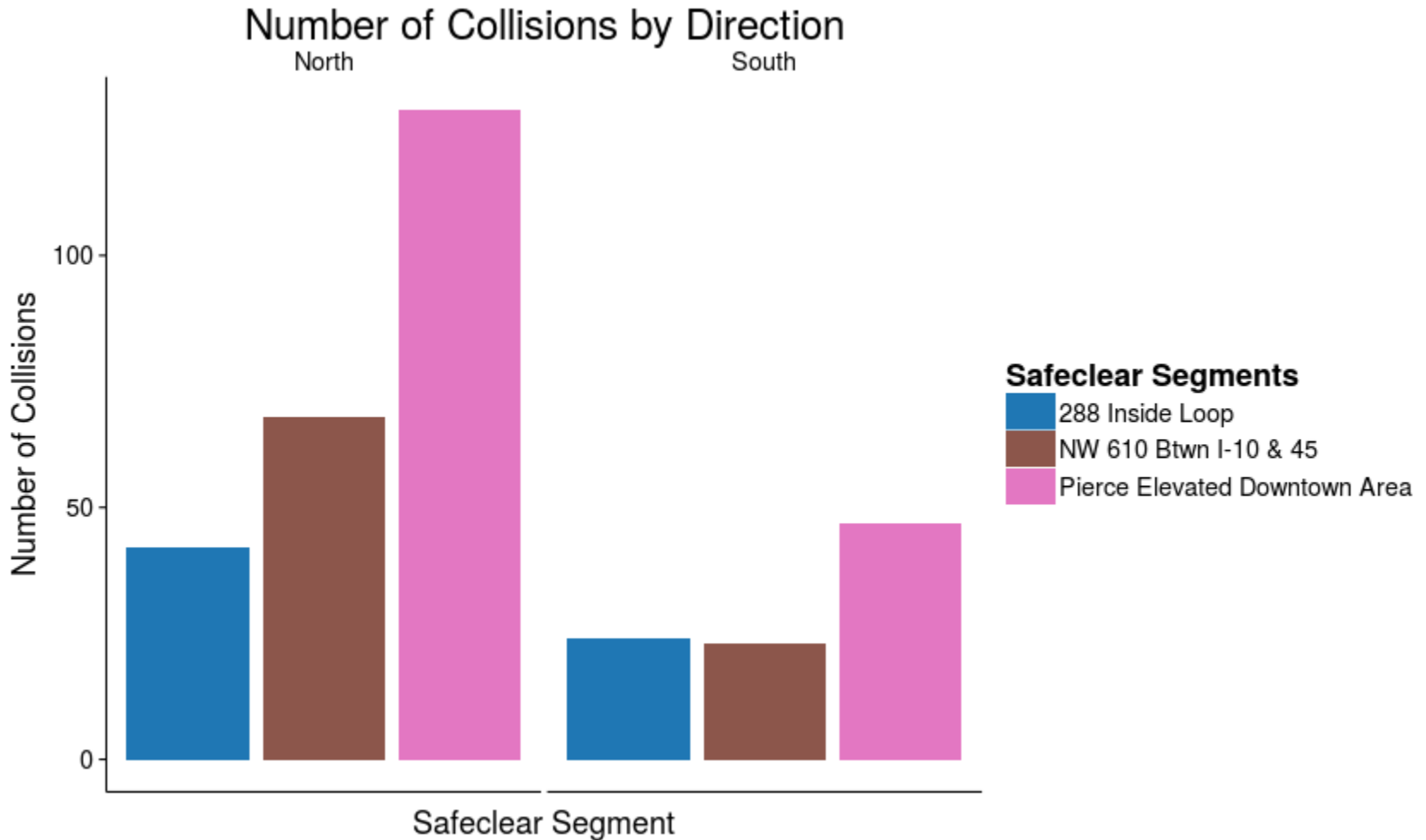
Direction



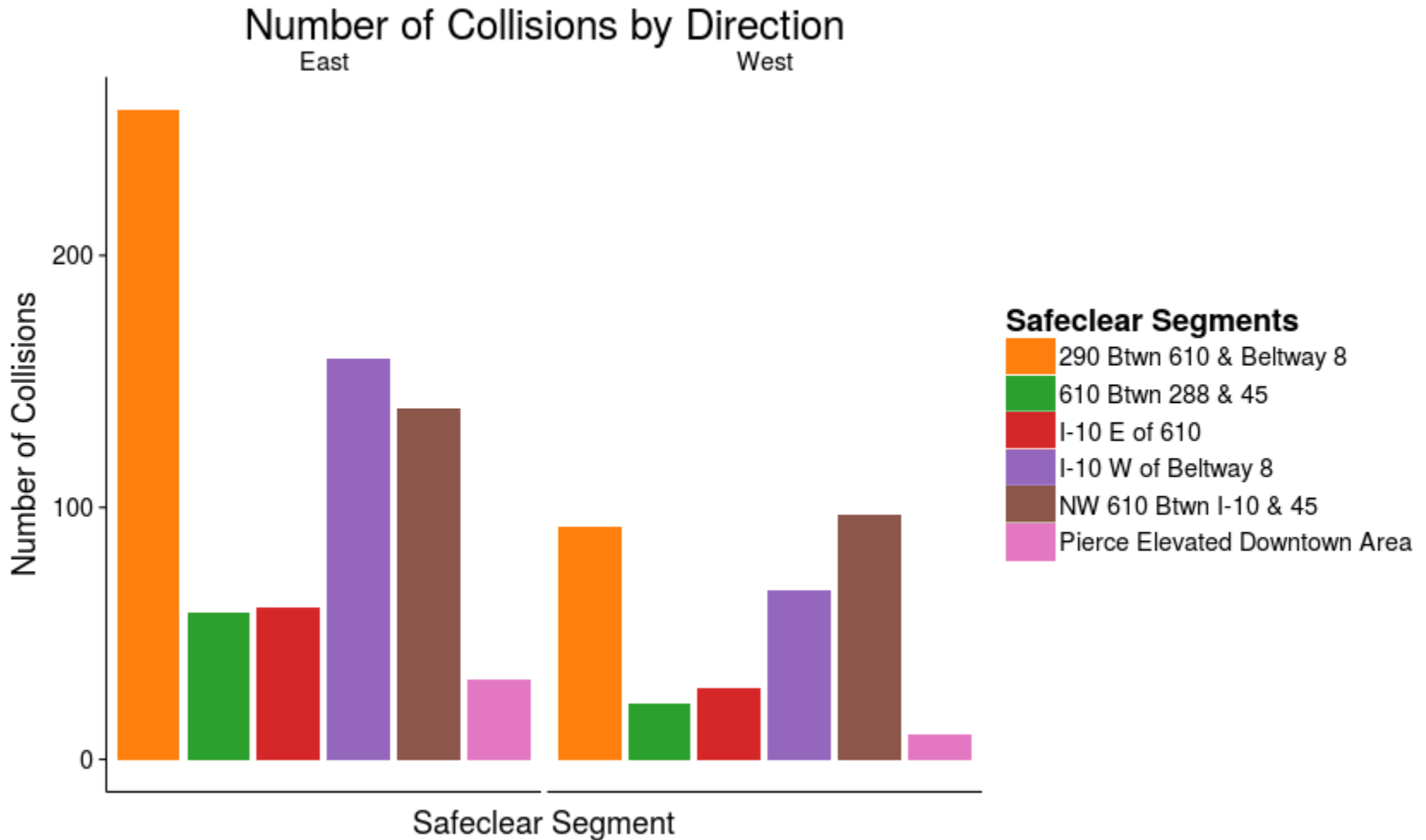
Safeclear Segments



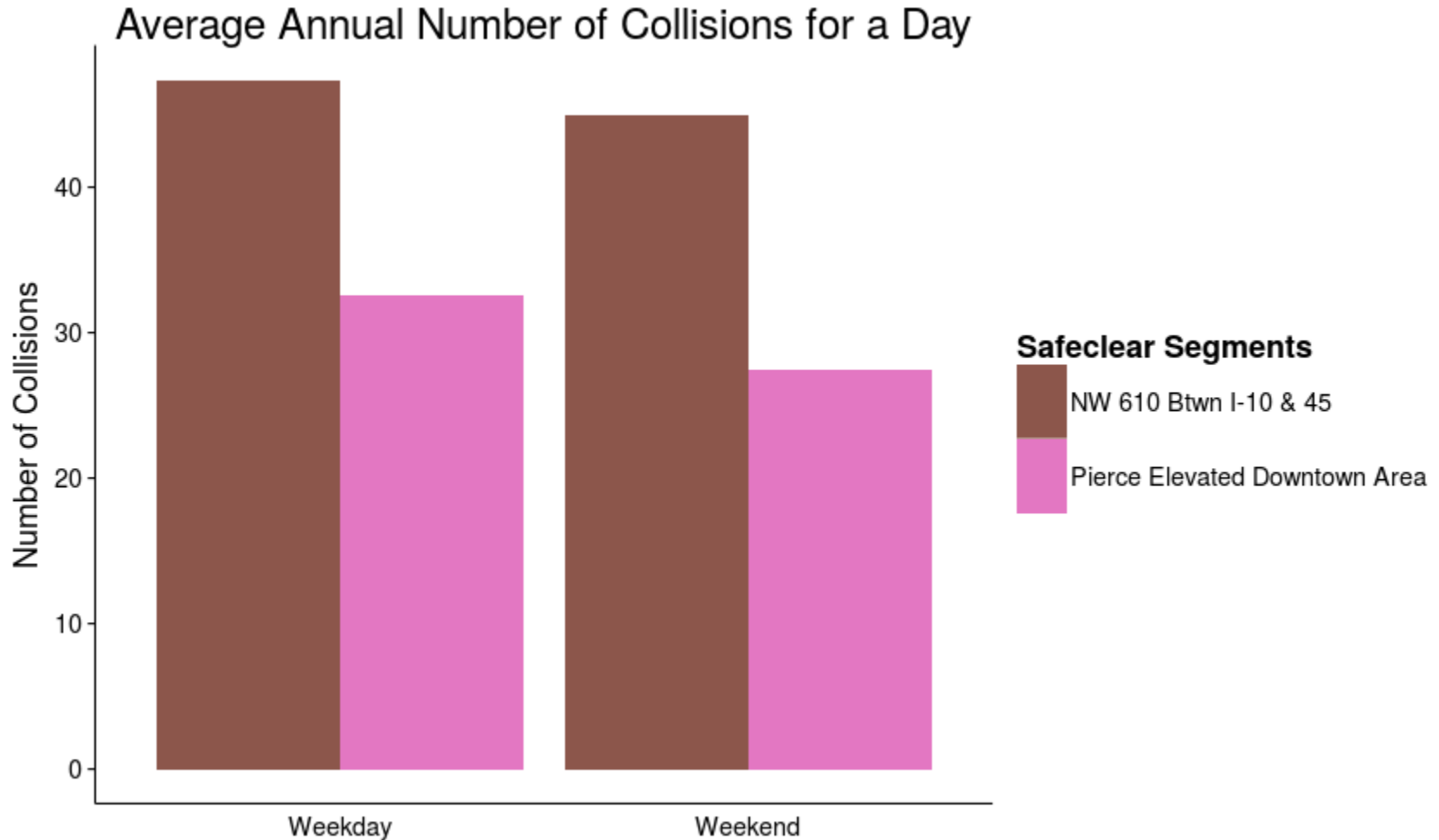
Direction



Direction

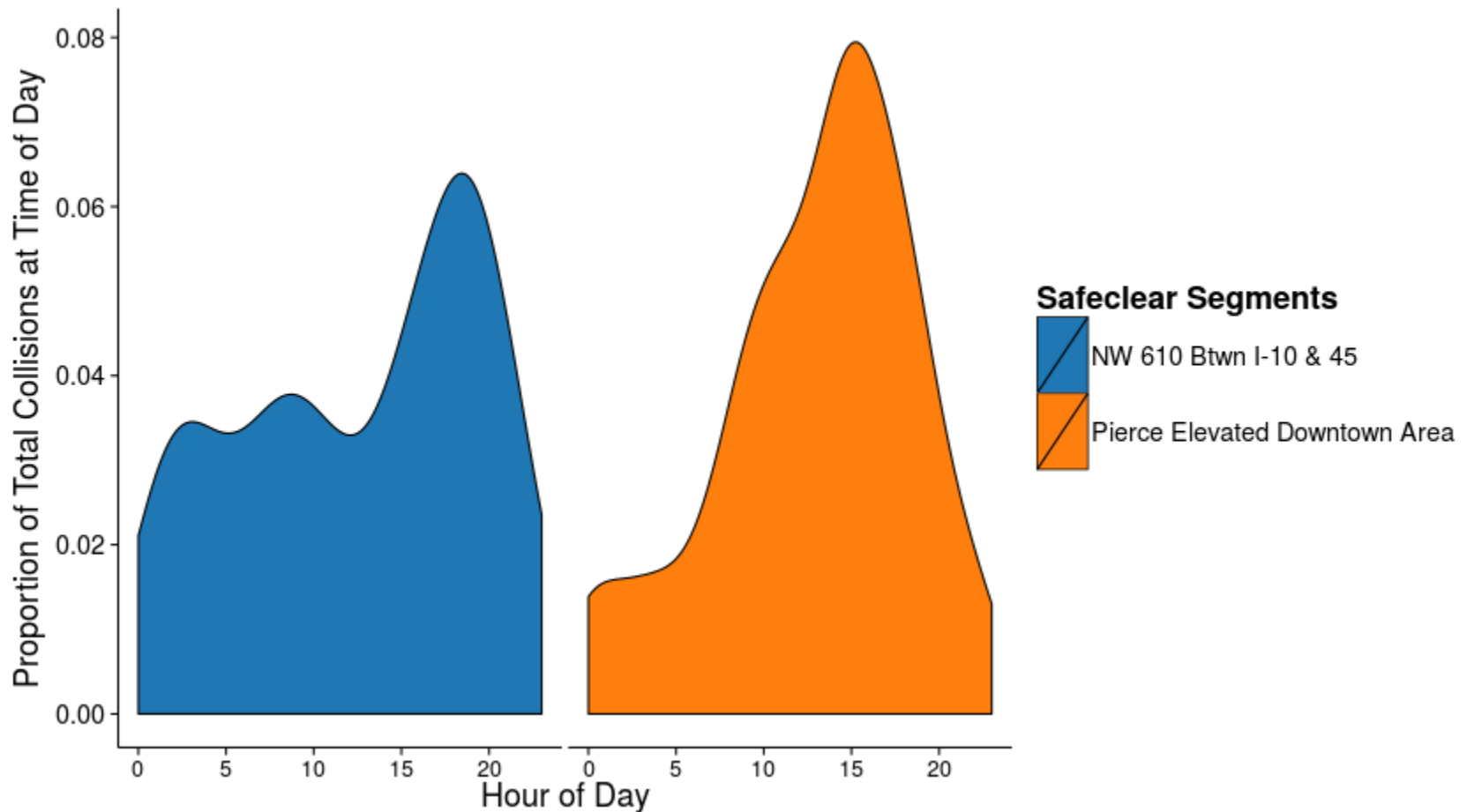


Similar Number of Collisions Between Weekend and Weekday



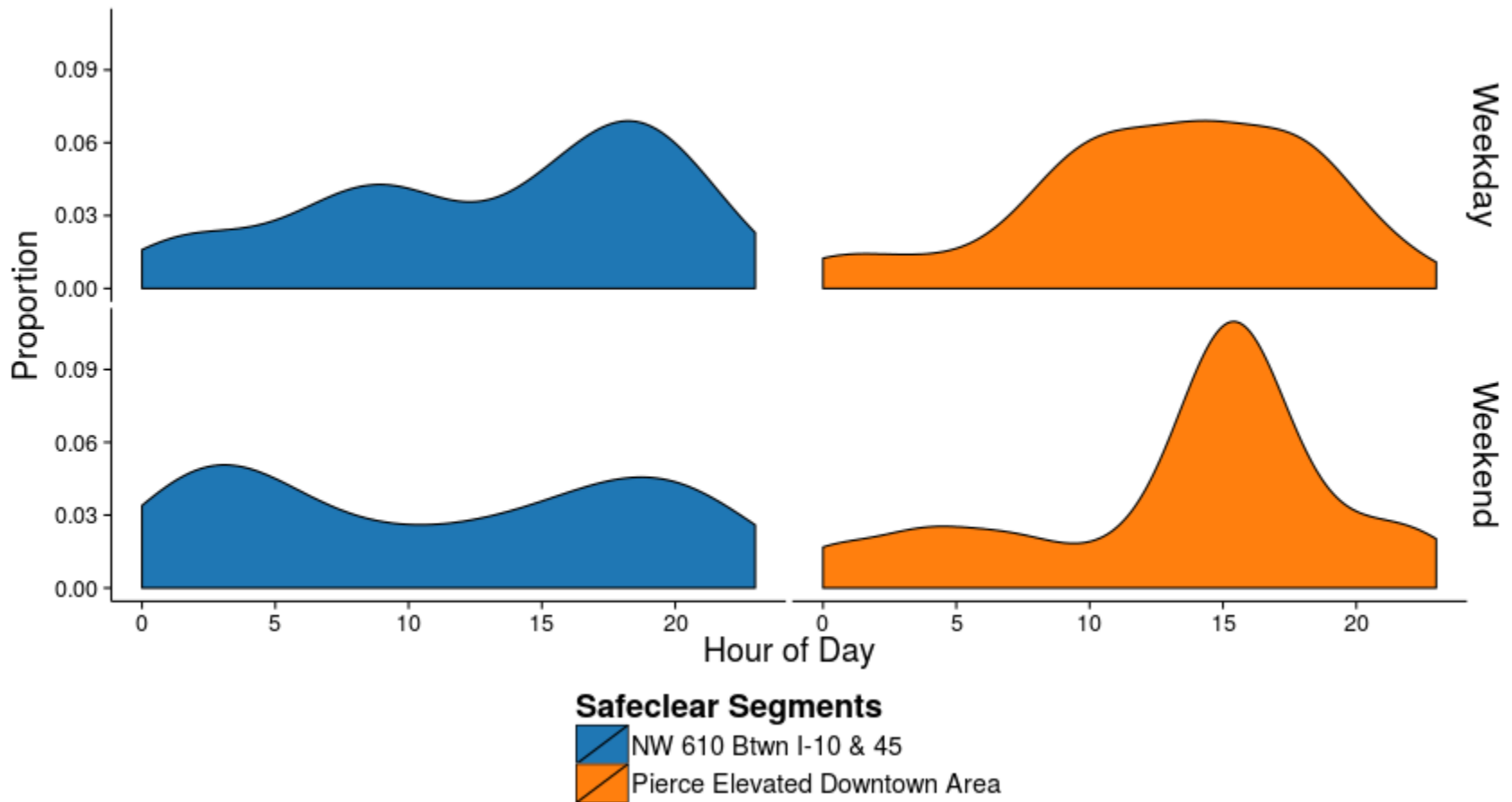
Candidates - Time of Day

Proportion of Total Collisions per Segment at Time of Day

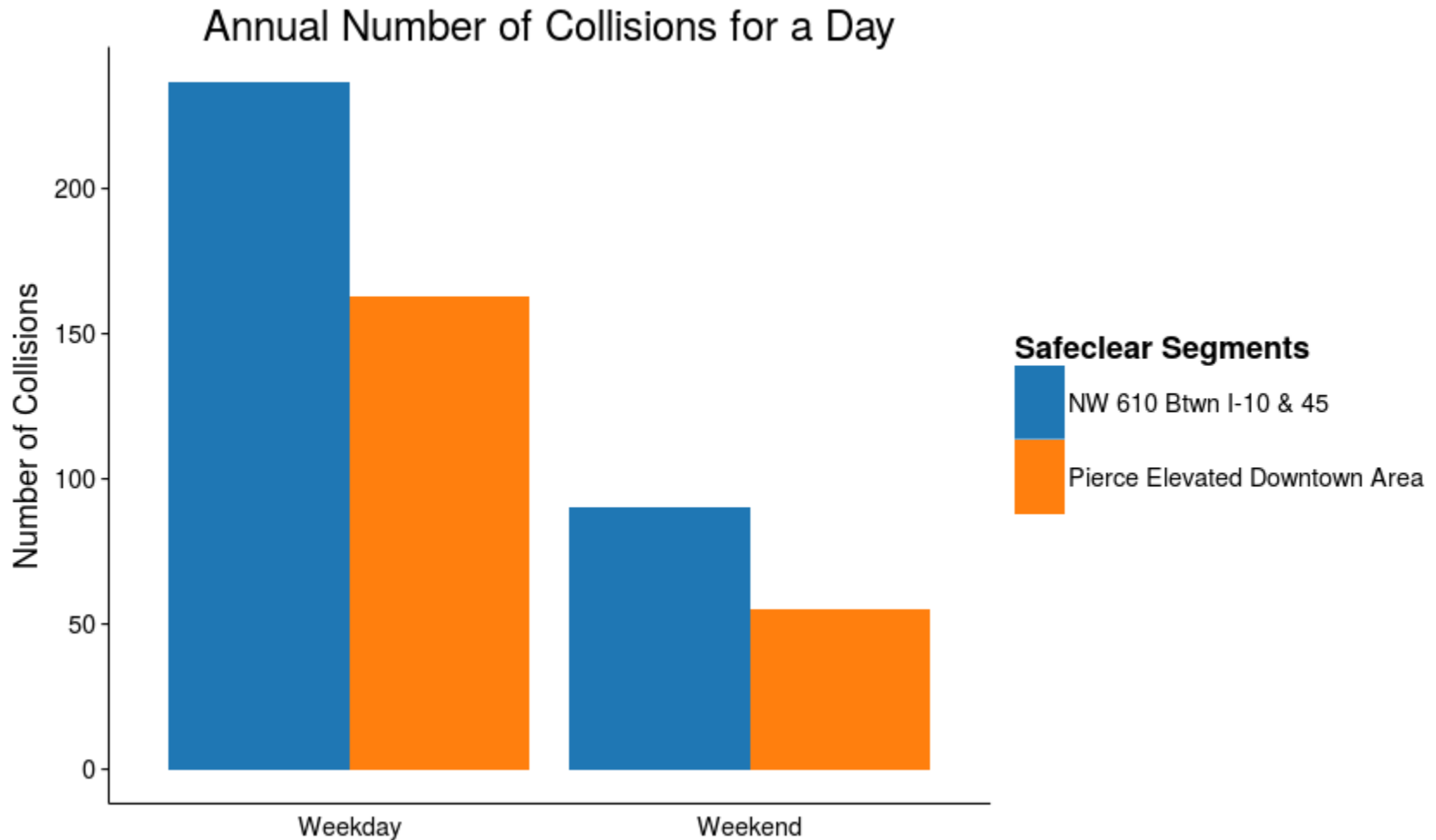


Weekend versus Weekday

Proportion of Total Collisions at Time of Day

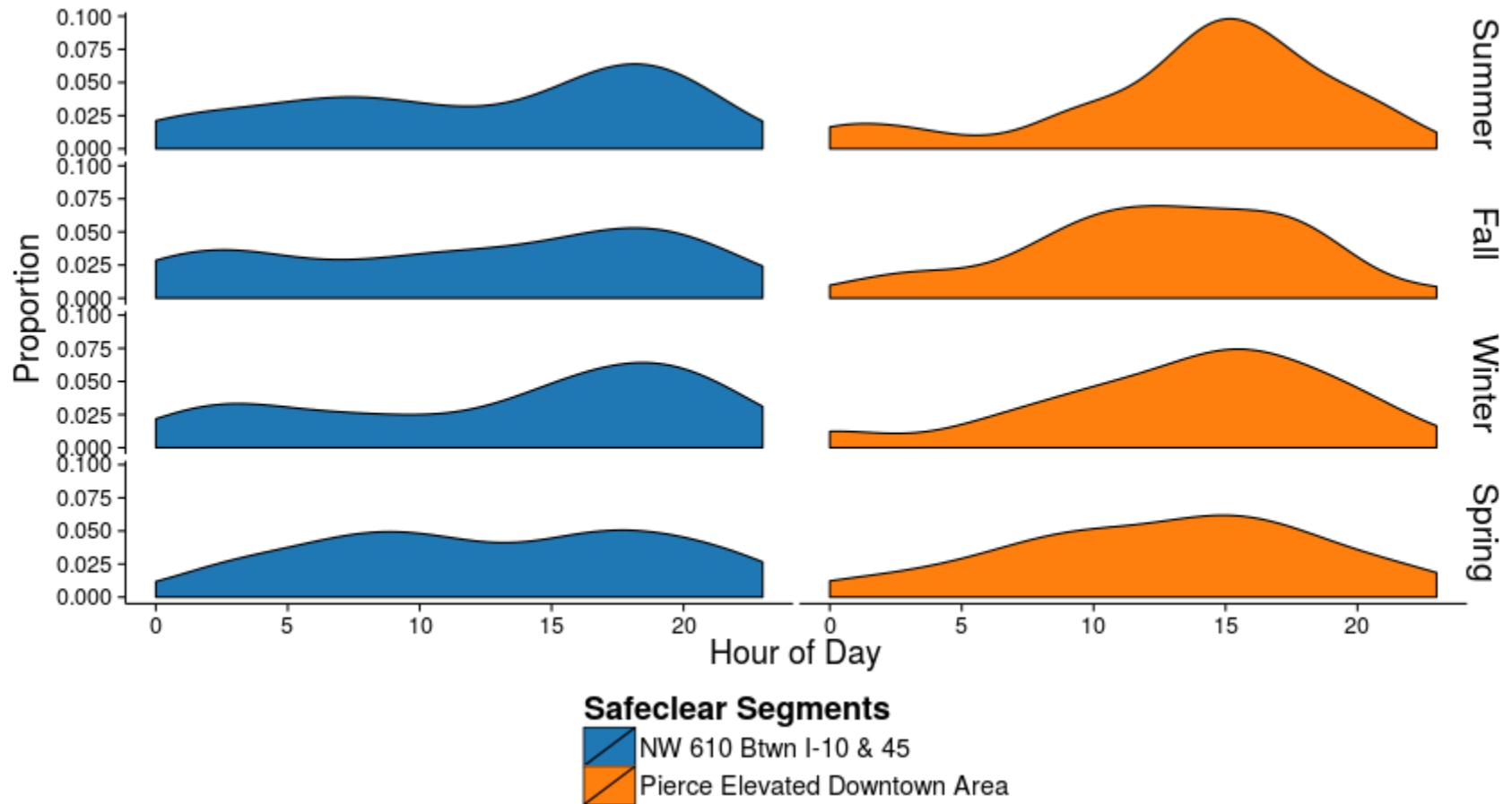


Candidates - Time of Week

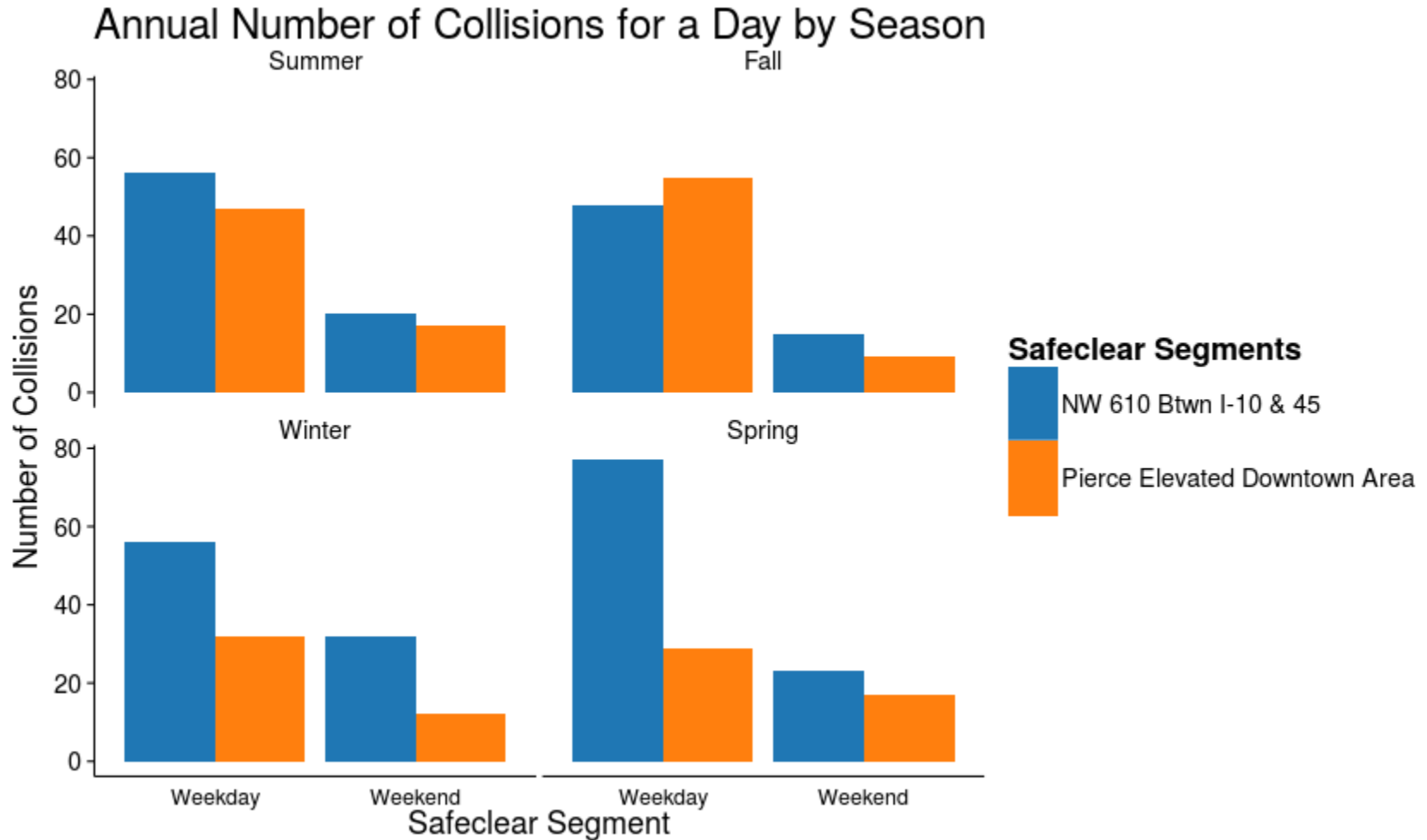


Candidates - Time of Year

Proportion of Total Collisions at Time of Day

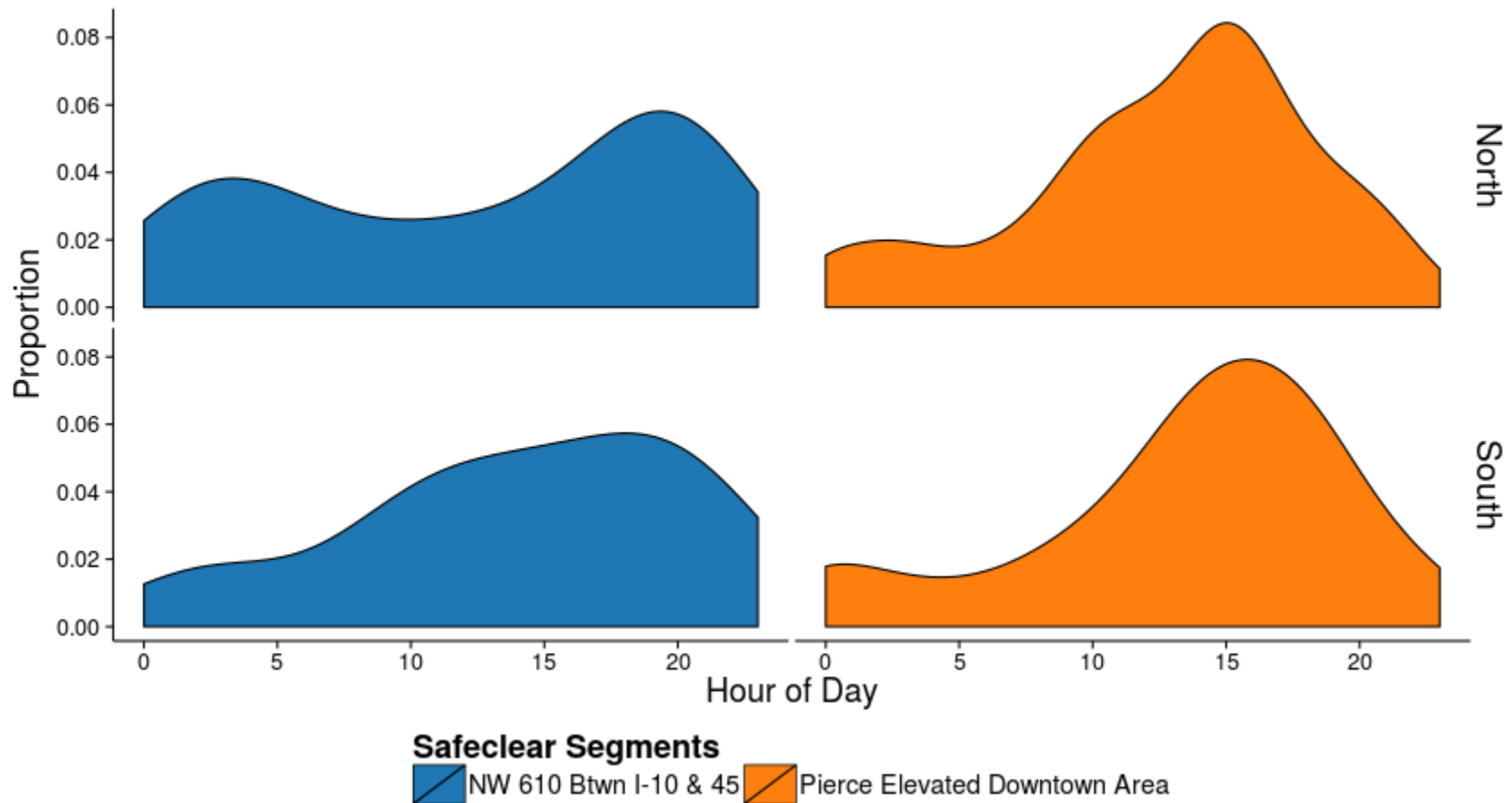


Candidates - Time of Year



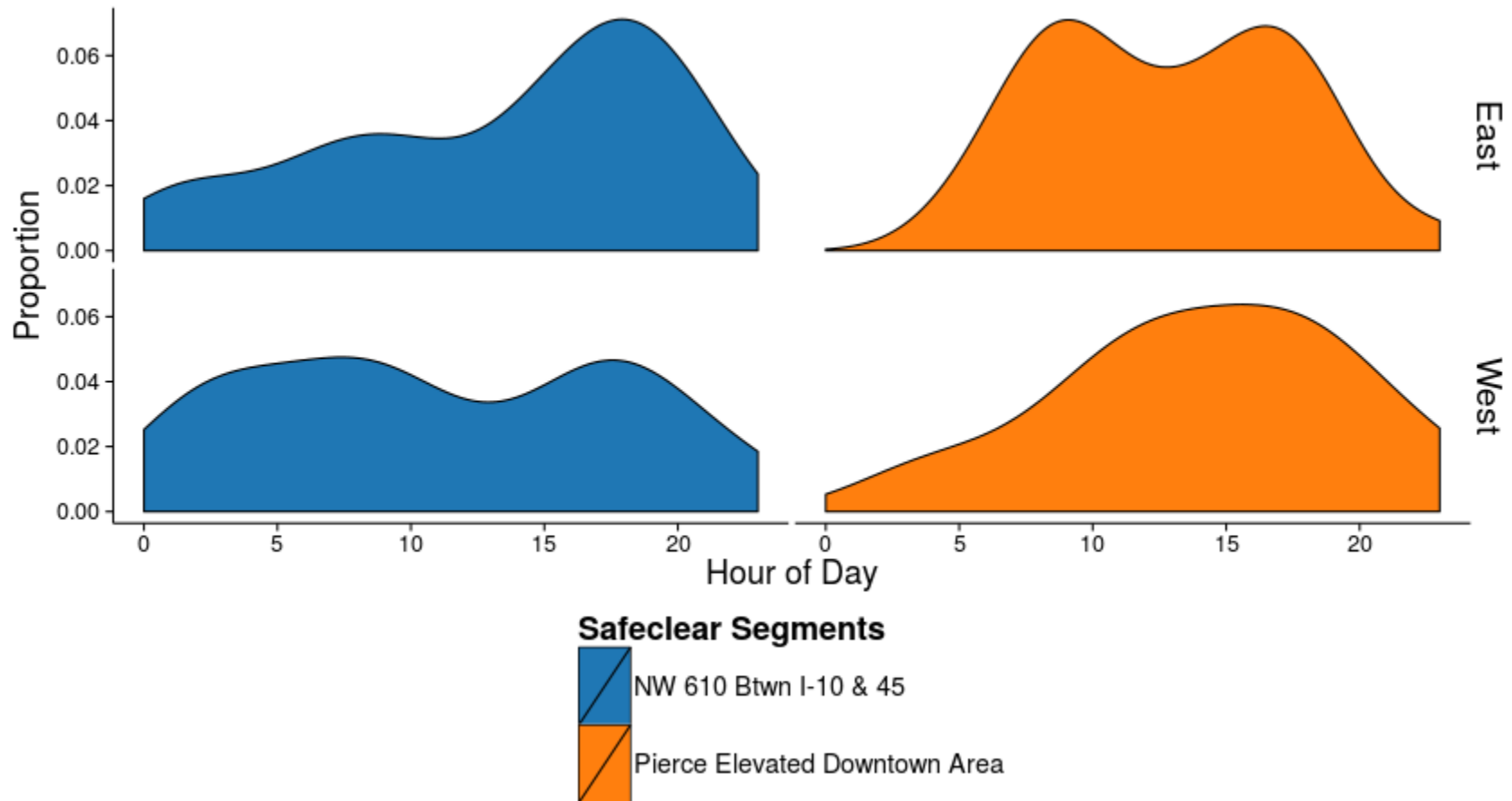
Candidates - Direction

Proportion of Total Collisions at Time of Day



Candidates - Direction

Proportion of Total Collisions at Time of Day



Police Presence

