

## Appendix F: MioVision Risk Diagnostic Reports

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West 3rd Street and U.S. Highway 491  
Cortez, CO  
Risk Diagnostic Report

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## General Information

### Report Details

<b>Site</b>	West 3rd Street and U.S. Highway 491, Cortez, CO
<b>Video Period</b>	2024-Nov-14 to 2024-Nov-19
<b>Video Length</b>	60 hours
<b>Report Notes</b>	Conflict data is provided for Nov. 14-19 @ 07:00-17:00 each day.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
<b>Vulnerable Road User Safe Systems Risk Indicator (VRUss)</b>	VRUss is a categorical risk indicator that uses an adapted version of Post Encroachment Time (PET) and the vehicle impact speed to determine the nearness and probability of a severe injury collision (MAIS 3+) using biomechanical injury thresholds for vehicle-pedestrian collisions [1]. This indicator is used to measure risk to VRUs.

[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.tpro.2016.05.396>



### Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

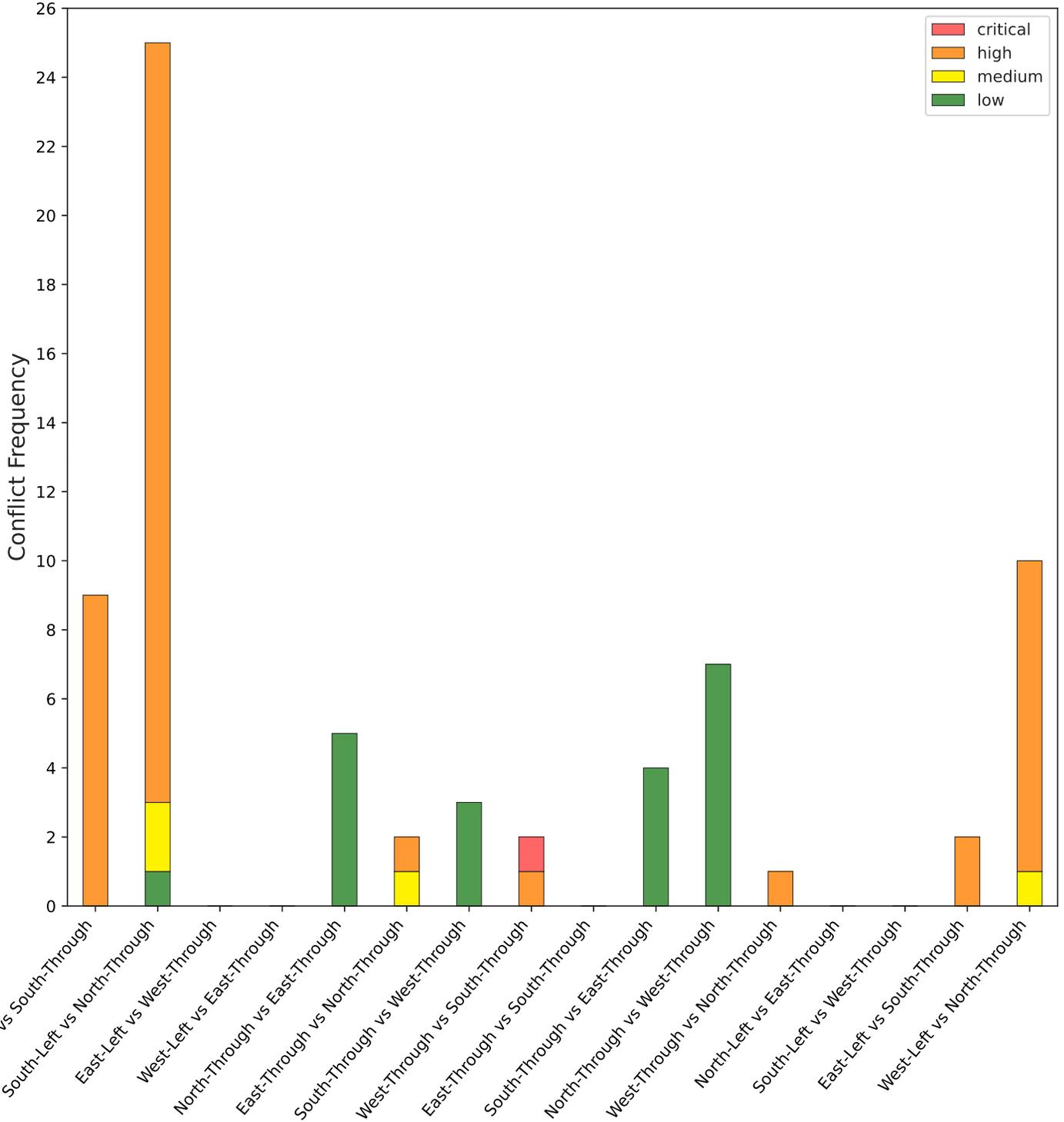


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	0	0	9	0
South-Left vs North-Through	1	2	22	0
East-Left vs West-Through	0	0	0	0
West-Left vs East-Through	0	0	0	0

### Right-Angle (Through Vehicle vs Through Vehicle)

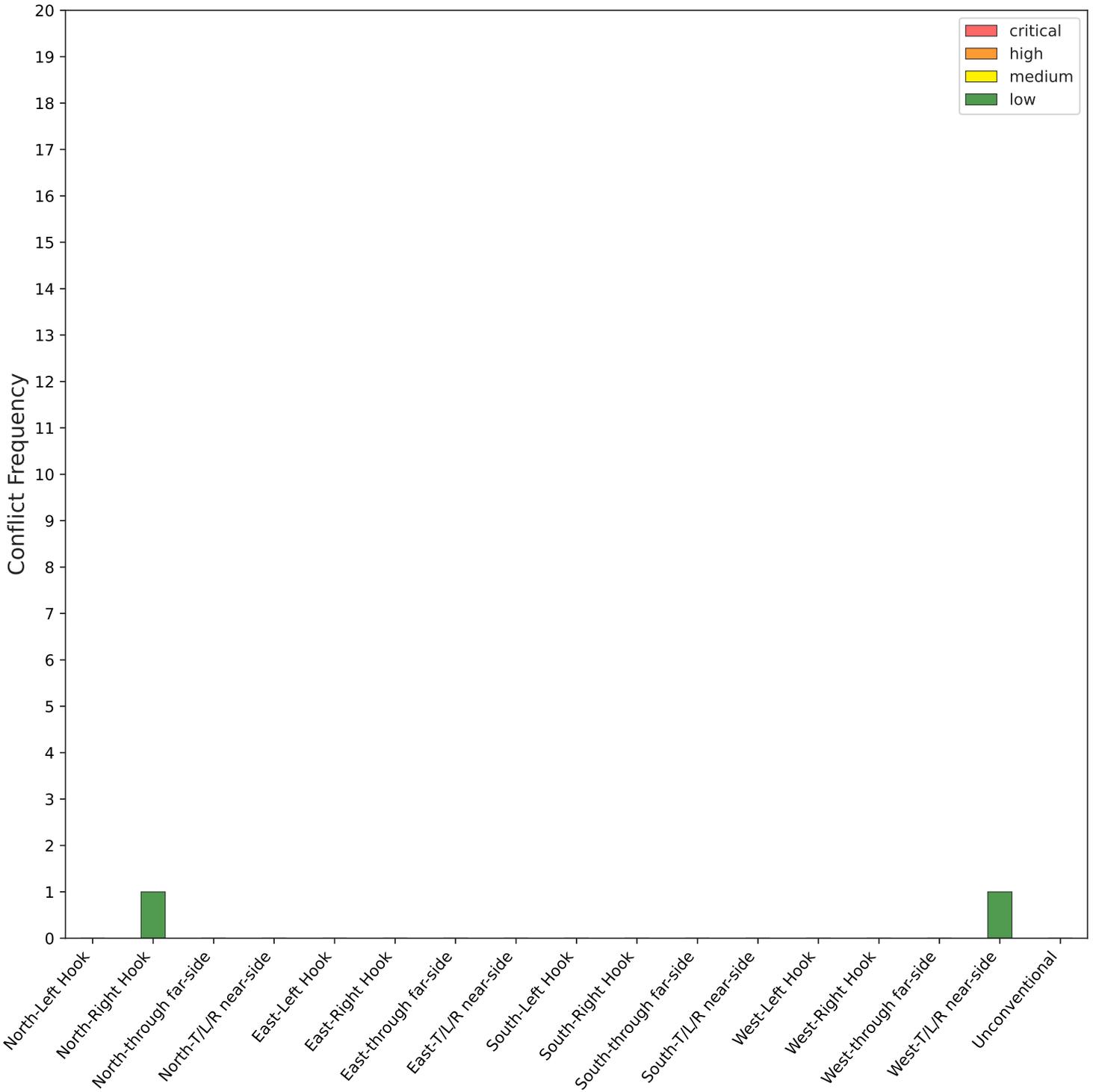
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	5	0	0	0
East-Through vs North-Through	0	1	1	0
South-Through vs West-Through	3	0	0	0
West-Through vs South-Through	0	0	1	1
East-Through vs South-Through	0	0	0	0
South-Through vs East-Through	4	0	0	0
North-Through vs West-Through	7	0	0	0
West-Through vs North-Through	0	0	1	0

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	0	0	0	0
South-Left vs West-Through	0	0	0	0
East-Left vs South-Through	0	0	2	0
West-Left vs North-Through	0	1	9	0



## Results Summary – Cyclist Safe Systems Risk Indicator





## Results Summary – Cyclist Safe Systems Risk Indicator

### Cyclist vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	NM	NM	NM	NM
North-Right Hook	1	0	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	0	0	0	0

### Cyclist vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	NM	NM	NM	NM

### Cyclist vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	0	0	0
South-Right Hook	NM	NM	NM	NM
South-through far-side	0	0	0	0
South-T/L/R near-side	0	0	0	0

### Cyclist vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	0	0	0	0
West-Right Hook	0	0	0	0
West-through far-side	NM	NM	NM	NM
West-T/L/R near-side	1	0	0	0

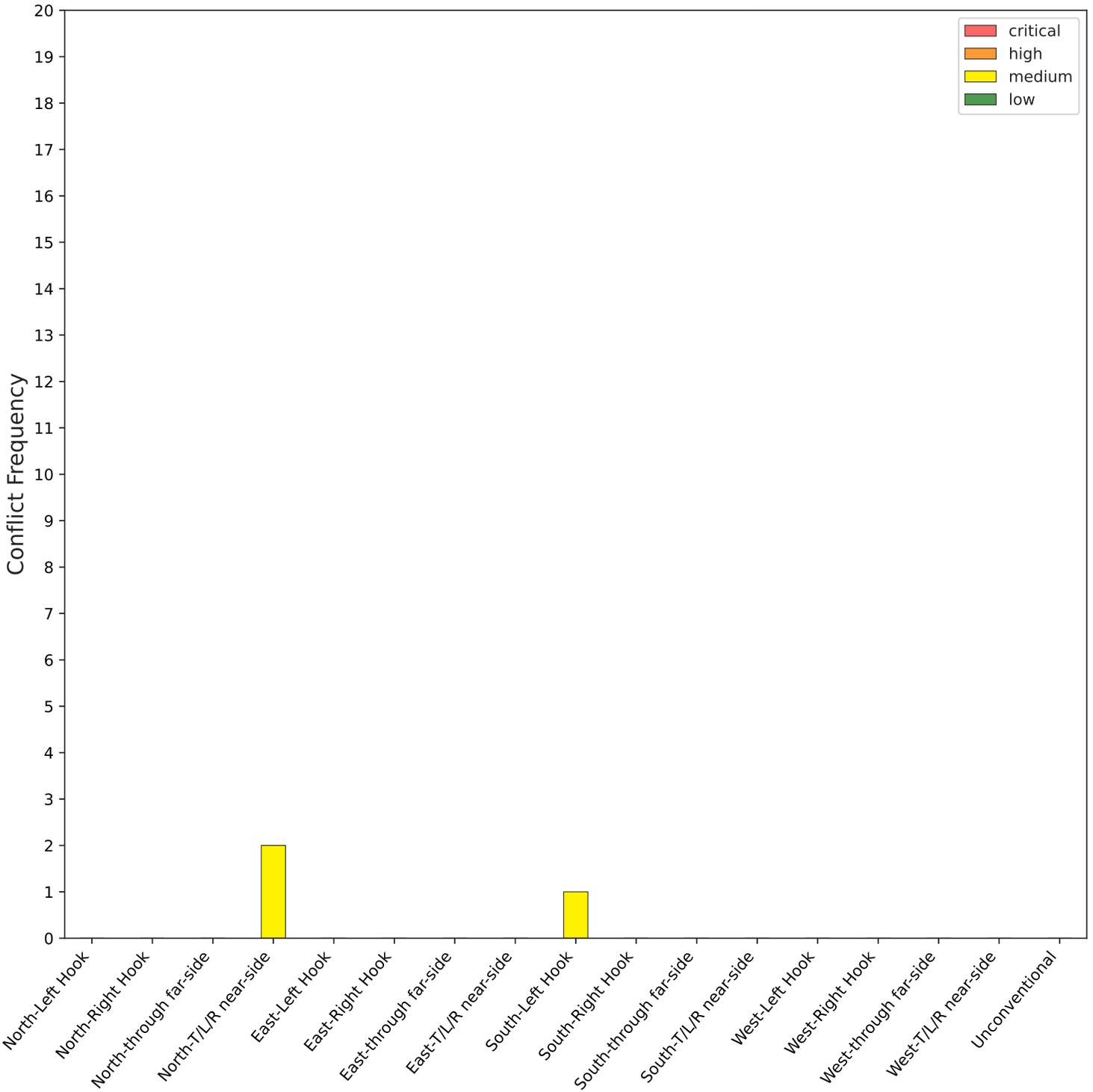
### Unconventional Cyclist Movement vs Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	NM	NM	NM	NM

NM = Not Measured



## Results Summary – Pedestrian Safe Systems Risk Indicator





## Results Summary – Pedestrian Safe Systems Risk Indicator

### Pedestrian vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	NM	NM	NM	NM
North-Right Hook	0	0	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	0	2	0	0

### Pedestrian vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	NM	NM	NM	NM

### Pedestrian vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	1	0	0
South-Right Hook	NM	NM	NM	NM
South-through far-side	0	0	0	0
South-T/L/R near-side	0	0	0	0

### Pedestrian vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	0	0	0	0
West-Right Hook	0	0	0	0
West-through far-side	NM	NM	NM	NM
West-T/L/R near-side	0	0	0	0

### Unconventional Pedestrian Movement vs Vehicle Conflicts

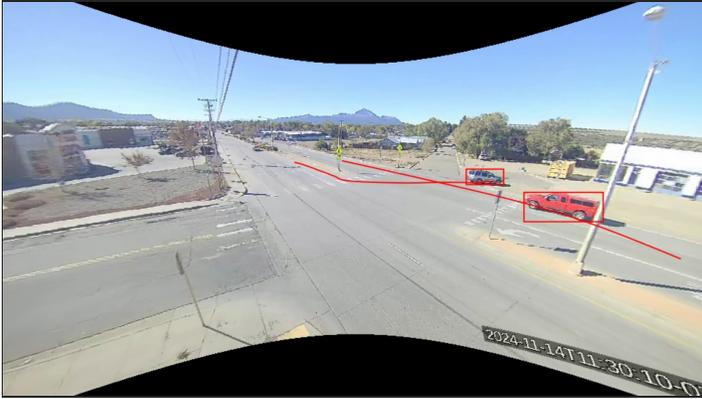
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	NM	NM	NM	NM

NM = Not Measured

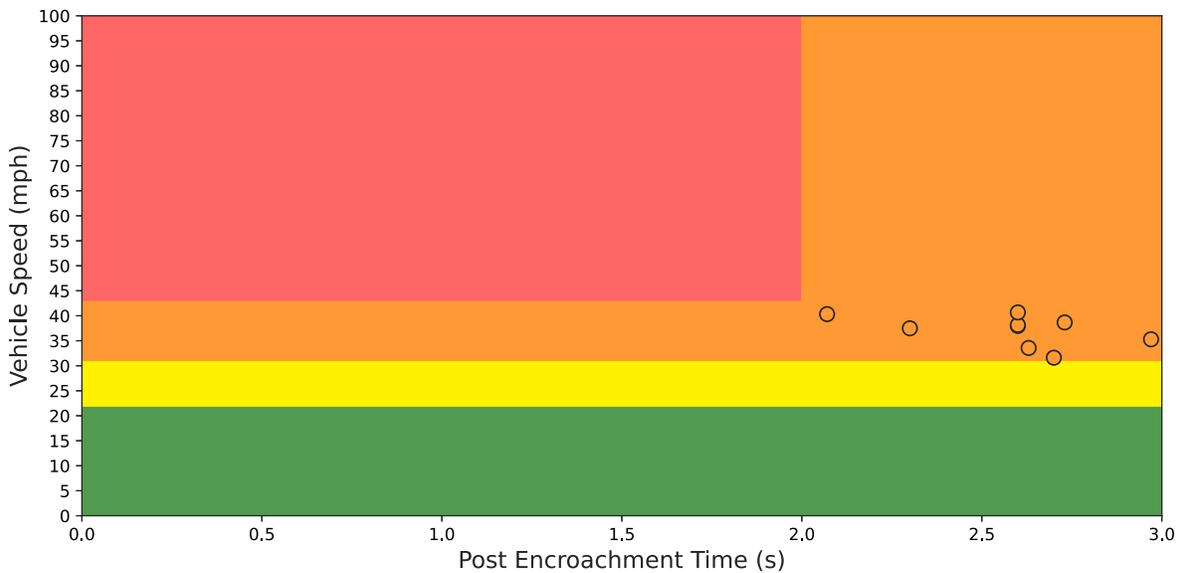
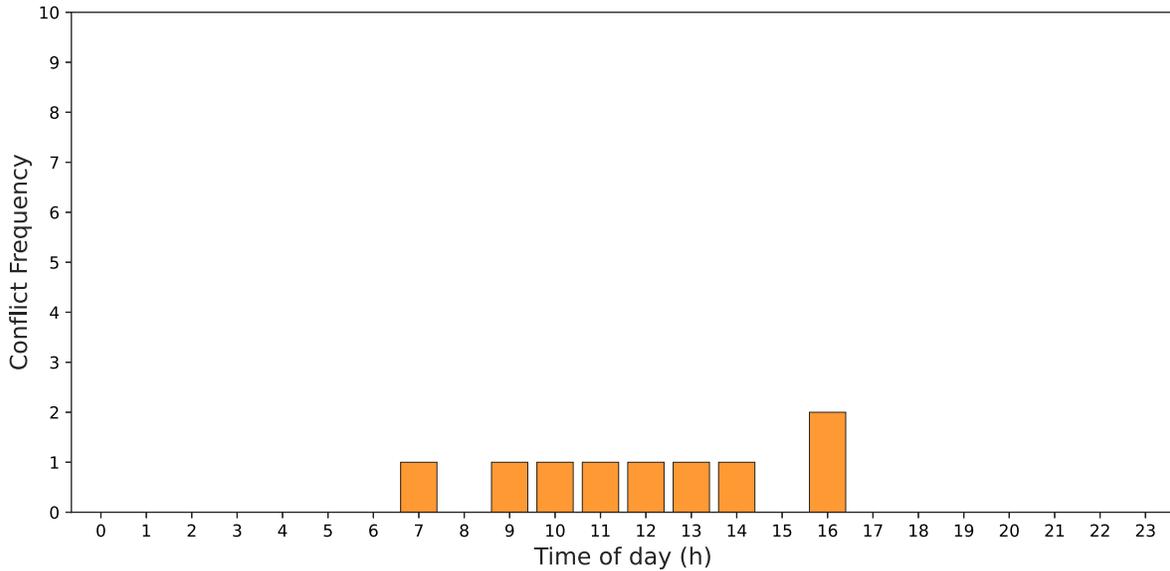


## North-Left Vehicle vs South-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	9	0	0
Annual Estimate	0	548	0	0
Conflict Rate (%)	0.0	3.33	0.0	0.0
Relative Risk	NA	1.23	0.95	0.86

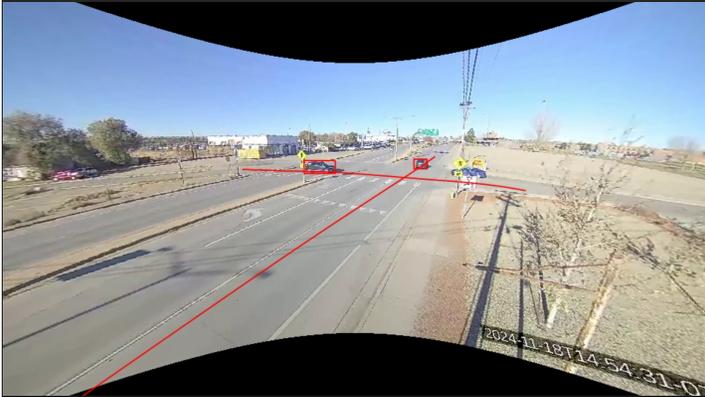


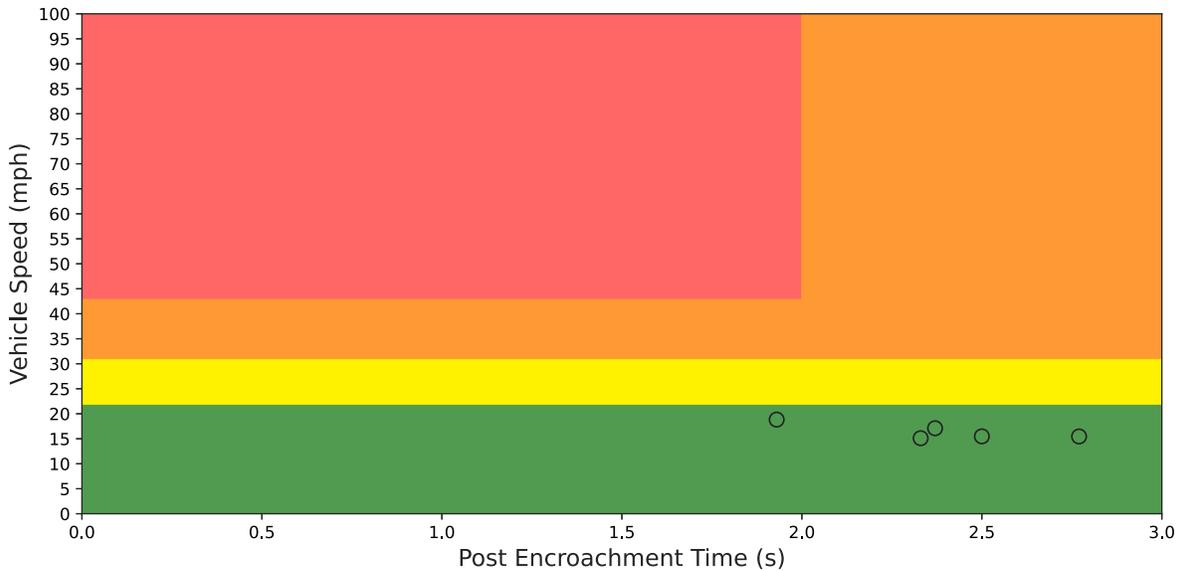
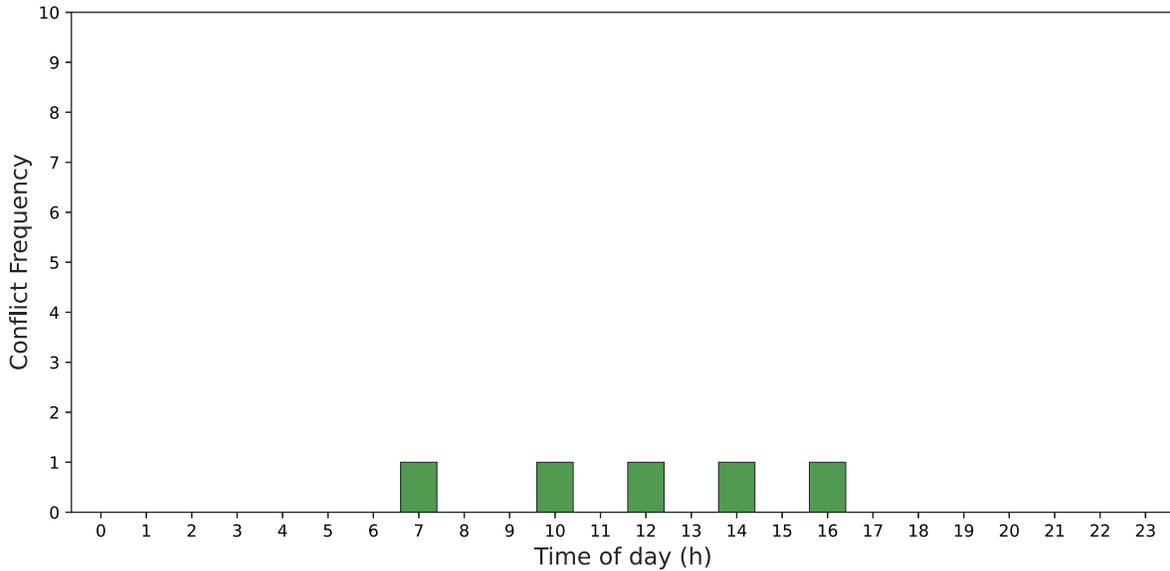




## North-Through Vehicle vs East-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

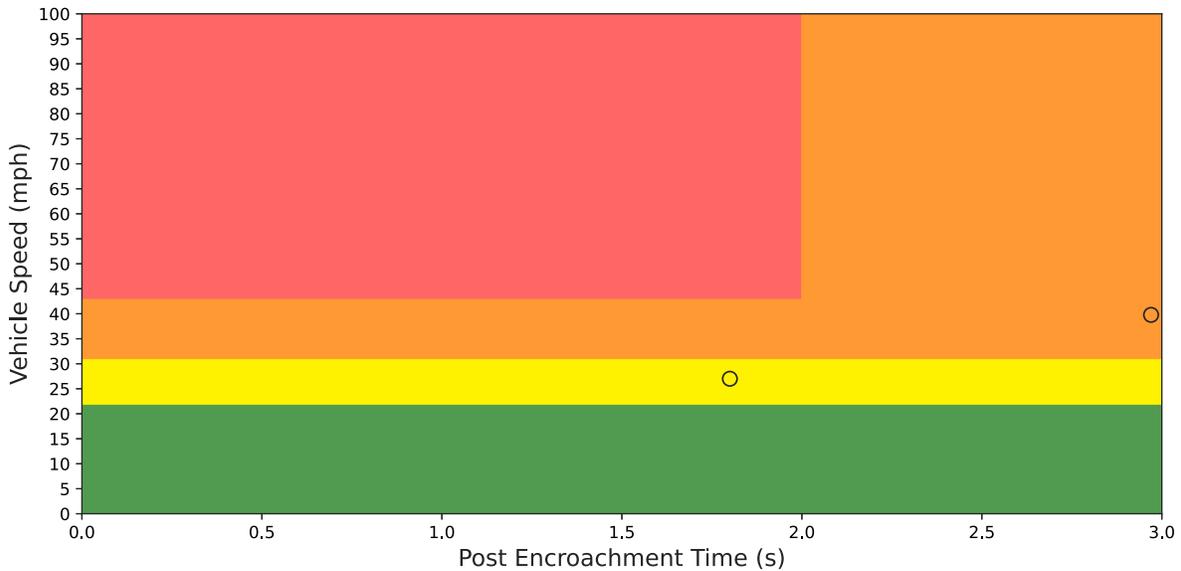
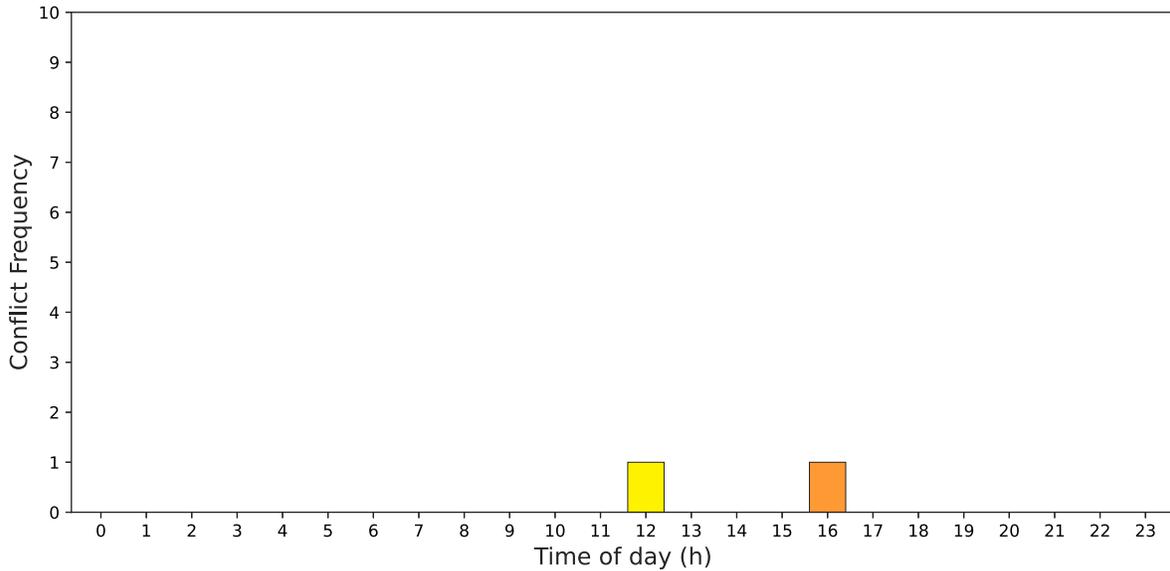
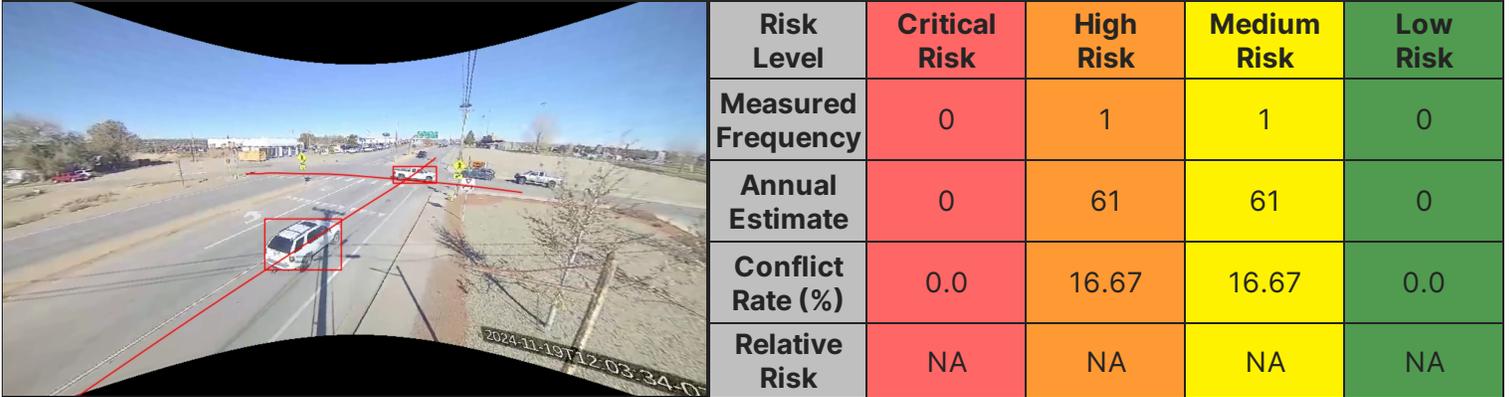
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	0	5
	Annual Estimate	0	0	0	304
	Conflict Rate (%)	0.0	0.0	0.0	0.02
	Relative Risk	NA	NA	NA	NA





## East-Through Vehicle vs North-Through Vehicle

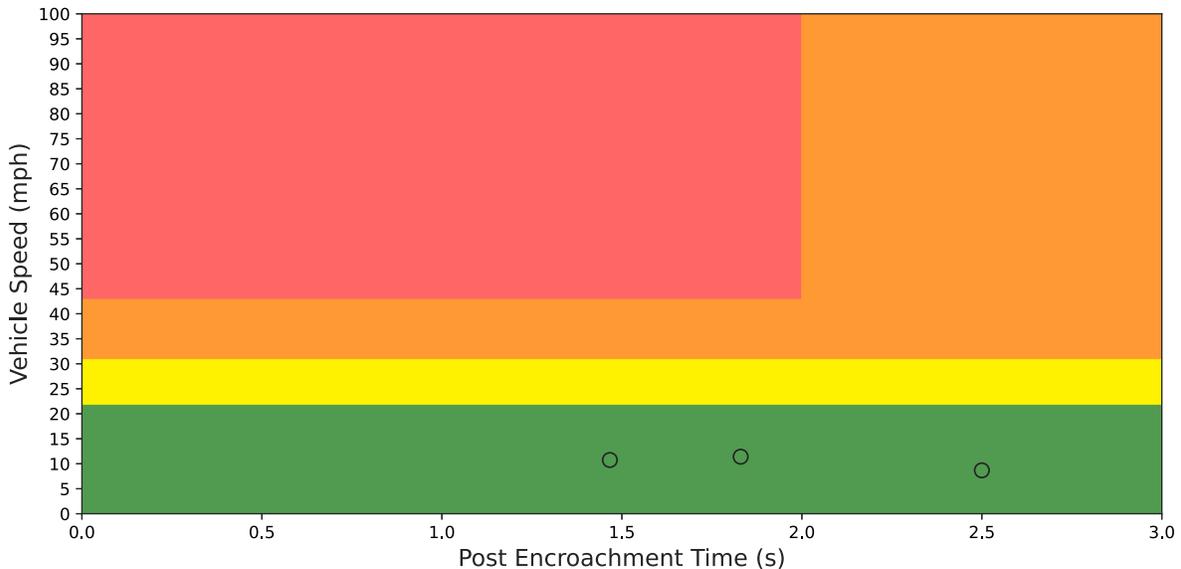
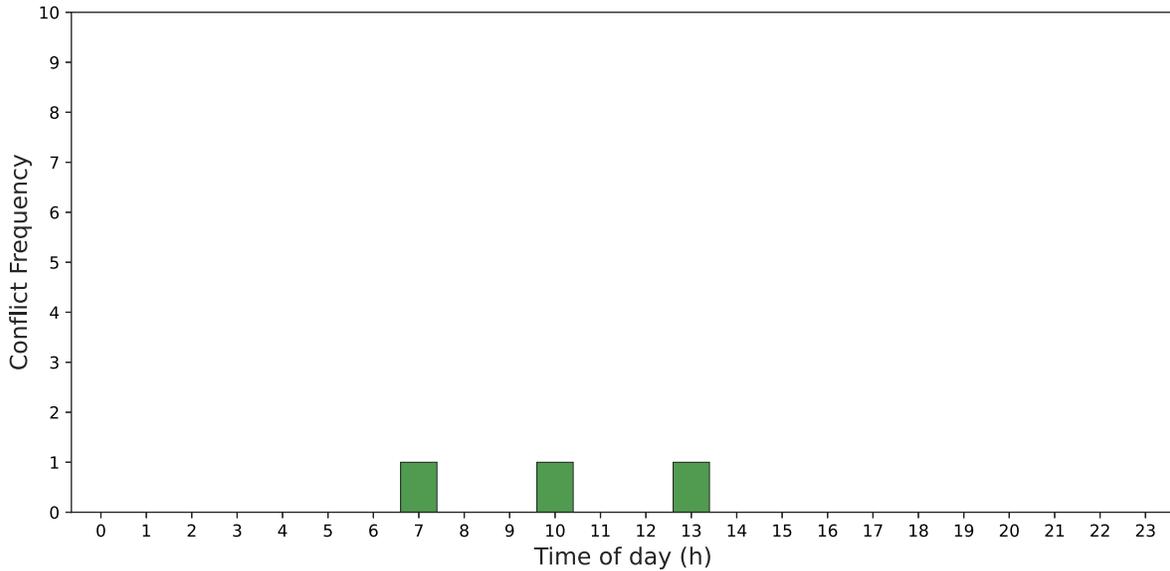
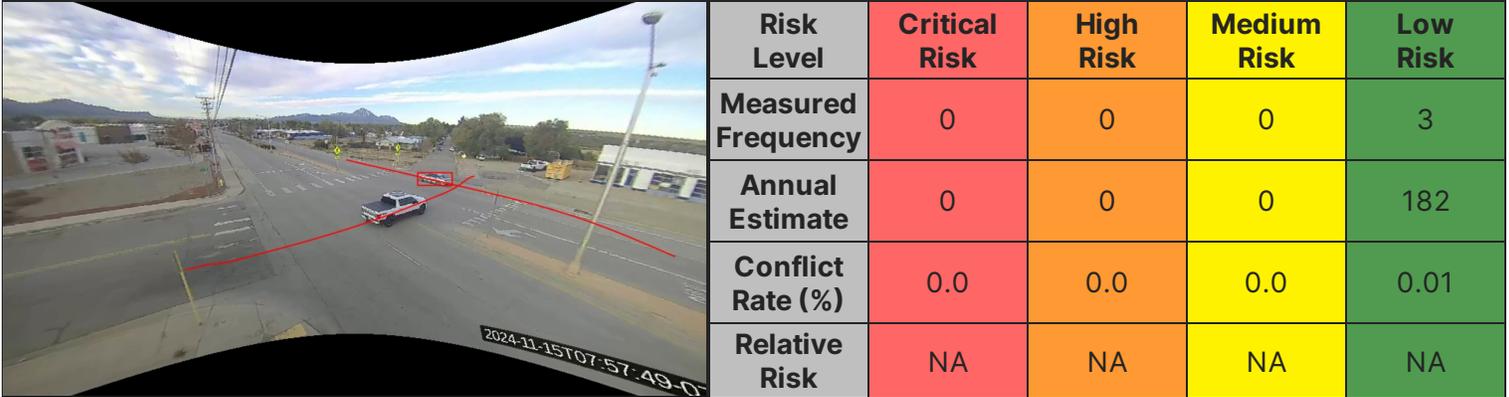
@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19





## South-Through Vehicle vs West-Through Vehicle

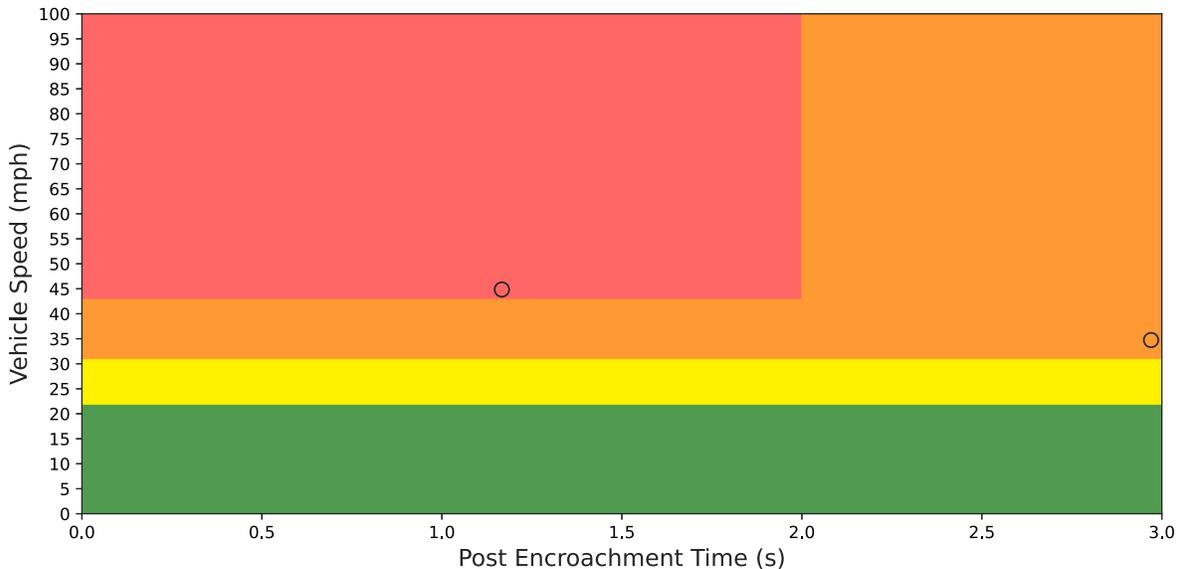
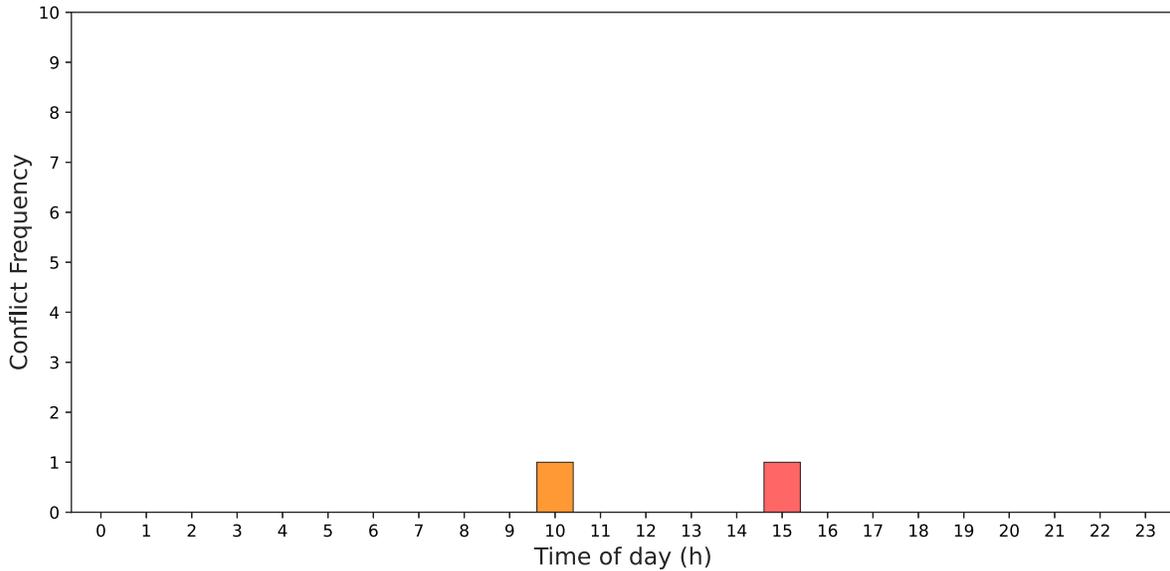
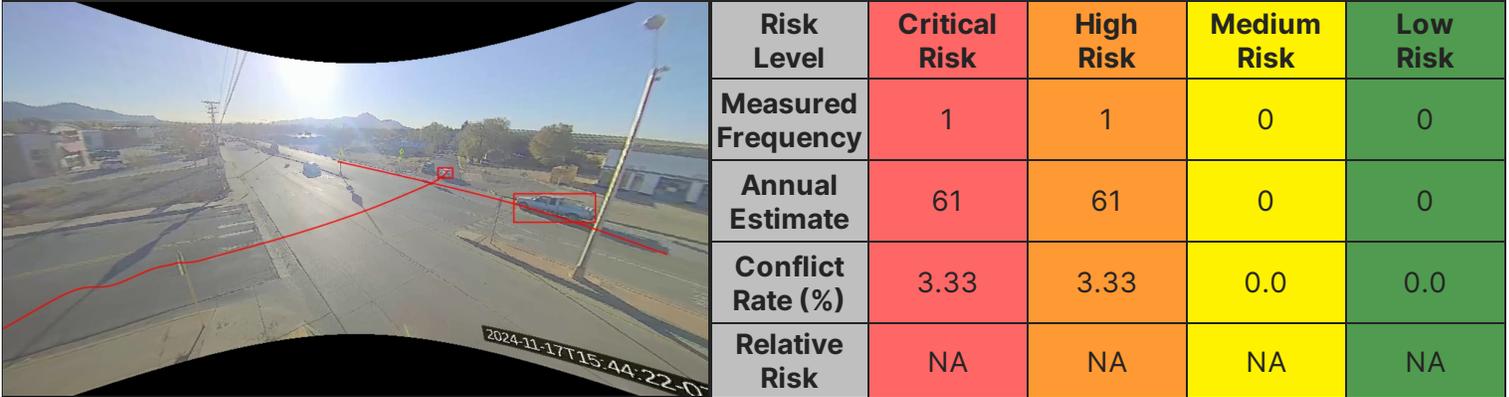
@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19





## West-Through Vehicle vs South-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

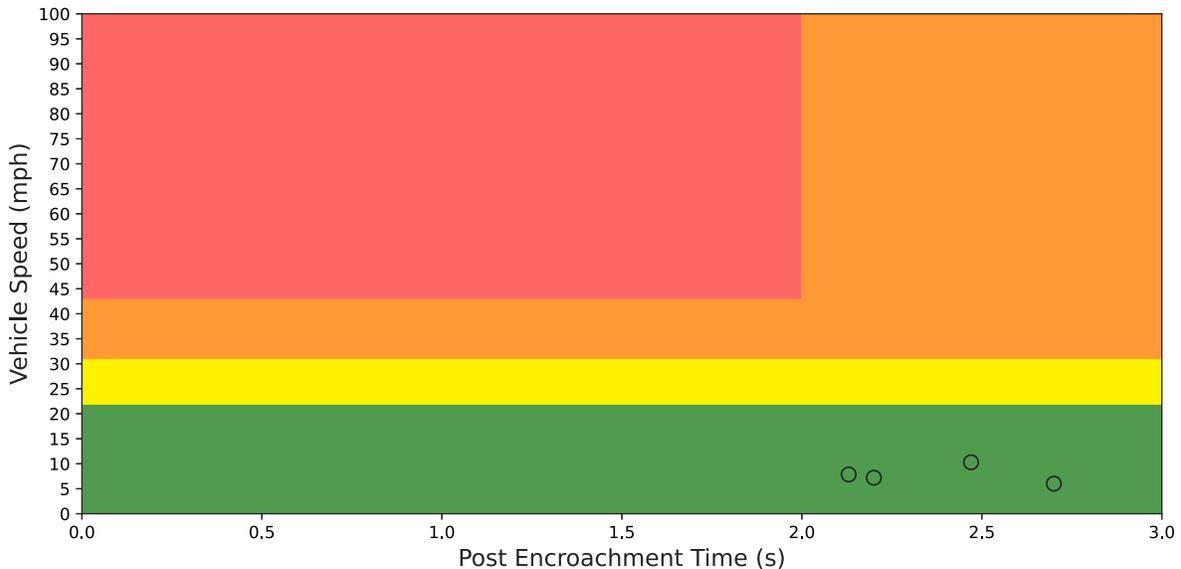
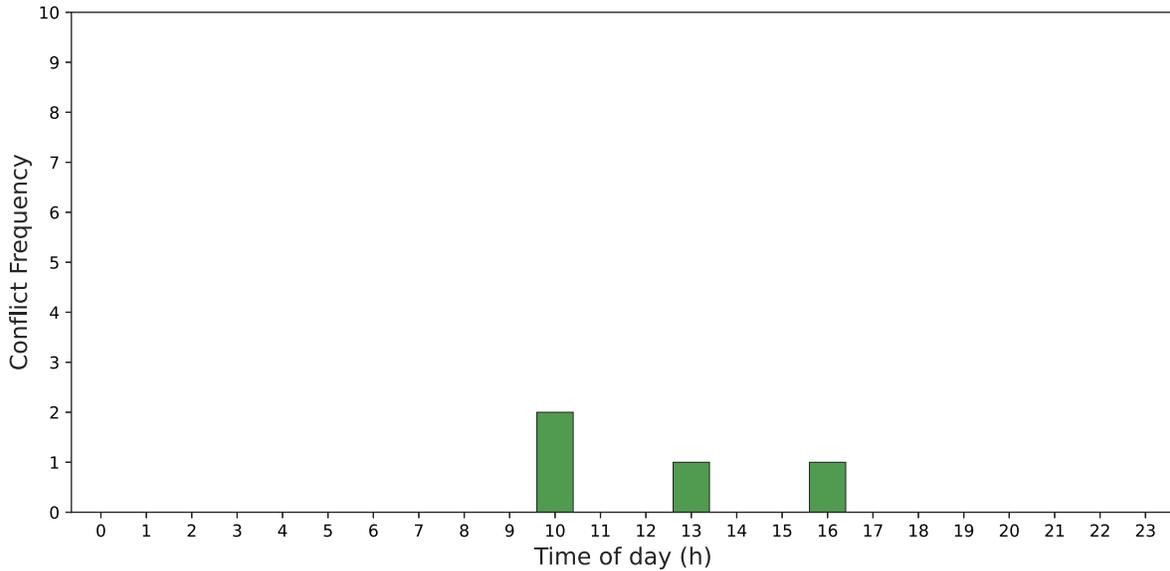




## South-Through Vehicle vs East-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

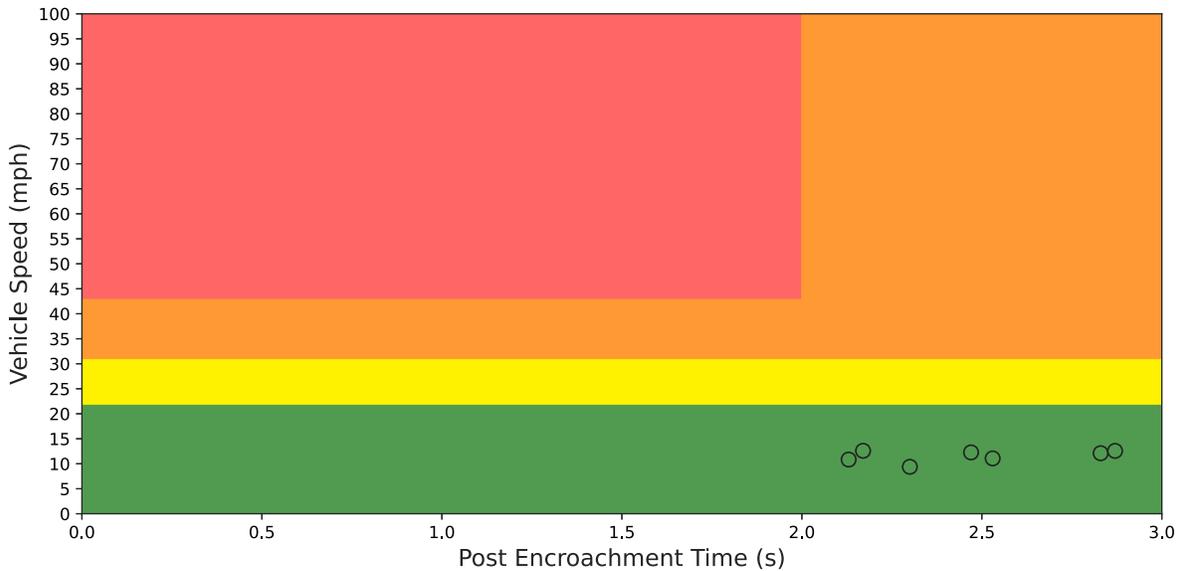
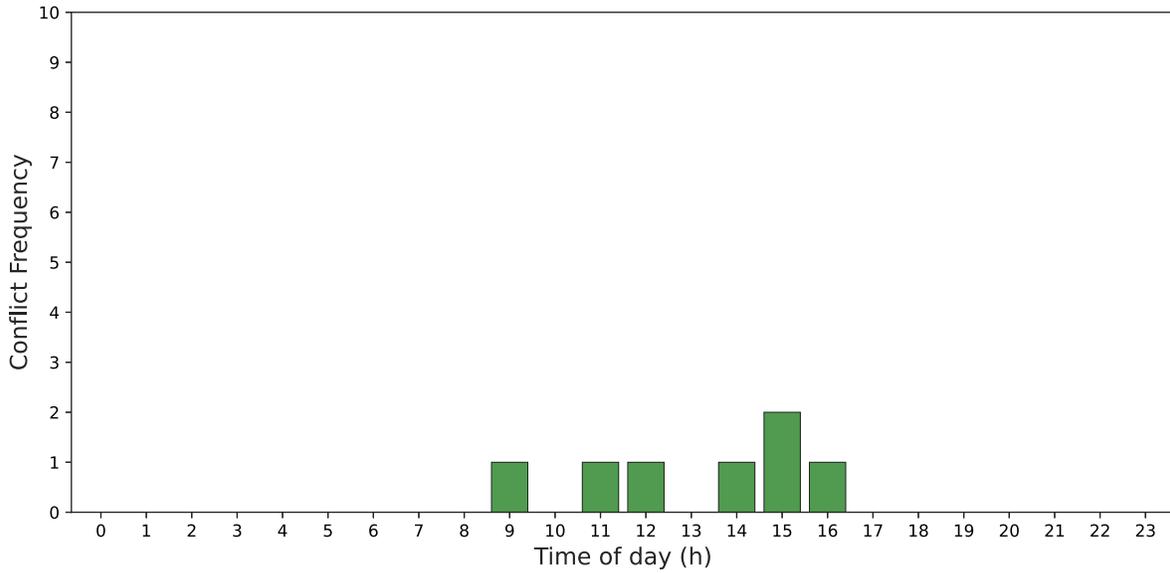
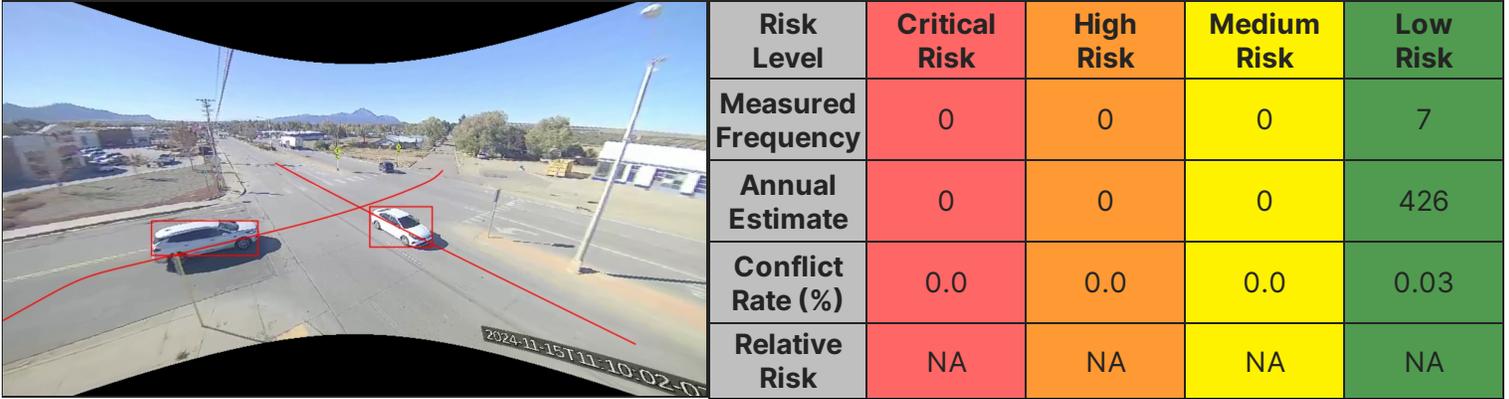
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	0	4
	Annual Estimate	0	0	0	243
	Conflict Rate (%)	0.0	0.0	0.0	0.01
	Relative Risk	NA	NA	NA	NA





## North-Through Vehicle vs West-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

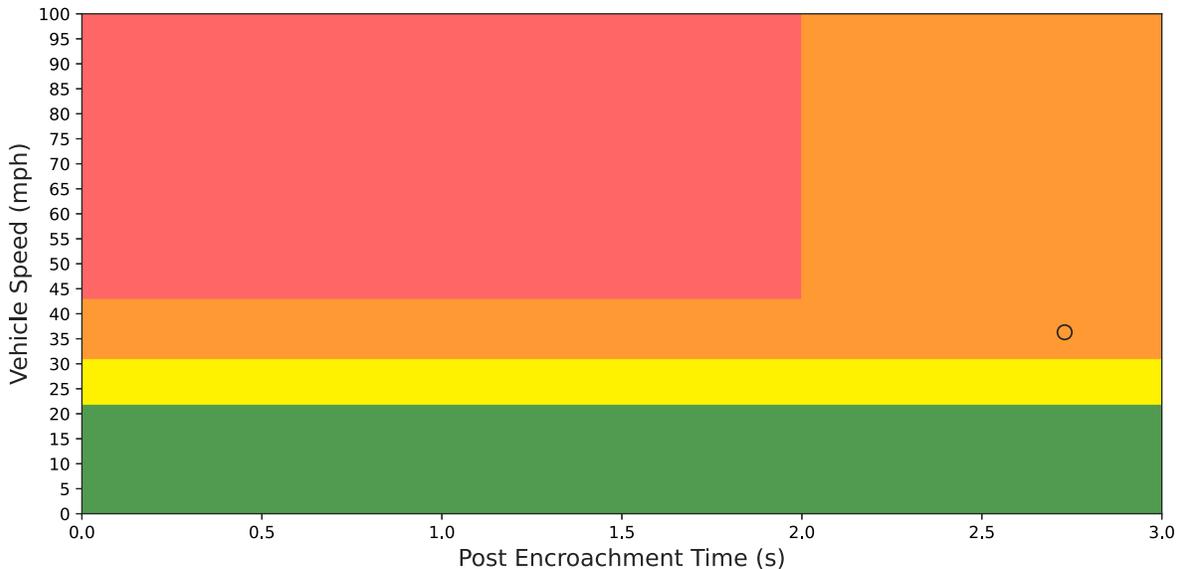
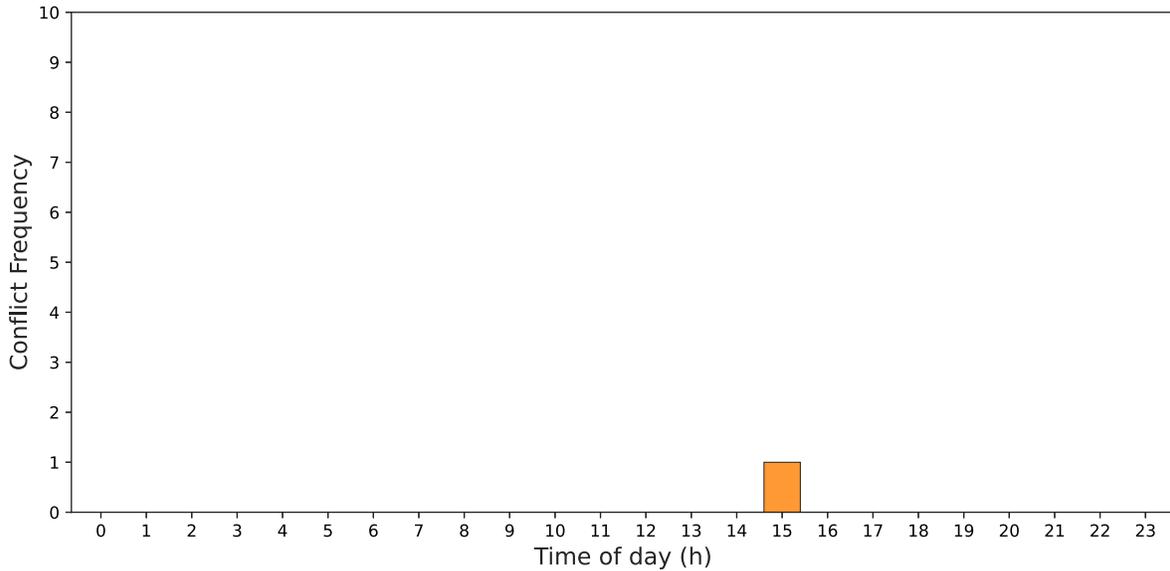




### West-Through Vehicle vs North-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	1	0	0
	Annual Estimate	0	61	0	0
	Conflict Rate (%)	0.0	3.33	0.0	0.0
	Relative Risk	NA	NA	NA	NA

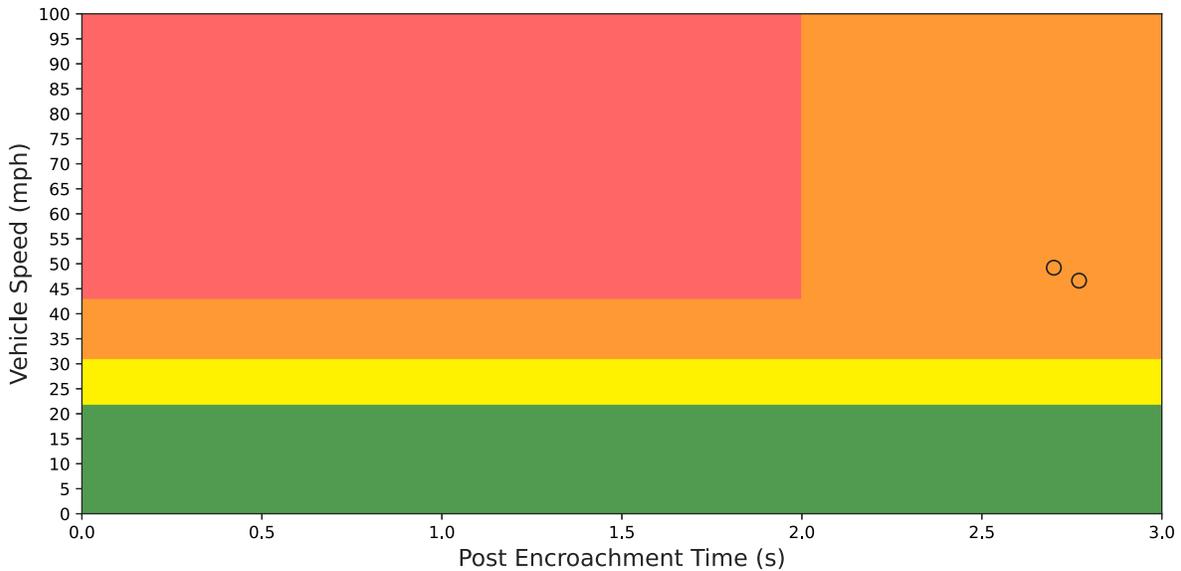
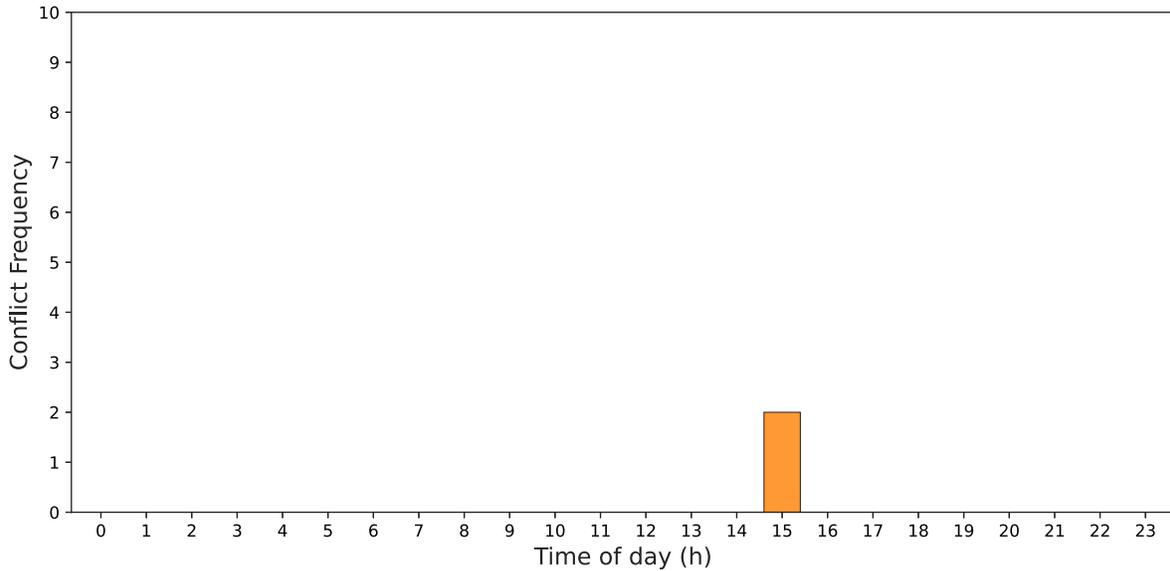




## East-Left Vehicle vs South-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

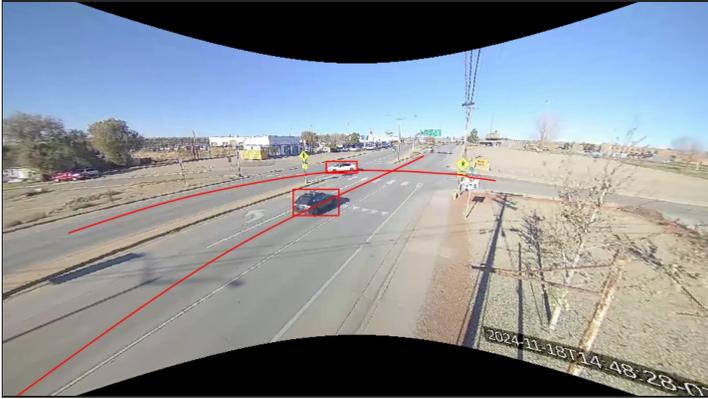
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	2	0	0
	Annual Estimate	0	122	0	0
	Conflict Rate (%)	0.0	0.64	0.0	0.0
	Relative Risk	NA	0.37	0.26	0.22



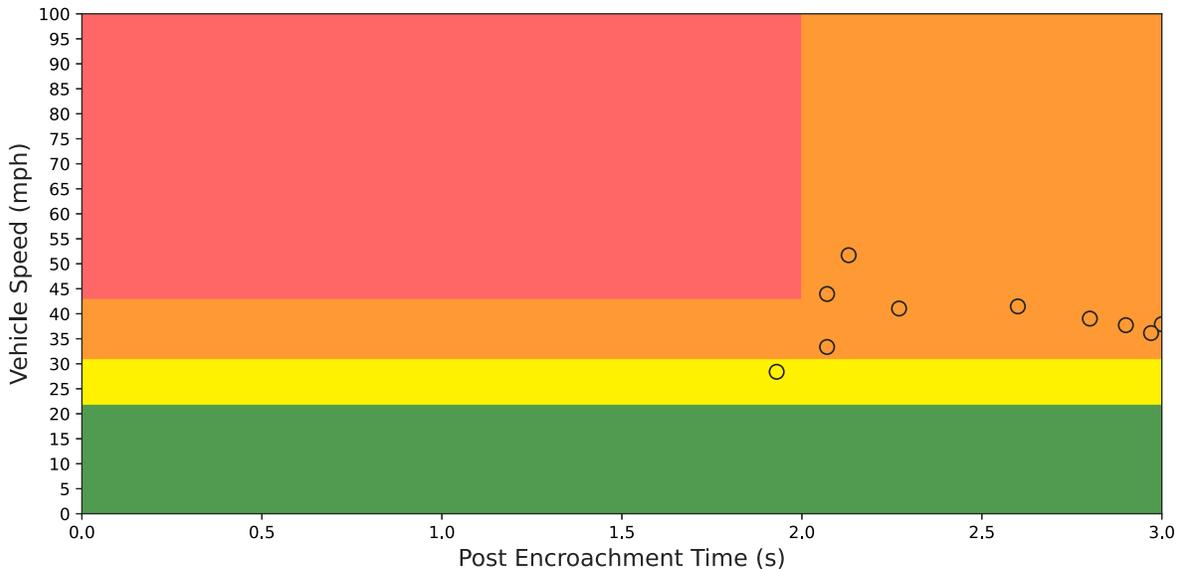
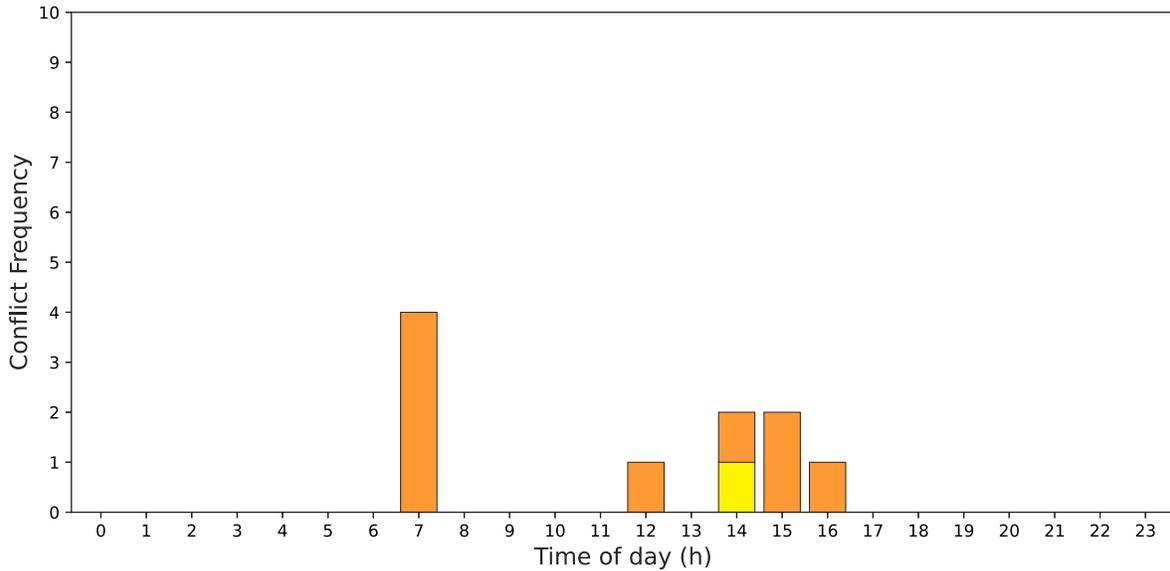


## West-Left Vehicle vs North-Through Vehicle

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	9	1	0
Annual Estimate	0	548	61	0
Conflict Rate (%)	0.0	1.28	0.14	0.0
Relative Risk	NA	0.74	0.58	0.48



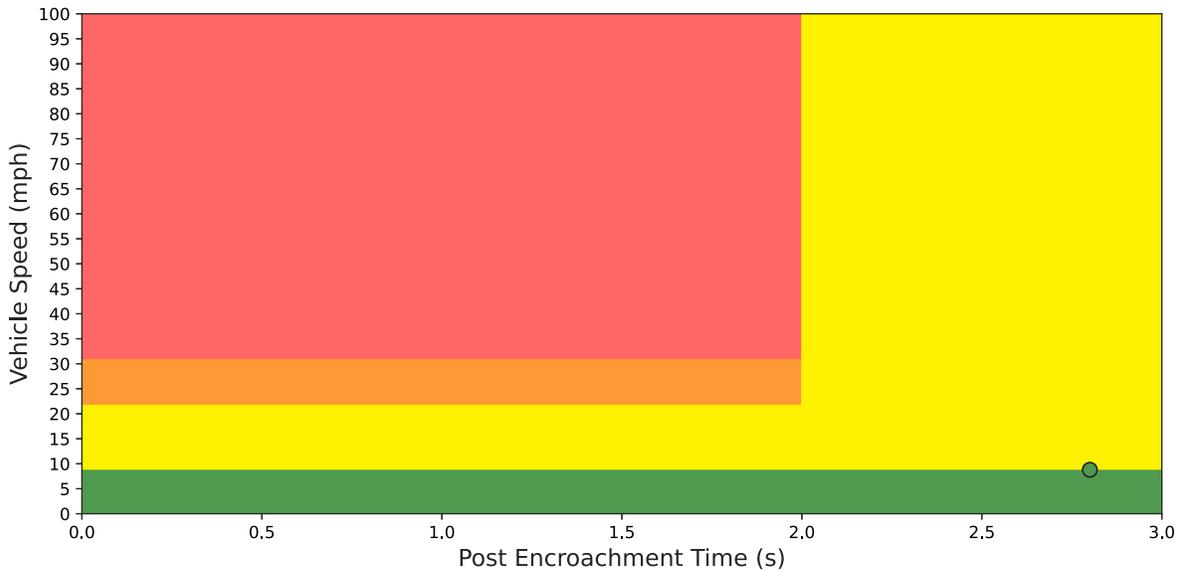
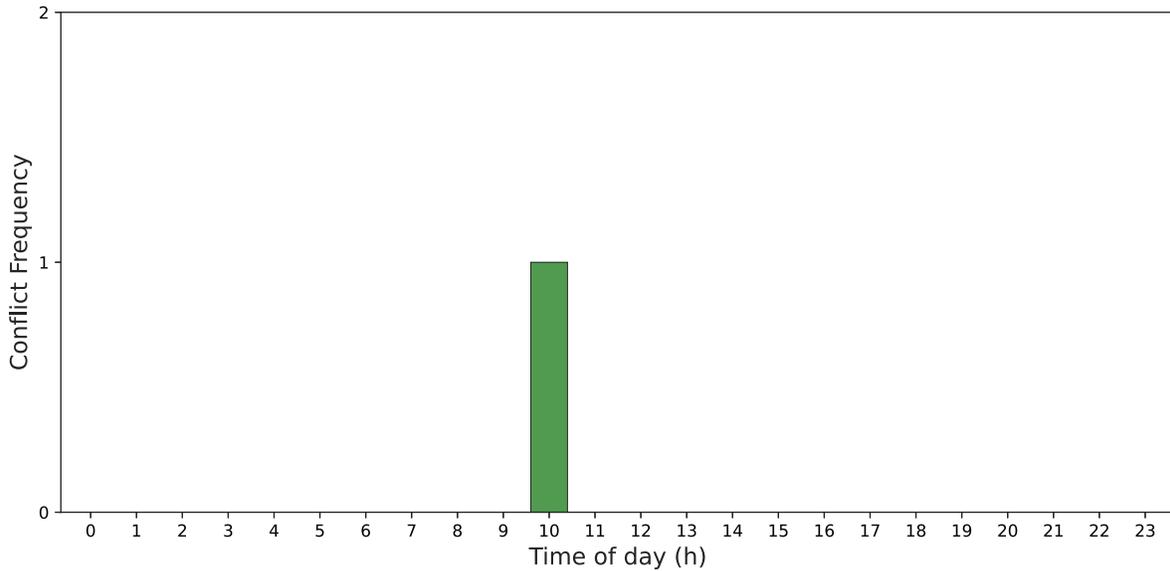


### North-Right Vehicle vs Cyclist on East Side (North-Right Hook)

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	1.85
Relative Risk	NA	NA	NA	NA



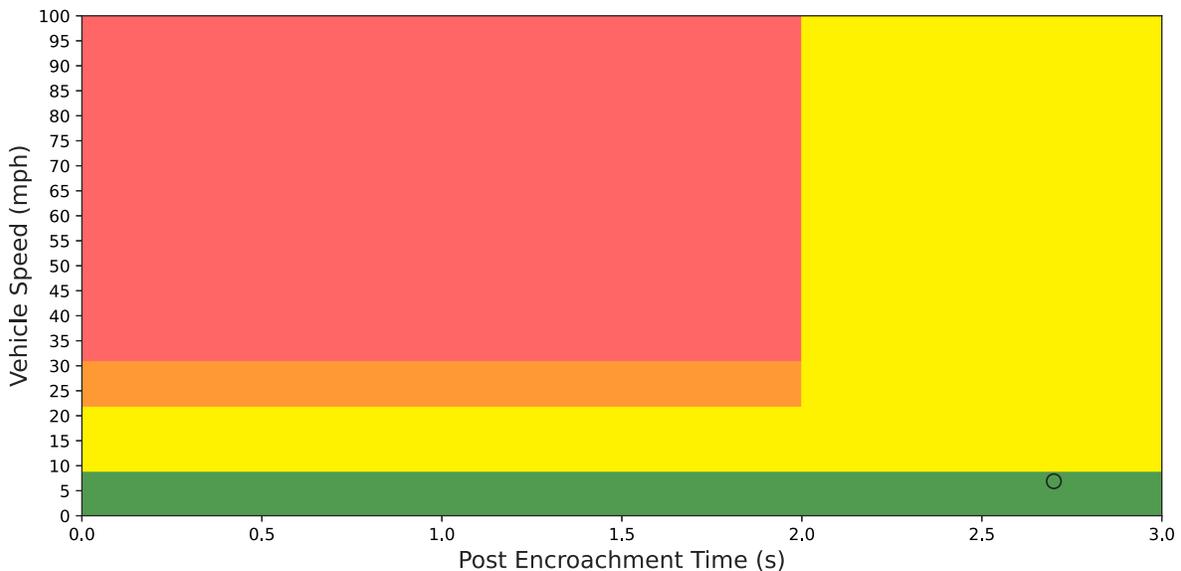
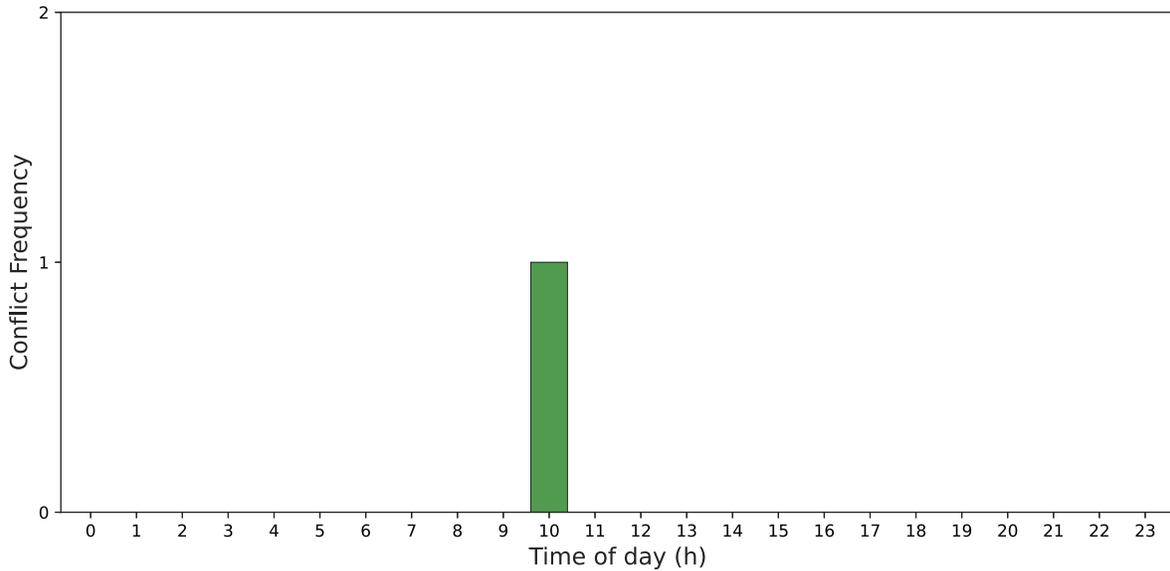


### West-T/L/R Vehicle vs Cyclist on East Side (West-T/L/R near-side)

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19



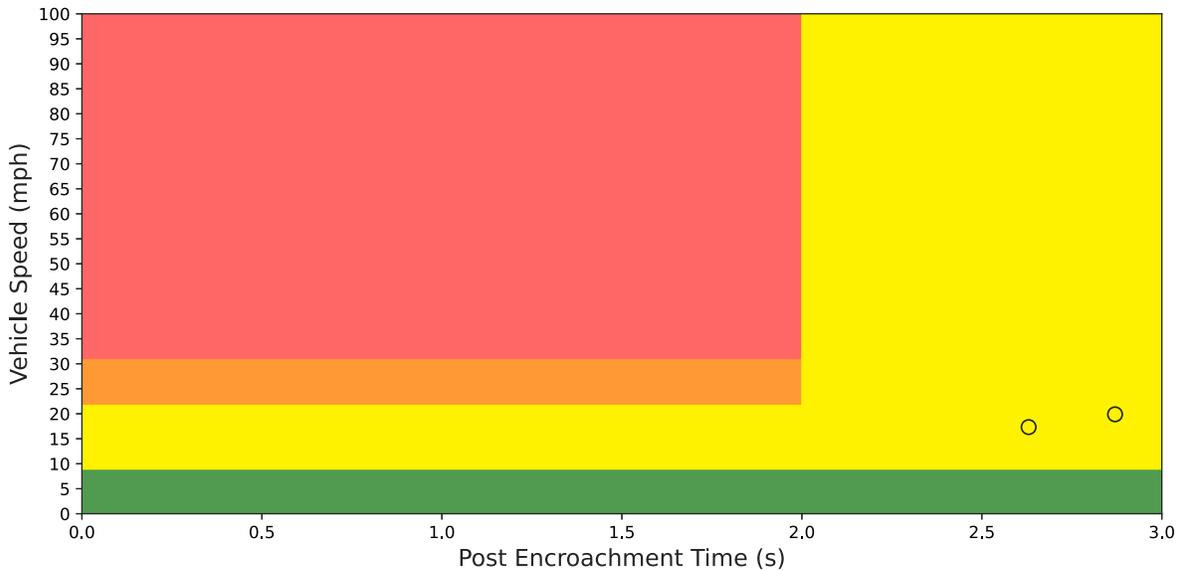
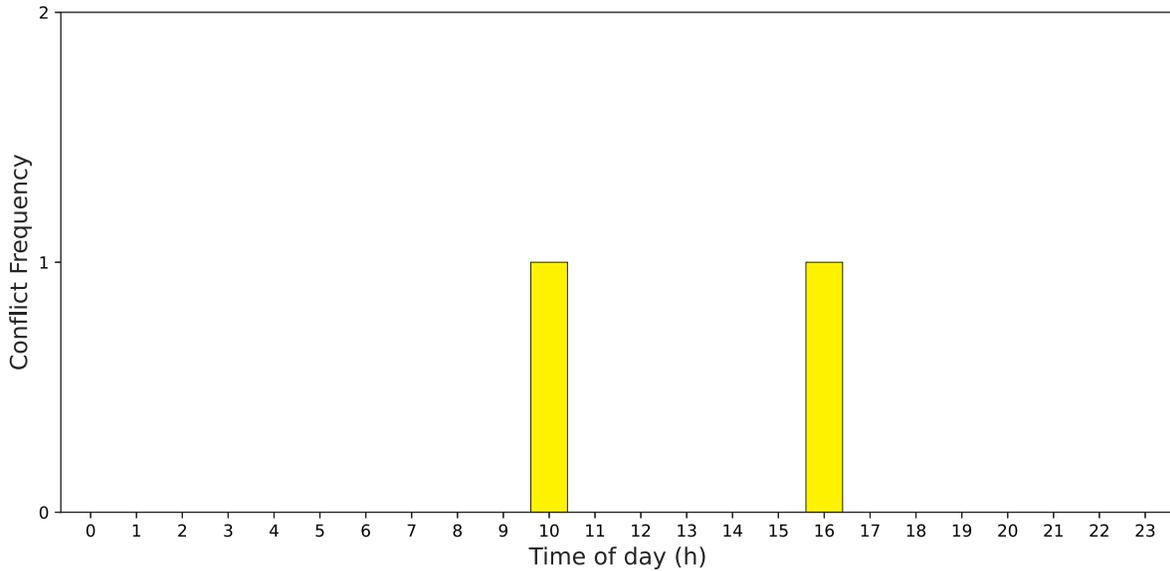
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	1.85
Relative Risk	NA	NA	NA	NA





### North-T/L/R Vehicle vs Pedestrian on South Side (North-T/L/R near-side) @ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19

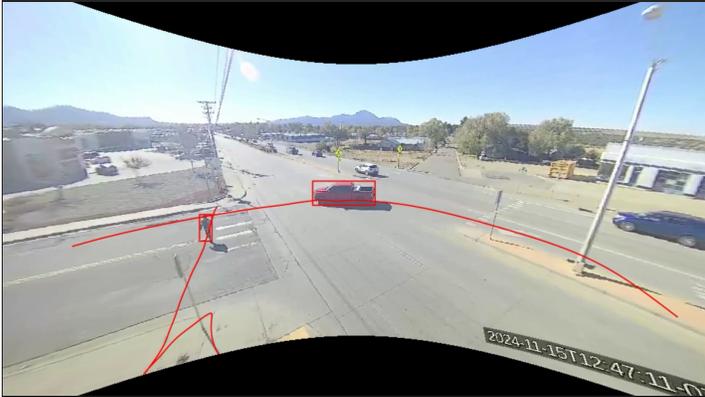
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	2	0
	Annual Estimate	0	0	122	0
	Conflict Rate (%)	0.0	0.0	4.76	0.0
	Relative Risk	NA	NA	NA	NA



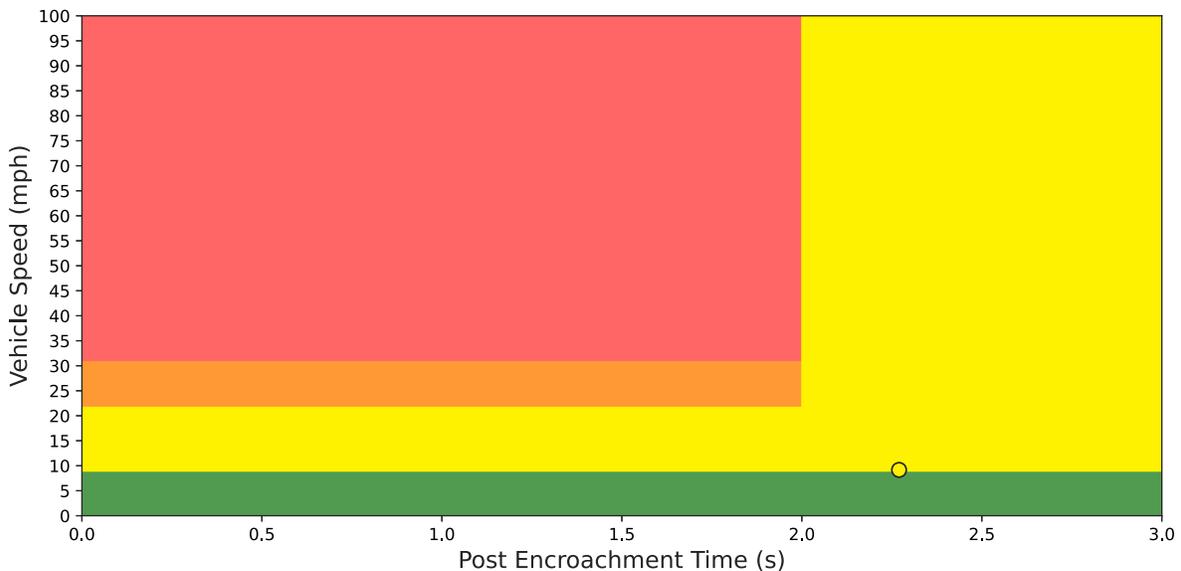
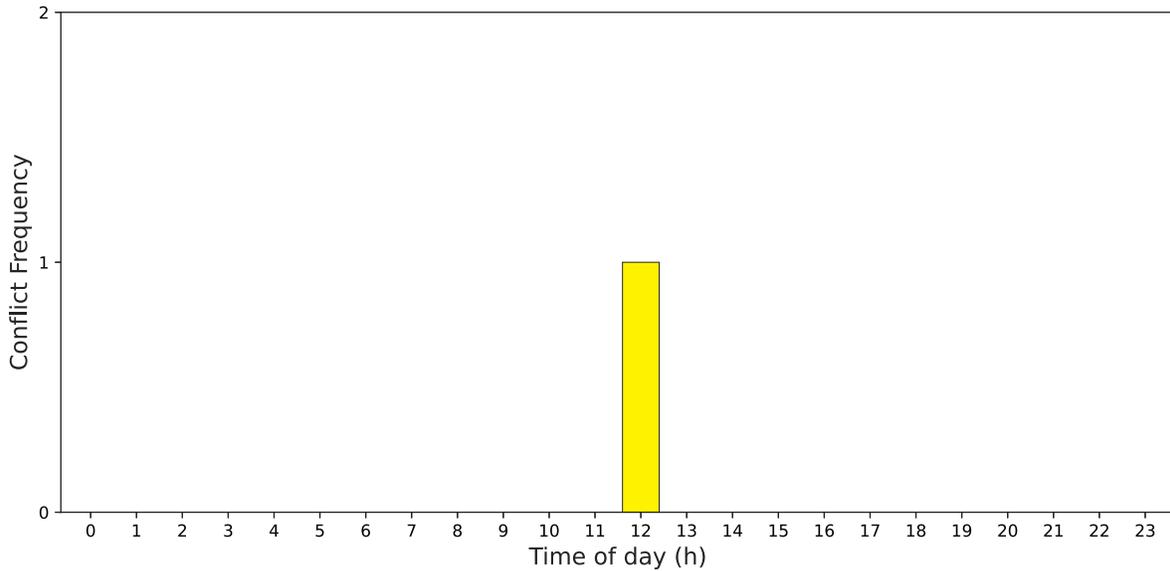


### South-Left Vehicle vs Pedestrian on East Side (South-Left Hook)

@ West 3rd Street and U.S. Highway 491, 2024-Nov-14 to 2024-Nov-19



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	0.0	0.0	1.11	0.0
Relative Risk	NA	NA	NA	NA





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CO-145 and E Empire Street  
Cortez, Colorado  
Risk Diagnostic Report

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<b>North-Left Vehicle vs East-Through Vehicle</b>	<b>16</b>
<b>South-Left Vehicle vs West-Through Vehicle</b>	<b>17</b>
<b>East-Left Vehicle vs South-Through Vehicle</b>	<b>18</b>



**West-Left Vehicle vs North-Through Vehicle**



## General Information

### Report Details

<b>Site</b>	CO-145 and E Empire Street, Cortez, Colorado
<b>Video Period</b>	2024-Oct-22 to 2024-Oct-27
<b>Video Length</b>	66 hours
<b>Report Notes</b>	Conflict data is provided for Oct. 22-27 @ 07:30-18:30 each day but no data was found for VRU conflicts.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
--	--

[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.trpro.2016.05.396>



## Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

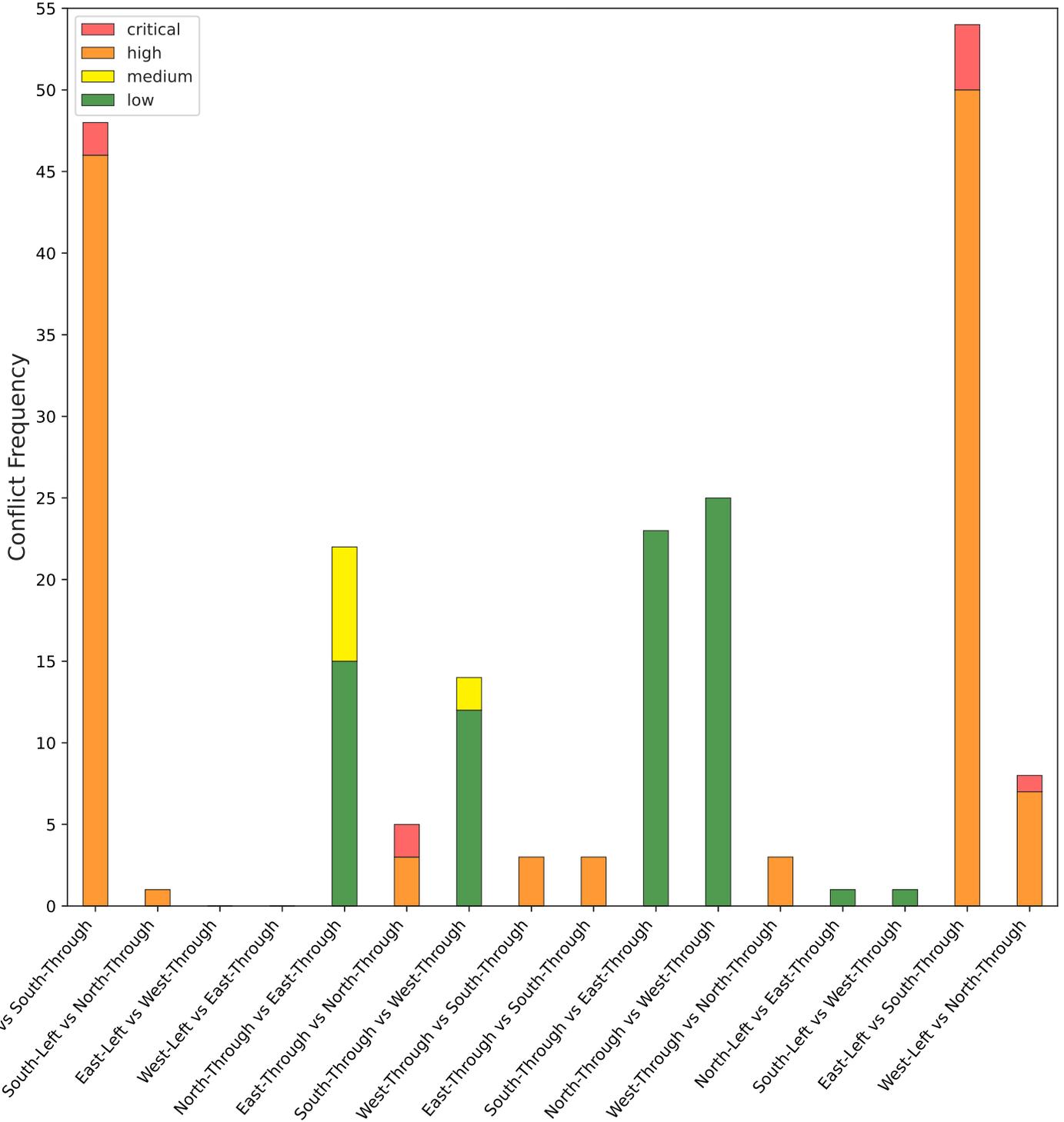


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	0	0	46	2
South-Left vs North-Through	0	0	1	0
East-Left vs West-Through	0	0	0	0
West-Left vs East-Through	0	0	0	0

### Right-Angle (Through Vehicle vs Through Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	15	7	0	0
East-Through vs North-Through	0	0	3	2
South-Through vs West-Through	12	2	0	0
West-Through vs South-Through	0	0	3	0
East-Through vs South-Through	0	0	3	0
South-Through vs East-Through	23	0	0	0
North-Through vs West-Through	25	0	0	0
West-Through vs North-Through	0	0	3	0

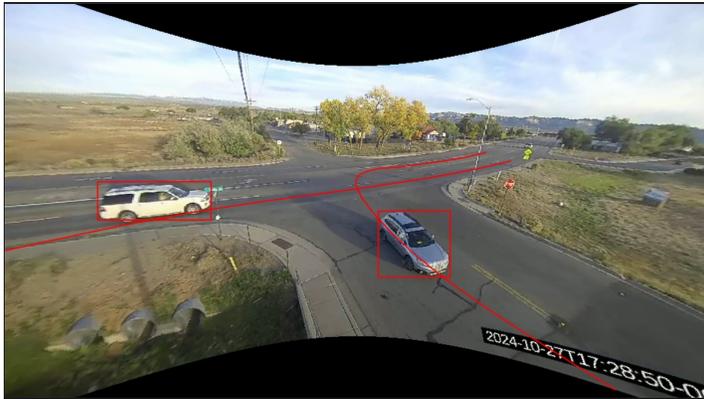
### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	1	0	0	0
South-Left vs West-Through	1	0	0	0
East-Left vs South-Through	0	0	50	4
West-Left vs North-Through	0	0	7	1

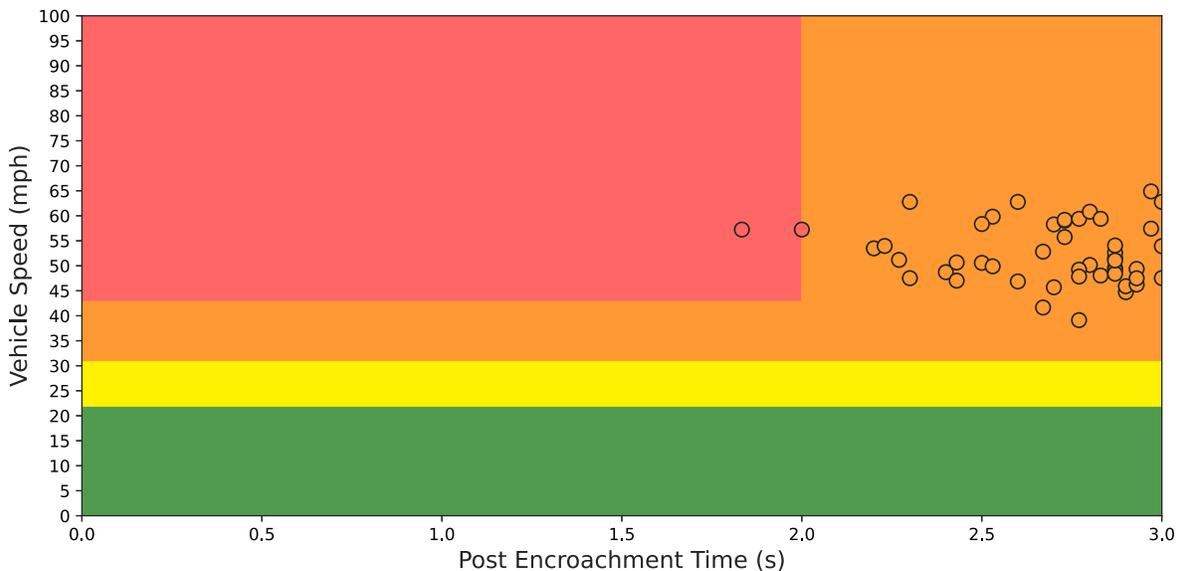
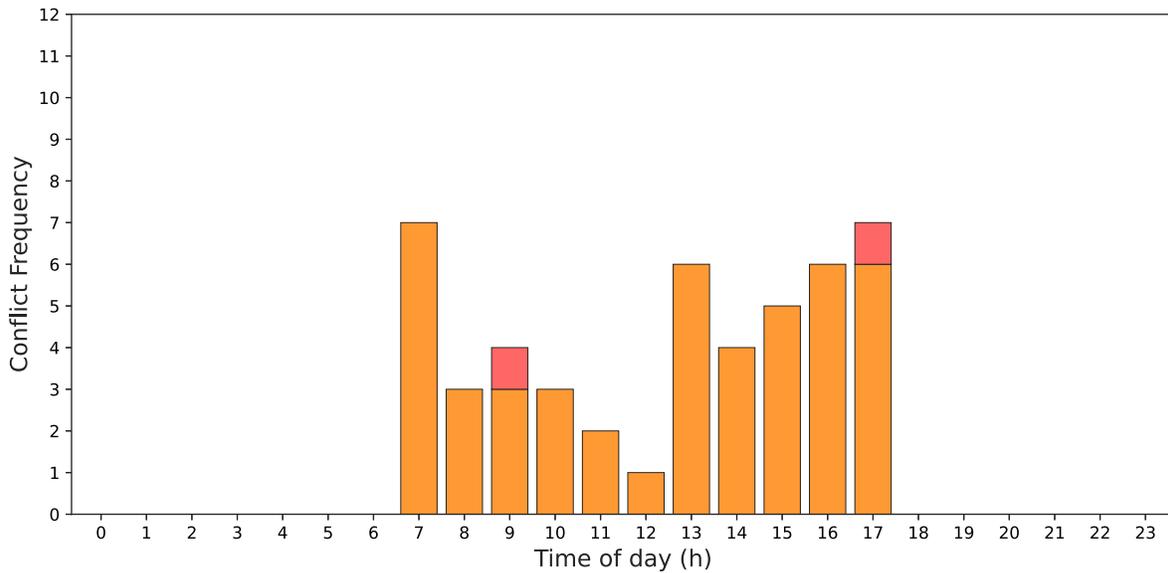


## North-Left Vehicle vs South-Through Vehicle

@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

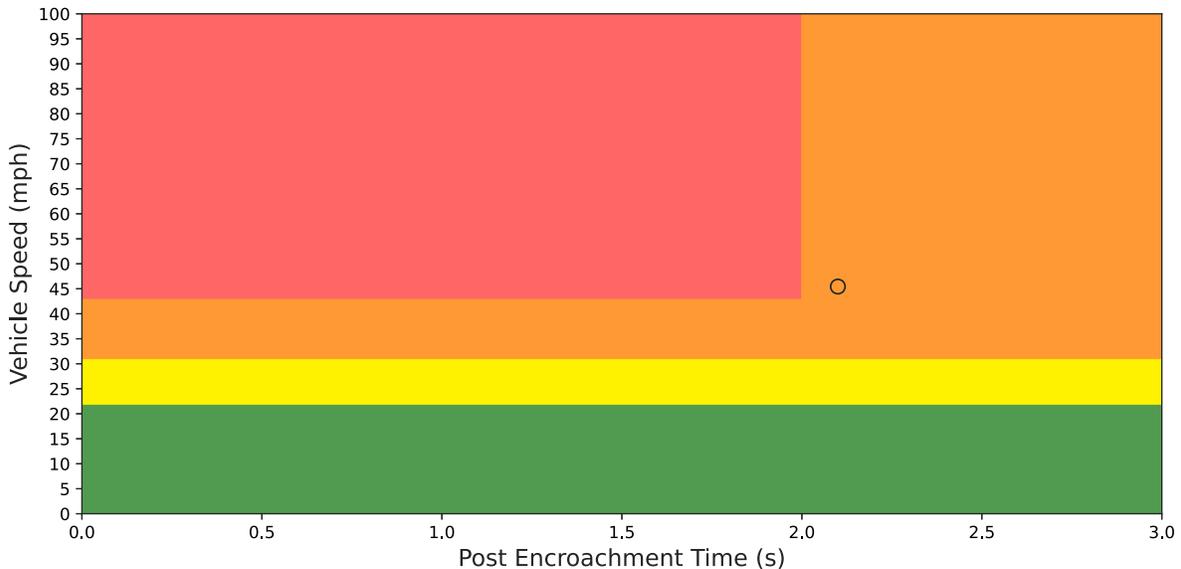
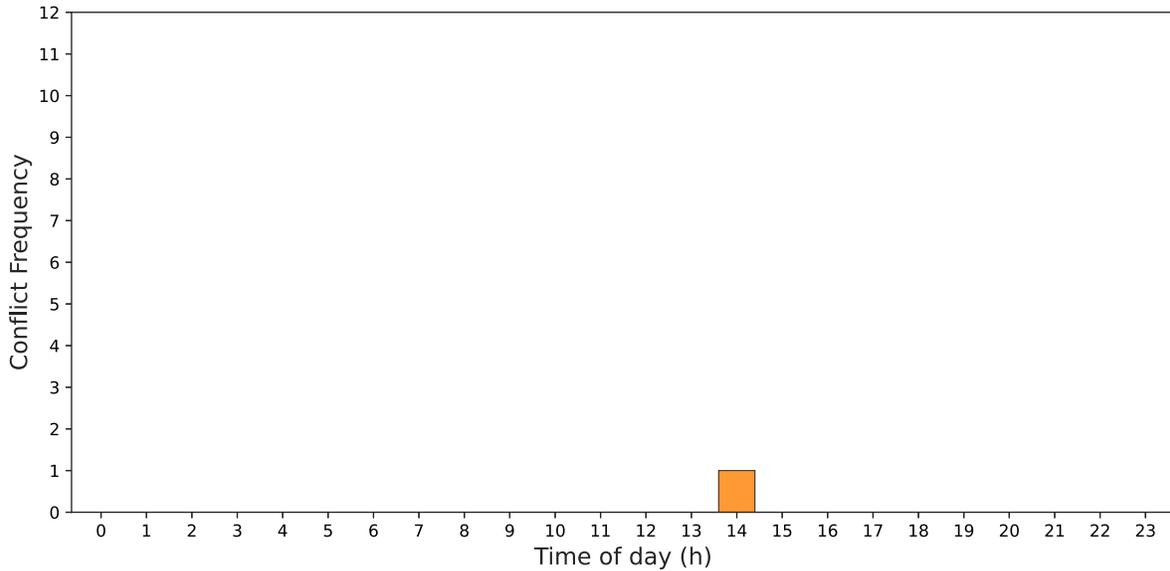
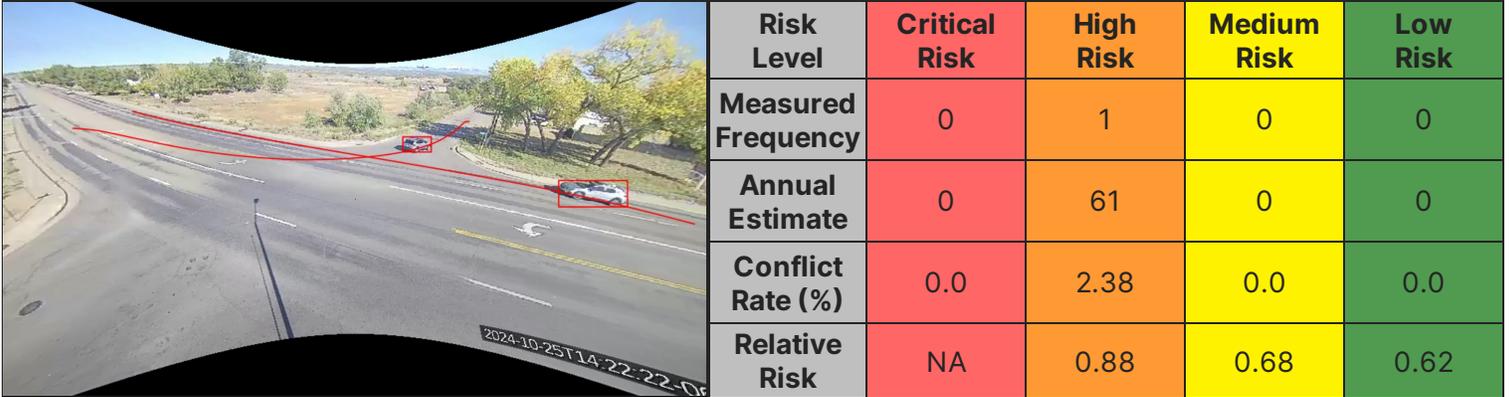


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	2	46	0	0
Annual Estimate	122	2798	0	0
Conflict Rate (%)	0.08	1.76	0.0	0.0
Relative Risk	NA	0.68	0.52	0.47





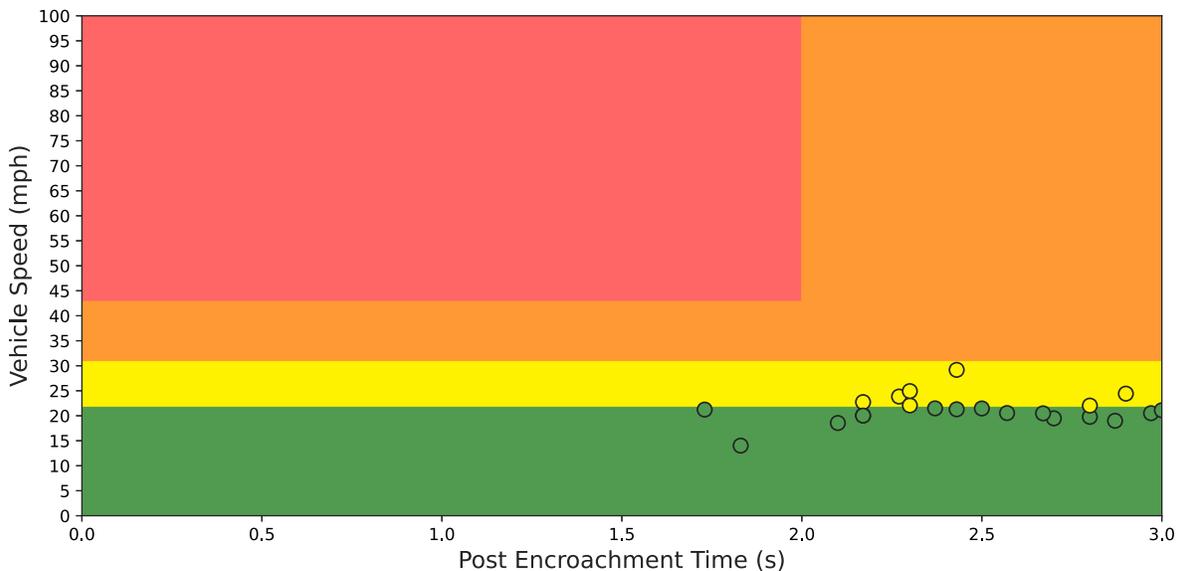
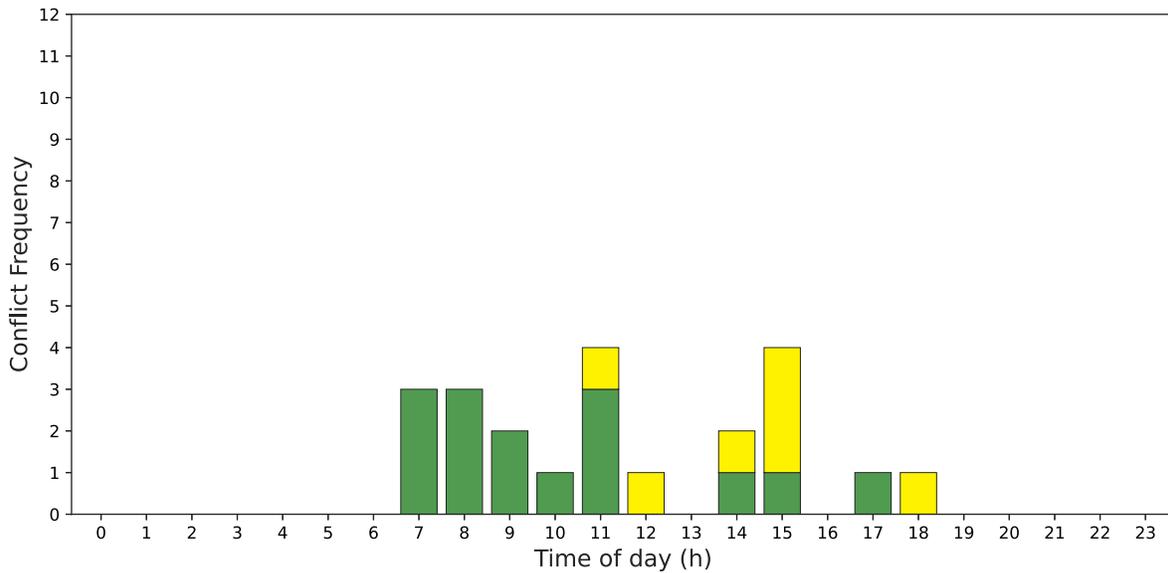
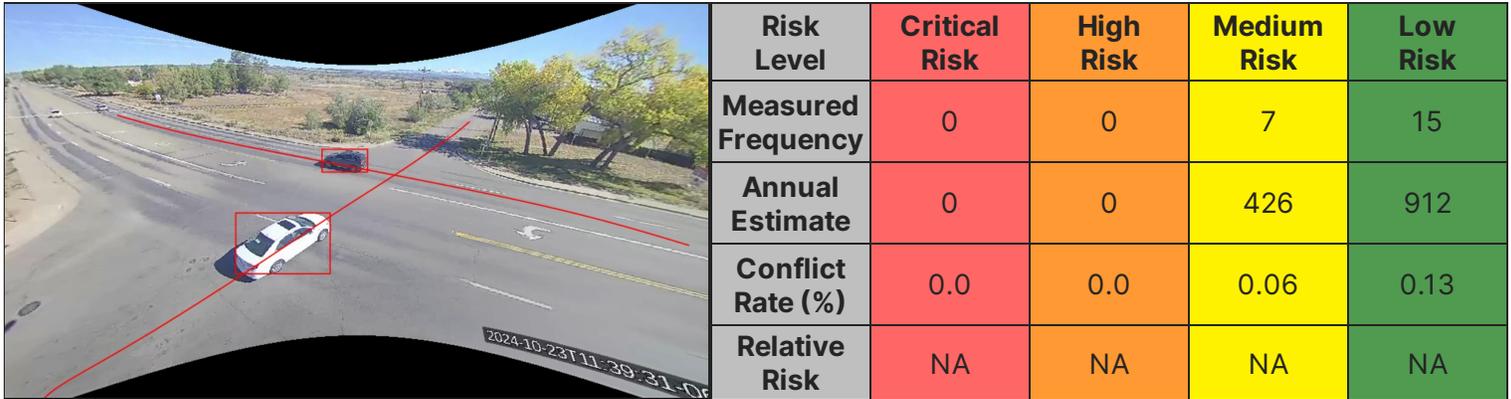
**South-Left Vehicle vs North-Through Vehicle**  
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27





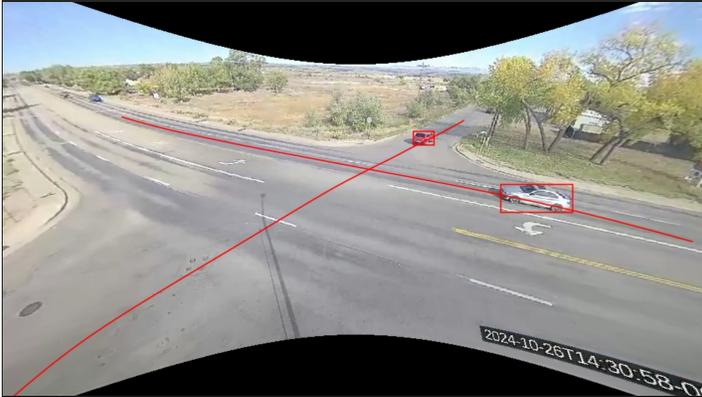
## North-Through Vehicle vs East-Through Vehicle

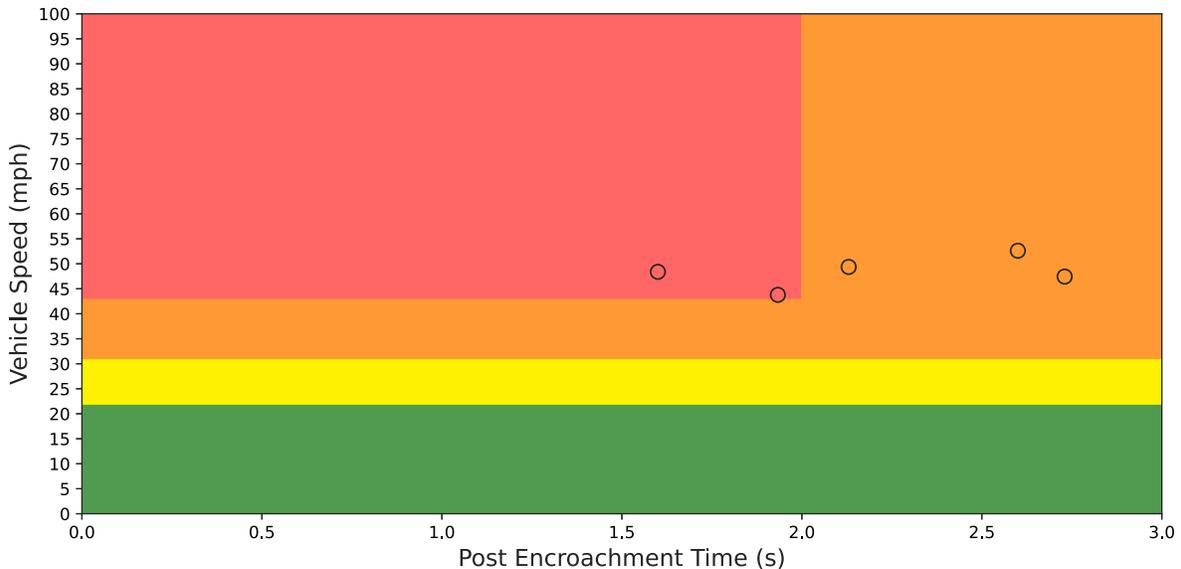
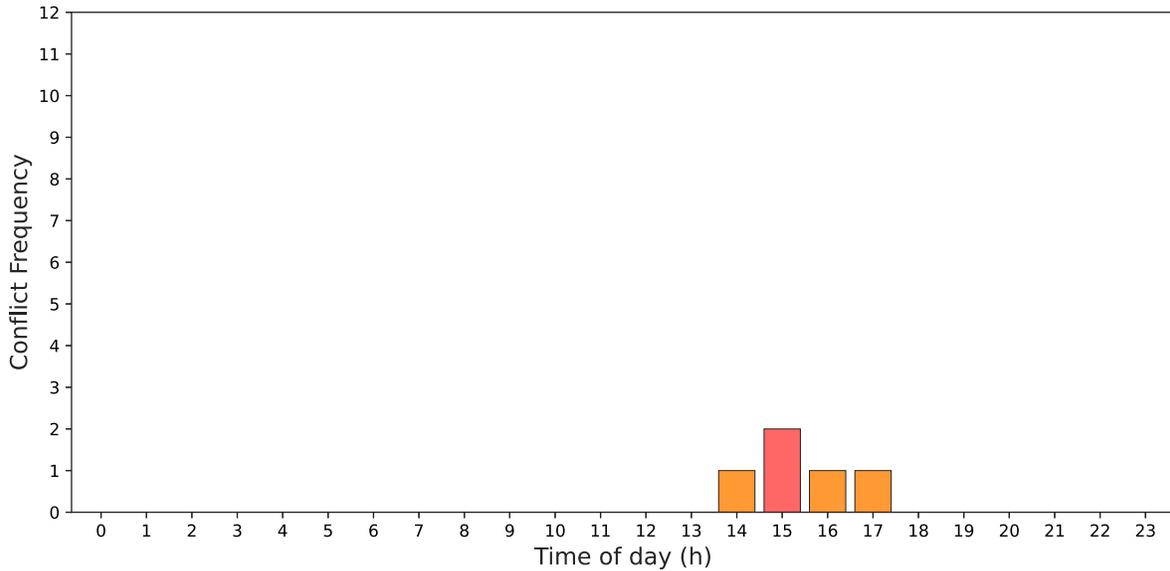
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27





### East-Through Vehicle vs North-Through Vehicle @ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

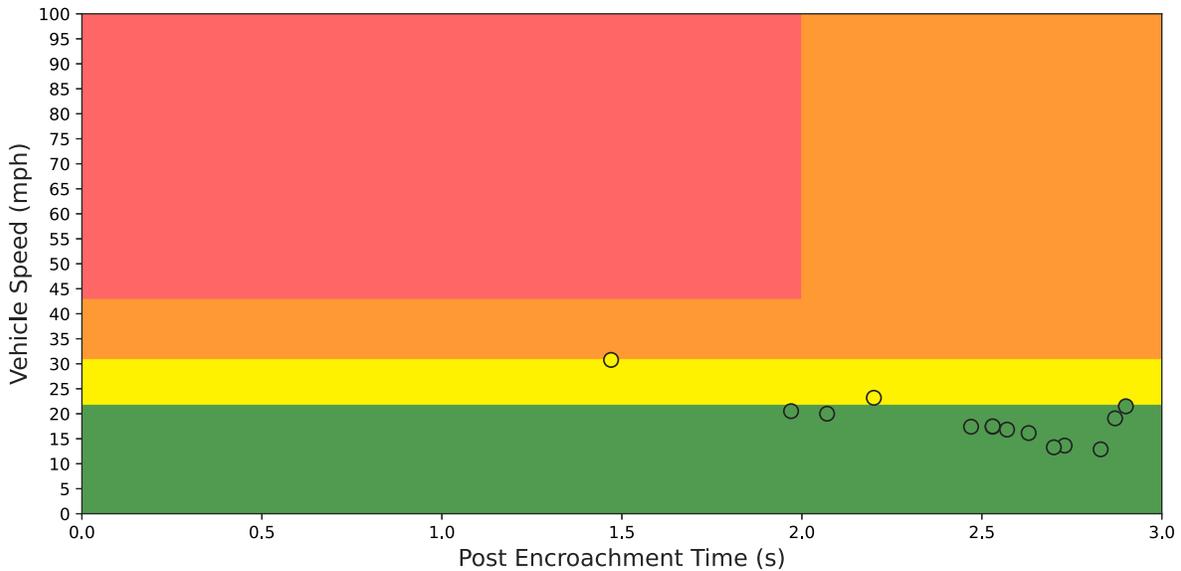
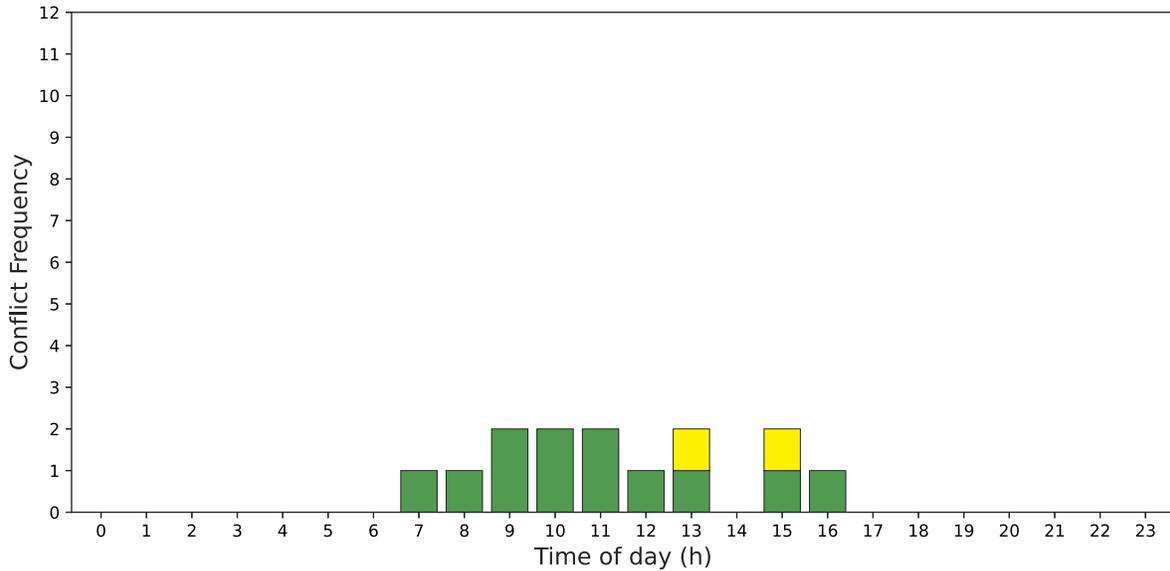
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	2	3	0	0
	Annual Estimate	122	182	0	0
	Conflict Rate (%)	1.67	2.5	0.0	0.0
	Relative Risk	NA	NA	NA	NA





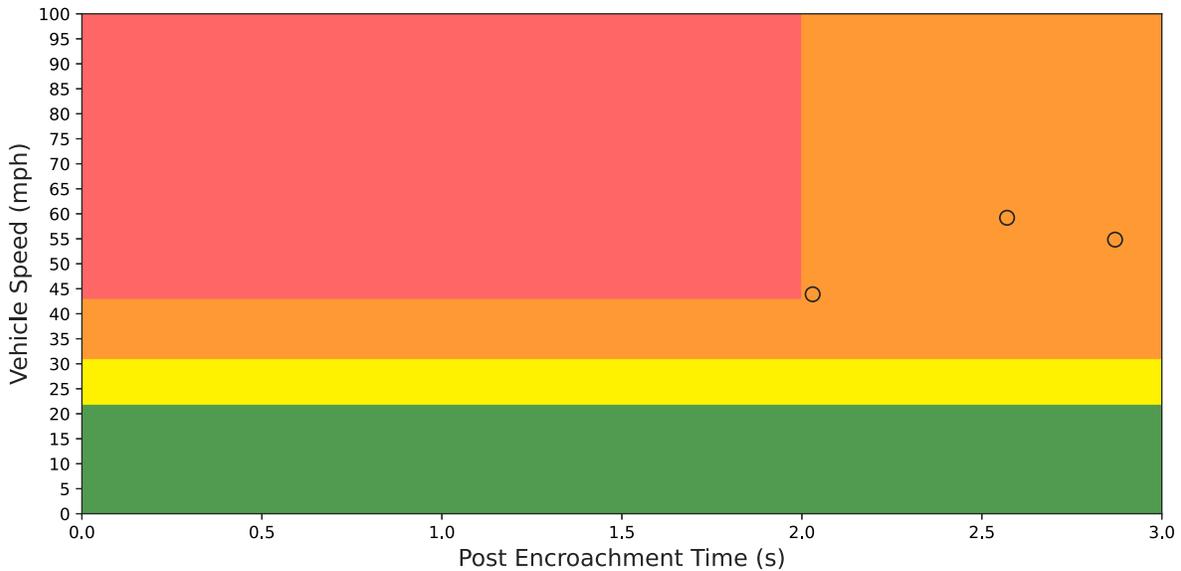
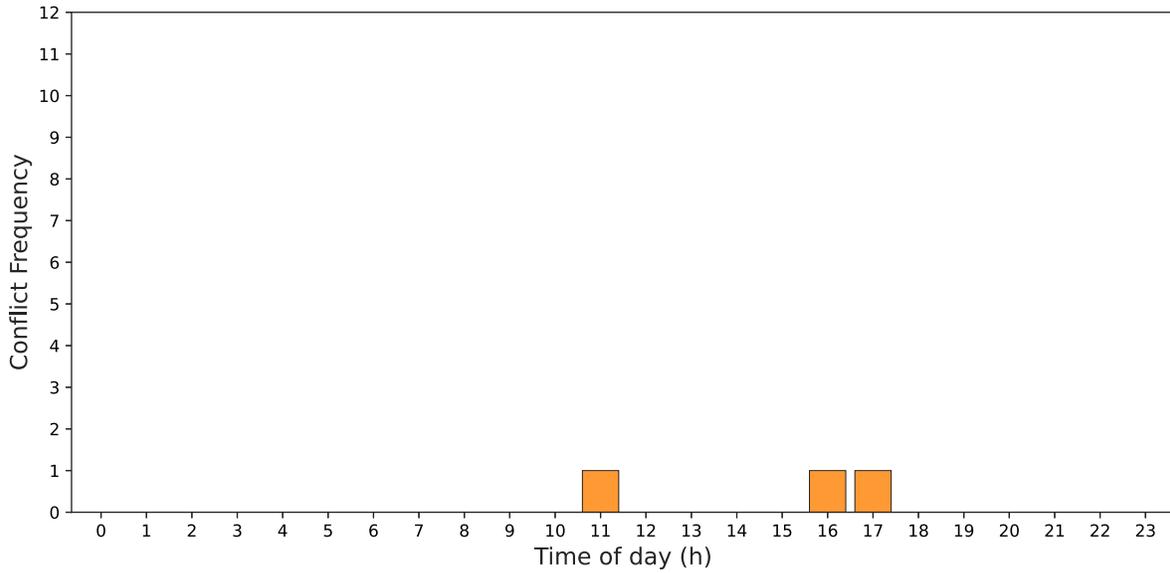
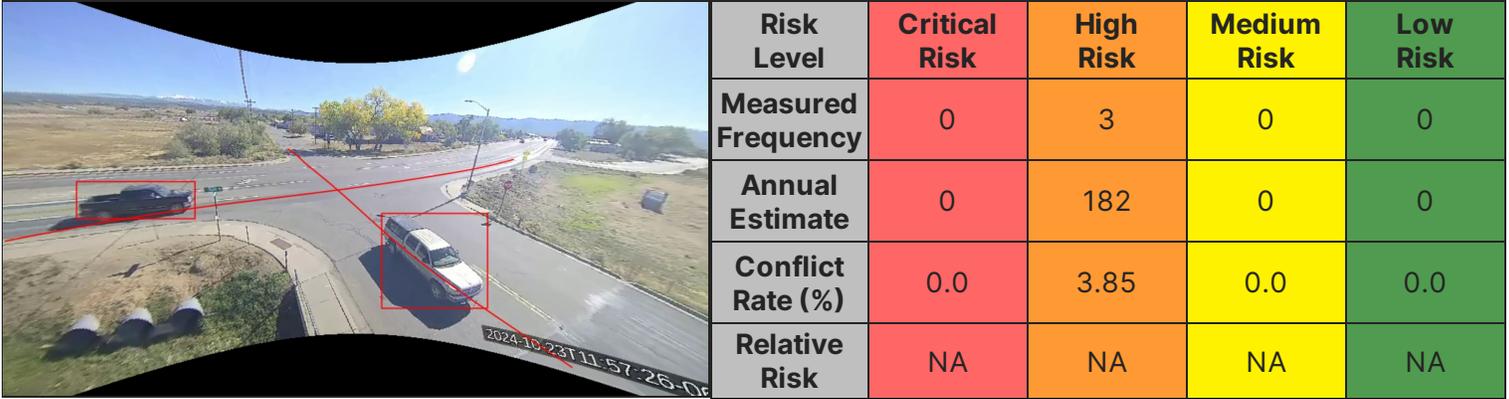
### South-Through Vehicle vs West-Through Vehicle @ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	2	12
	Annual Estimate	0	0	122	730
	Conflict Rate (%)	0.0	0.0	0.02	0.1
	Relative Risk	NA	NA	NA	NA



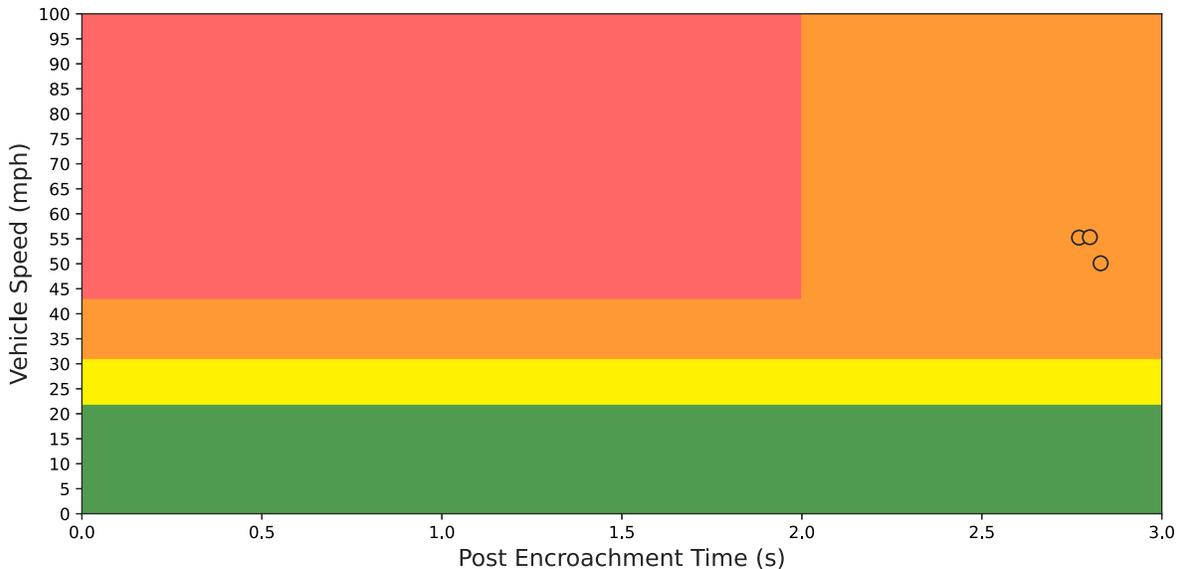
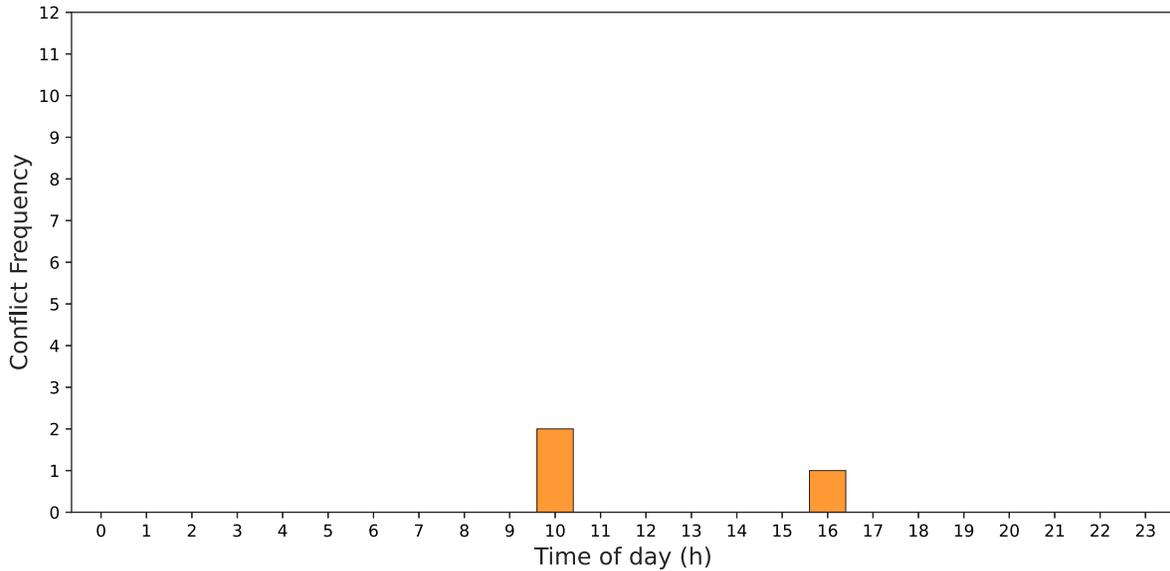
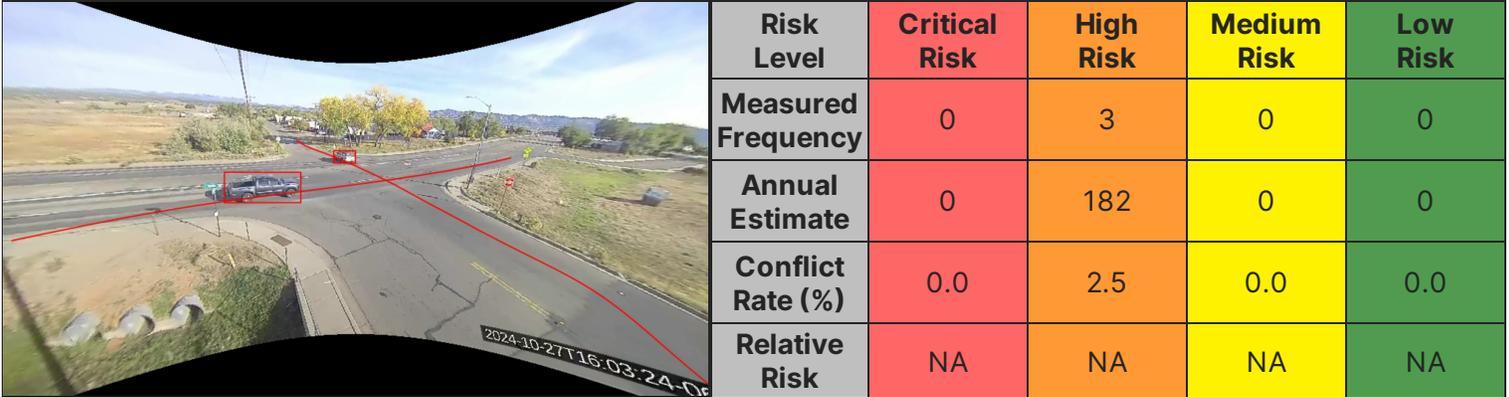


## West-Through Vehicle vs South-Through Vehicle @ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27



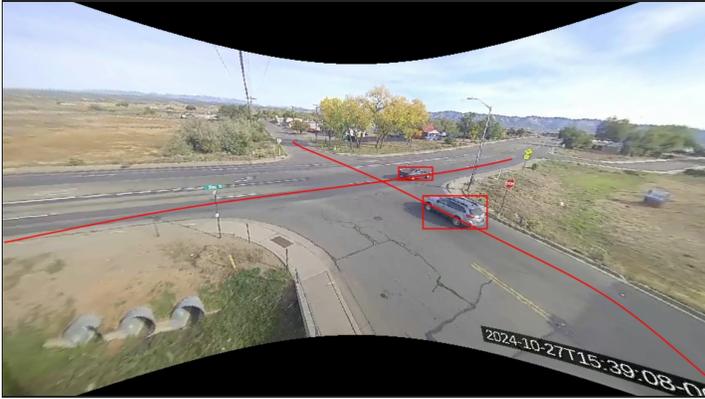


**East-Through Vehicle vs South-Through Vehicle**  
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

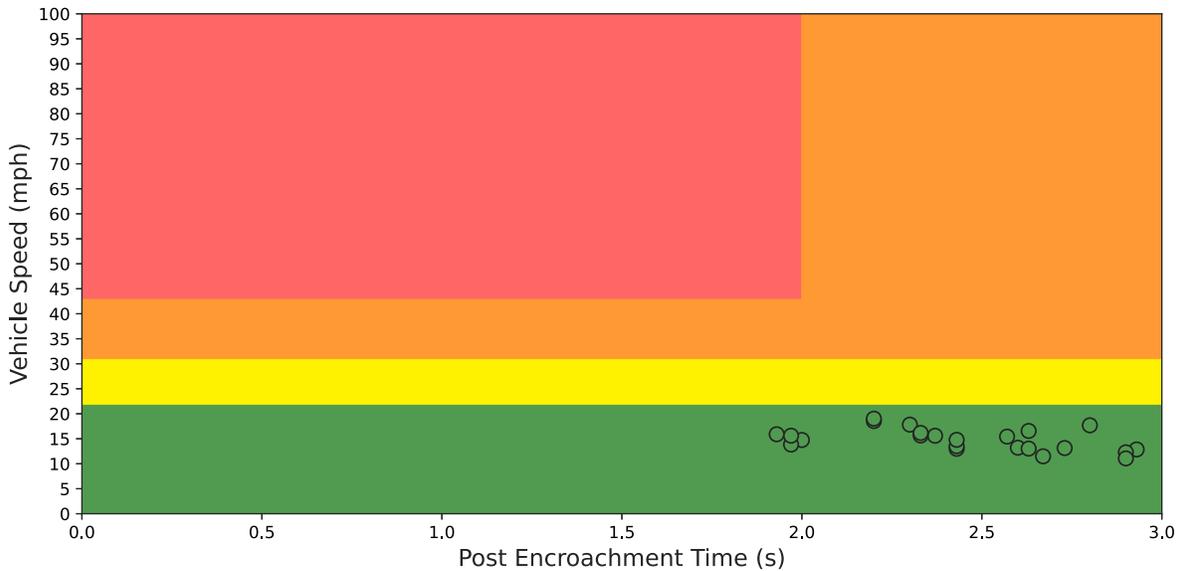
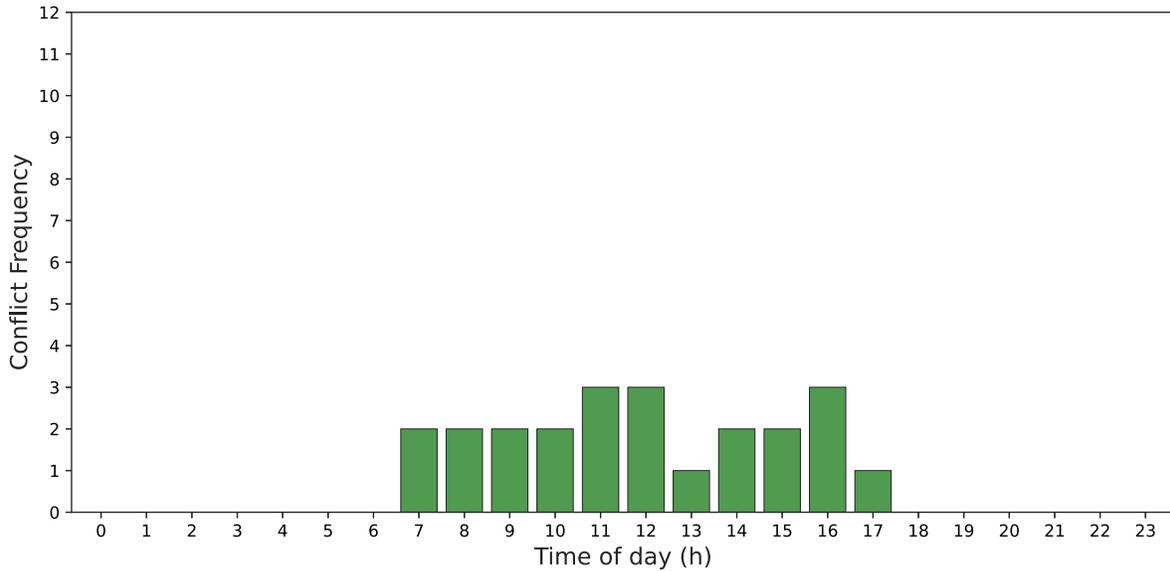




**South-Through Vehicle vs East-Through Vehicle**  
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

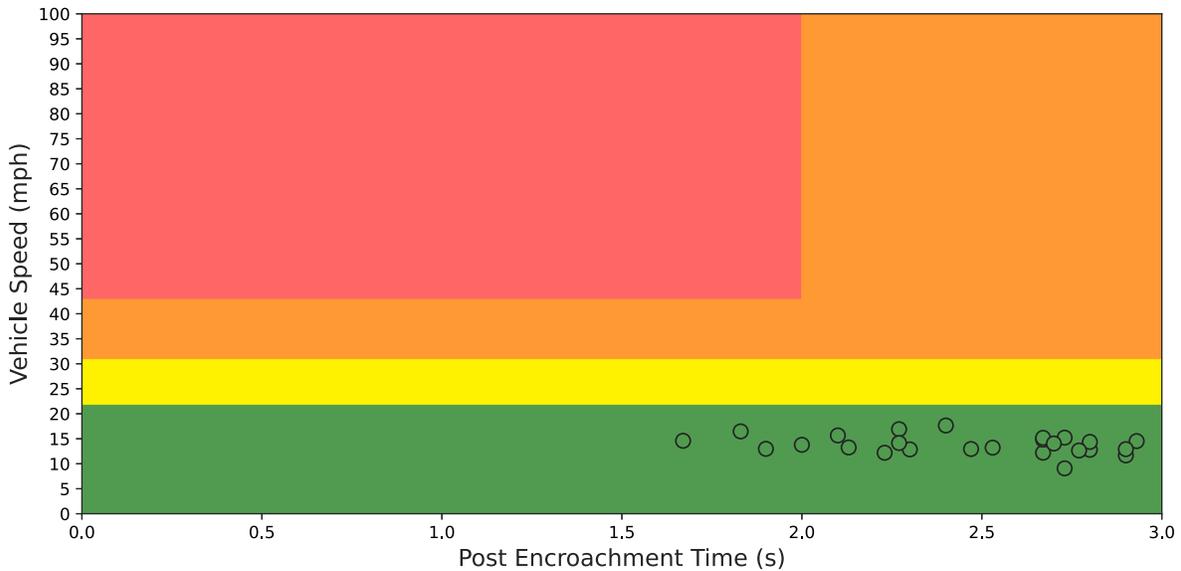
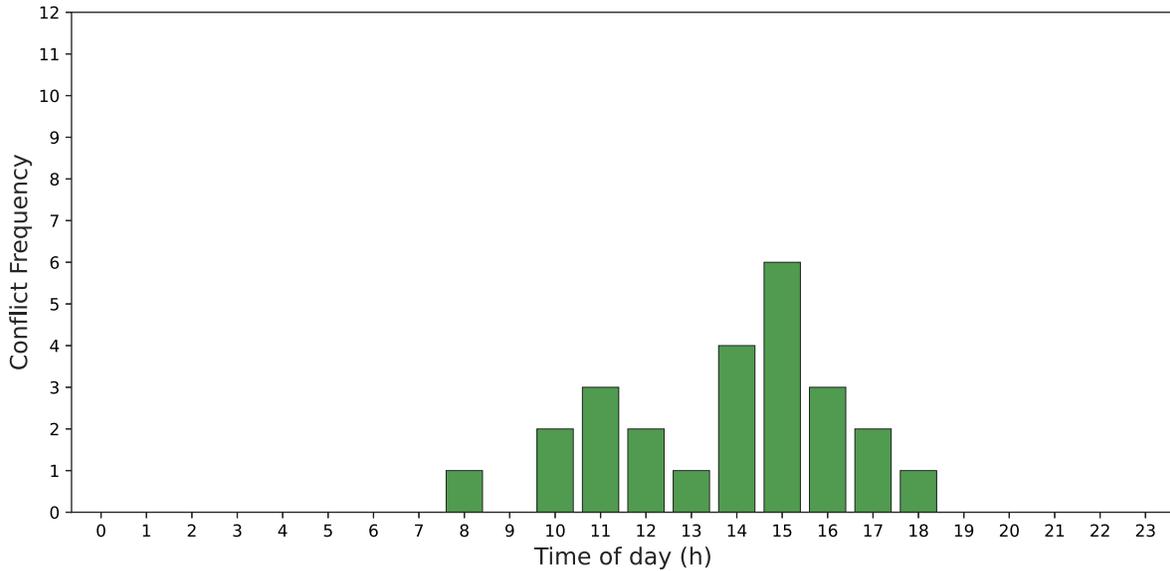
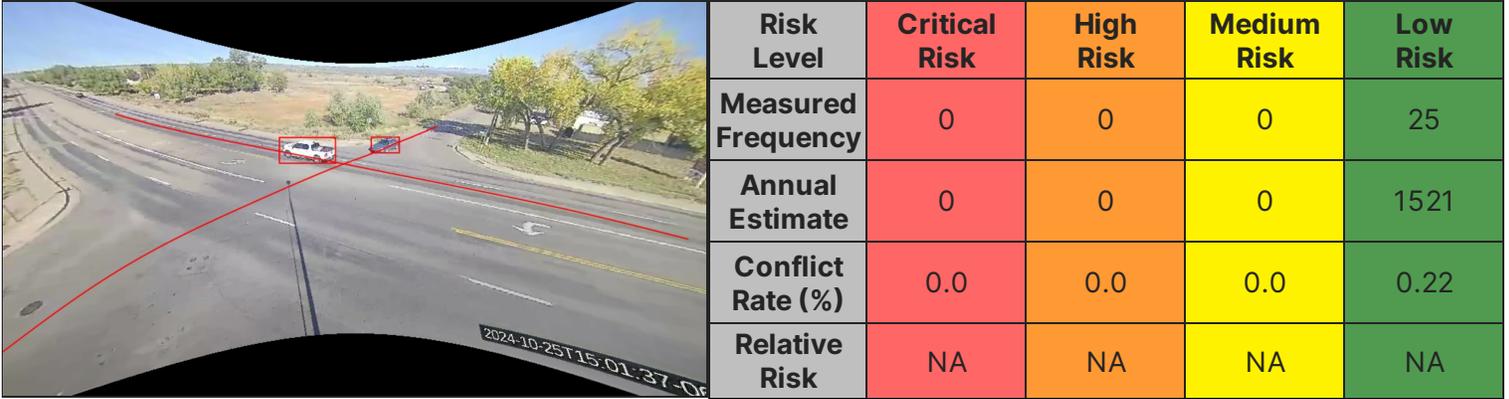


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	23
Annual Estimate	0	0	0	1399
Conflict Rate (%)	0.0	0.0	0.0	0.2
Relative Risk	NA	NA	NA	NA



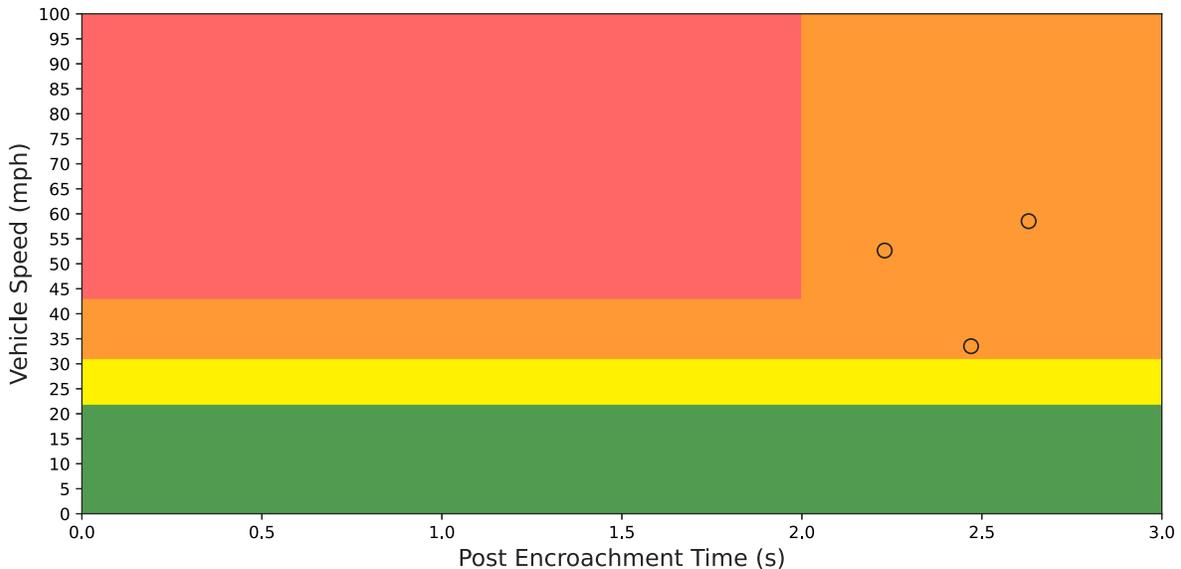
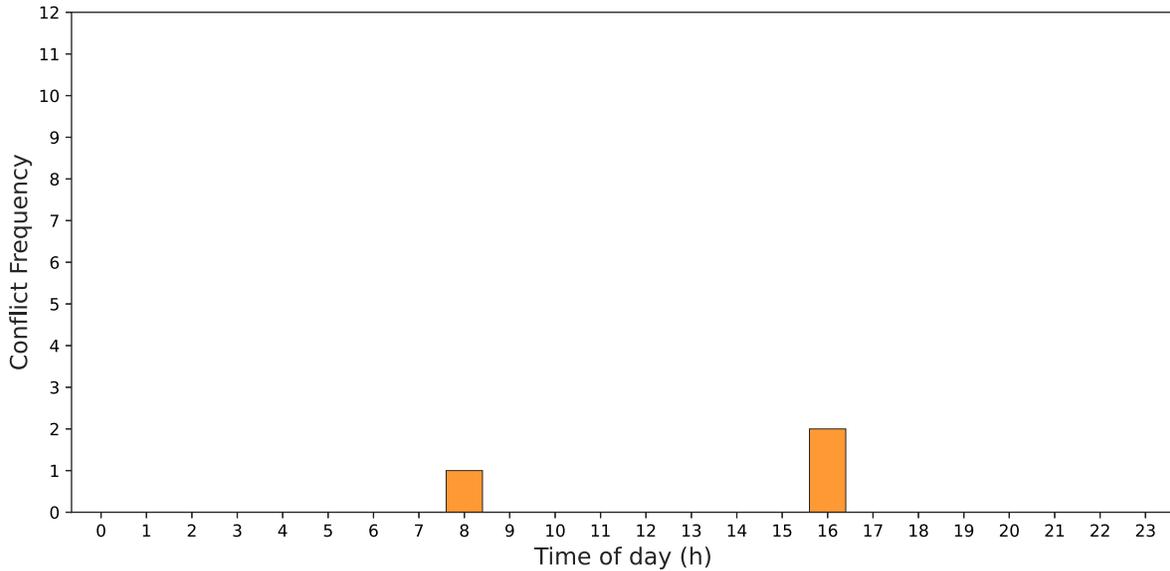
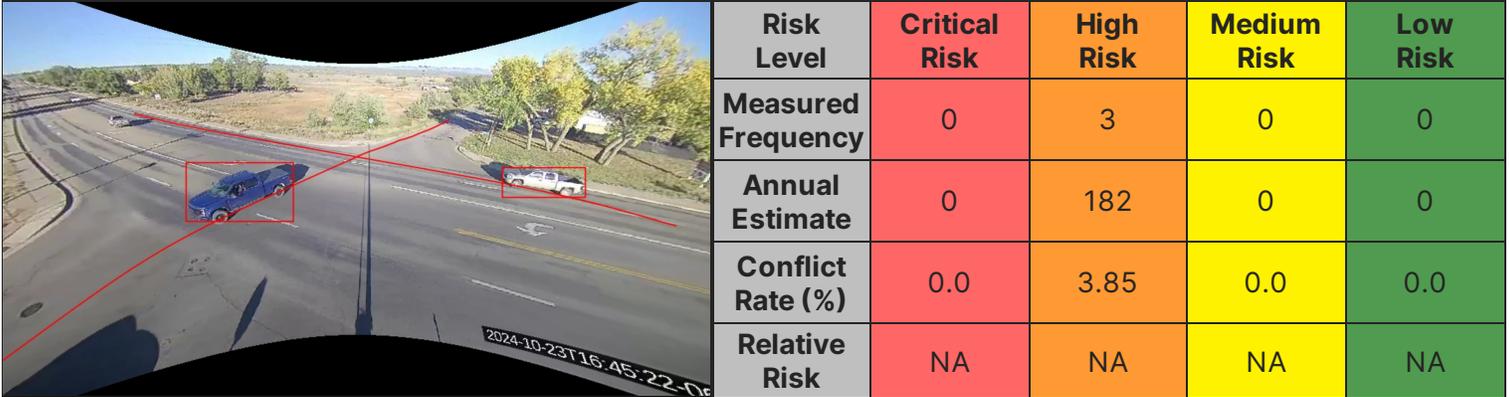


## North-Through Vehicle vs West-Through Vehicle @ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27



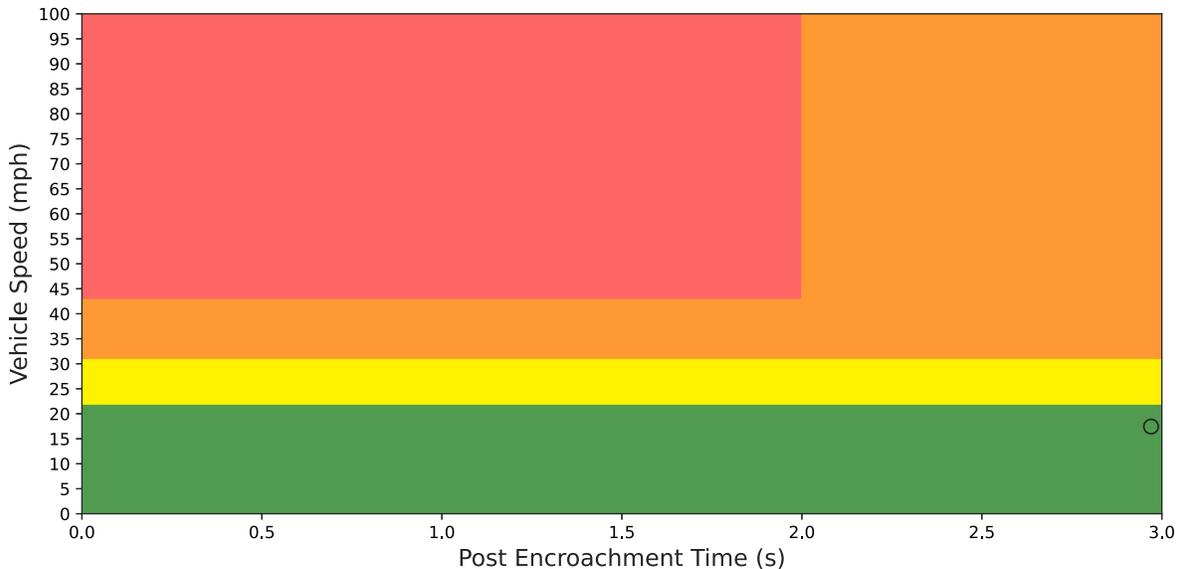
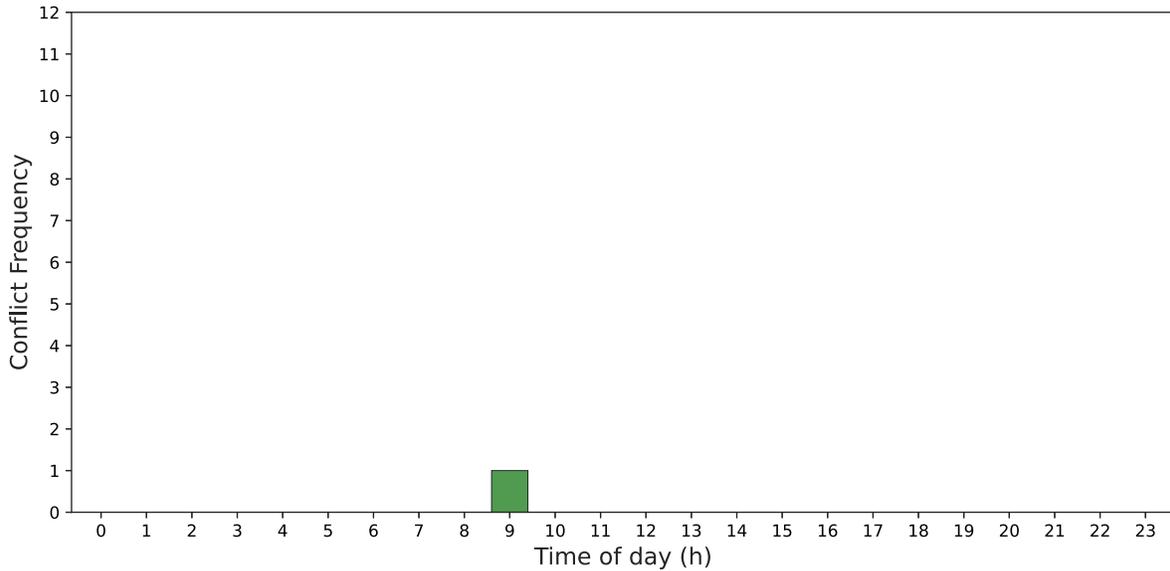
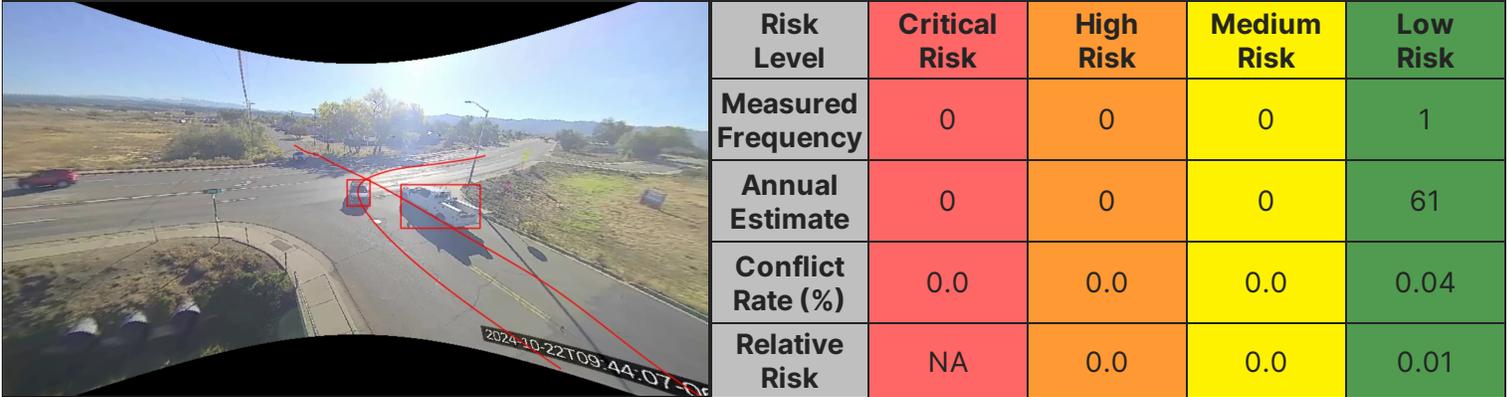


## West-Through Vehicle vs North-Through Vehicle @ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27



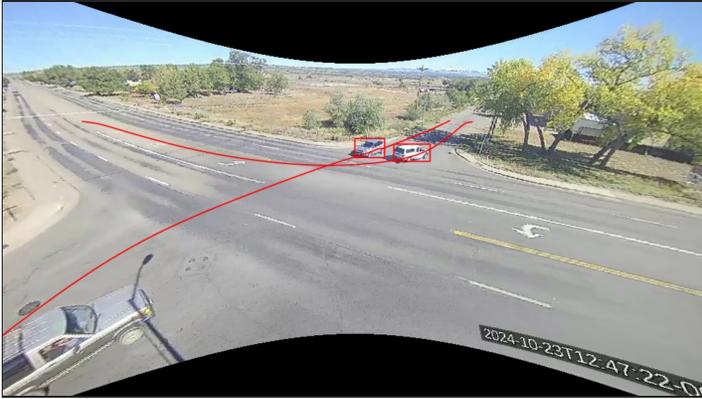


**North-Left Vehicle vs East-Through Vehicle**  
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

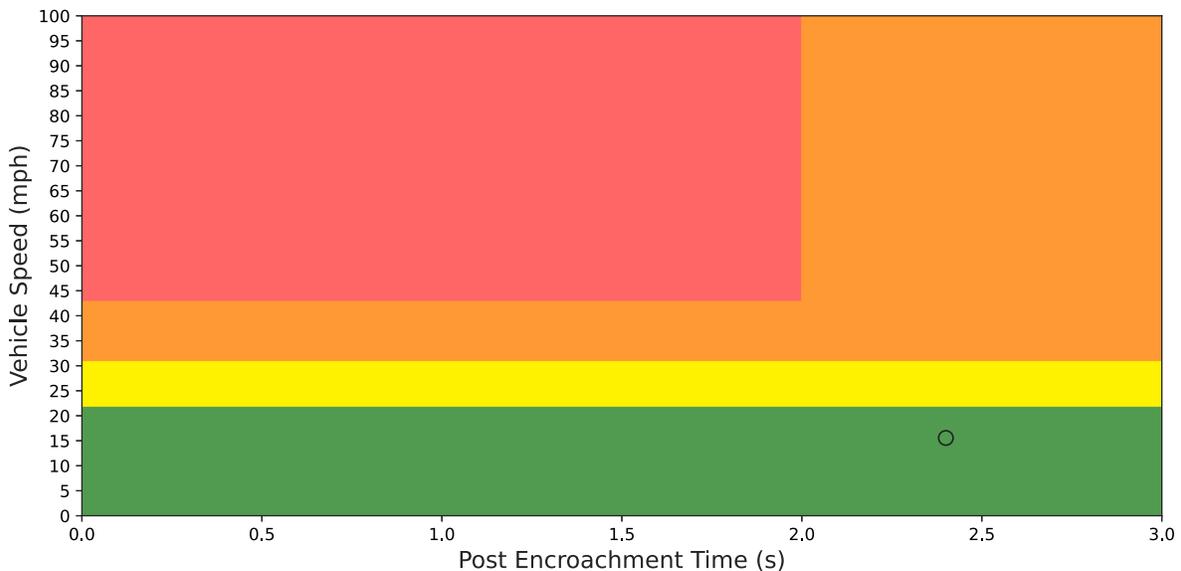
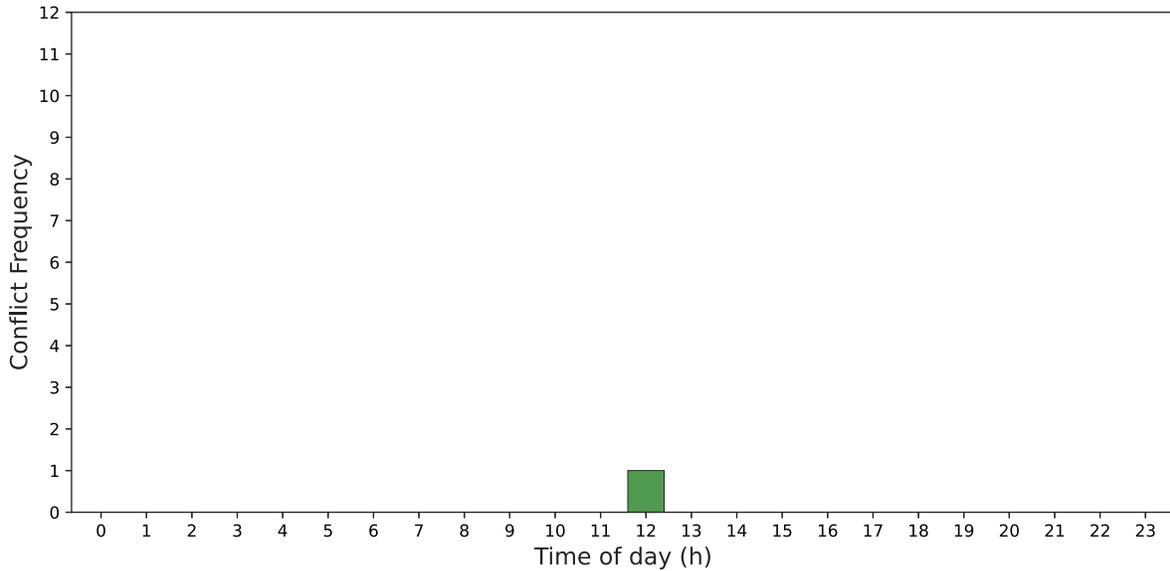




### South-Left Vehicle vs West-Through Vehicle @ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

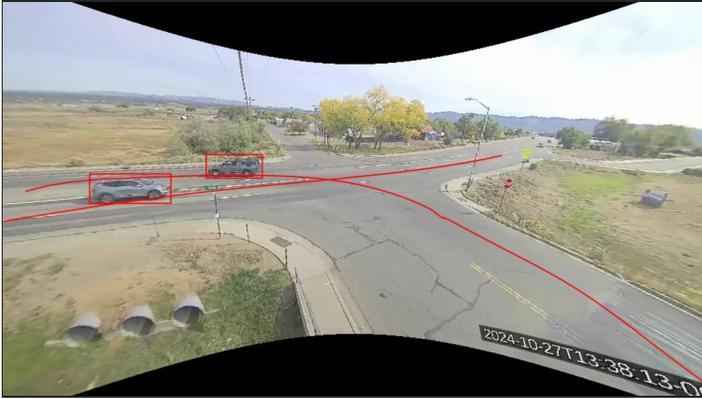


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	2.38
Relative Risk	NA	0.0	0.0	0.62

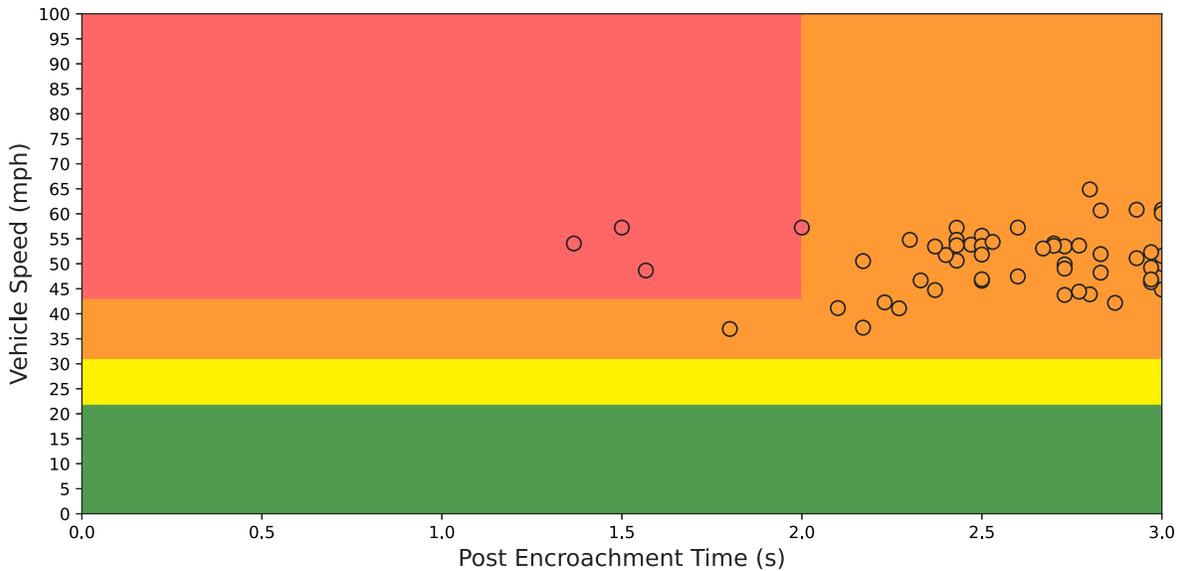
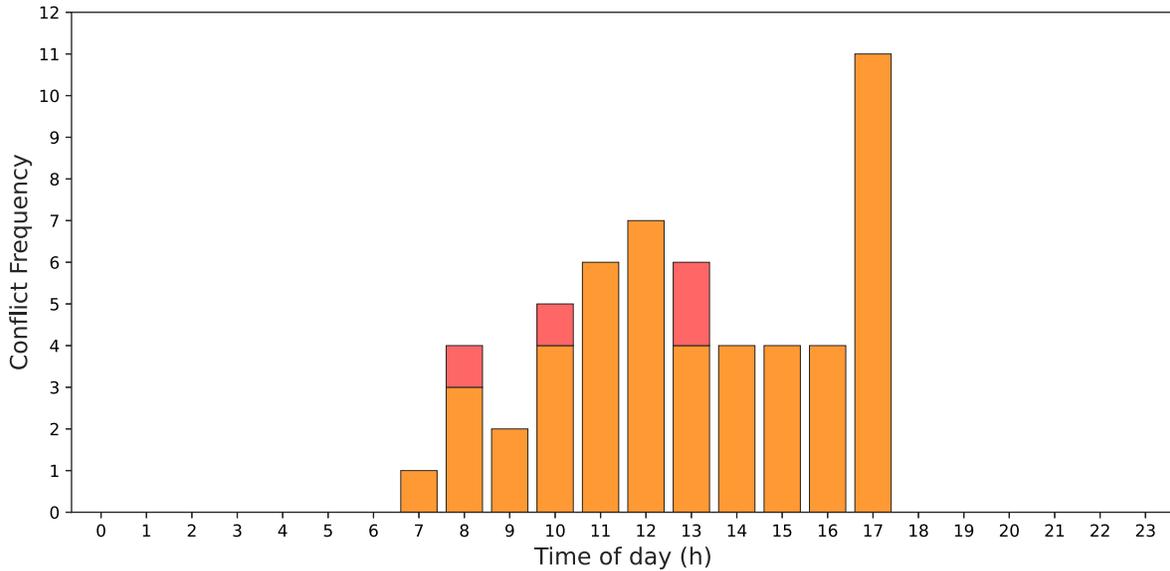




**East-Left Vehicle vs South-Through Vehicle**  
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27

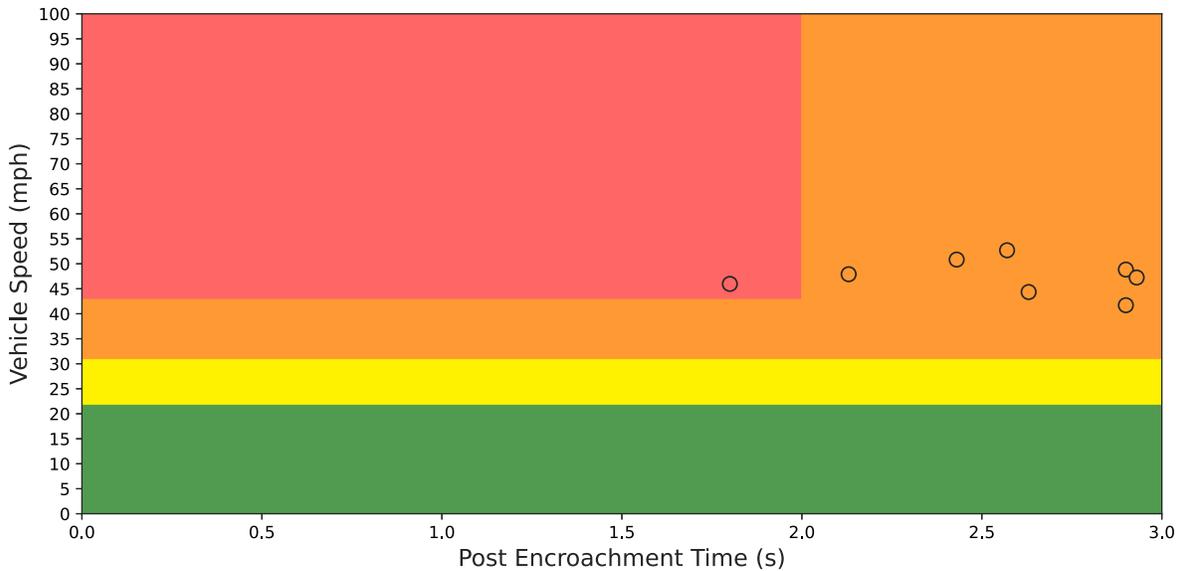
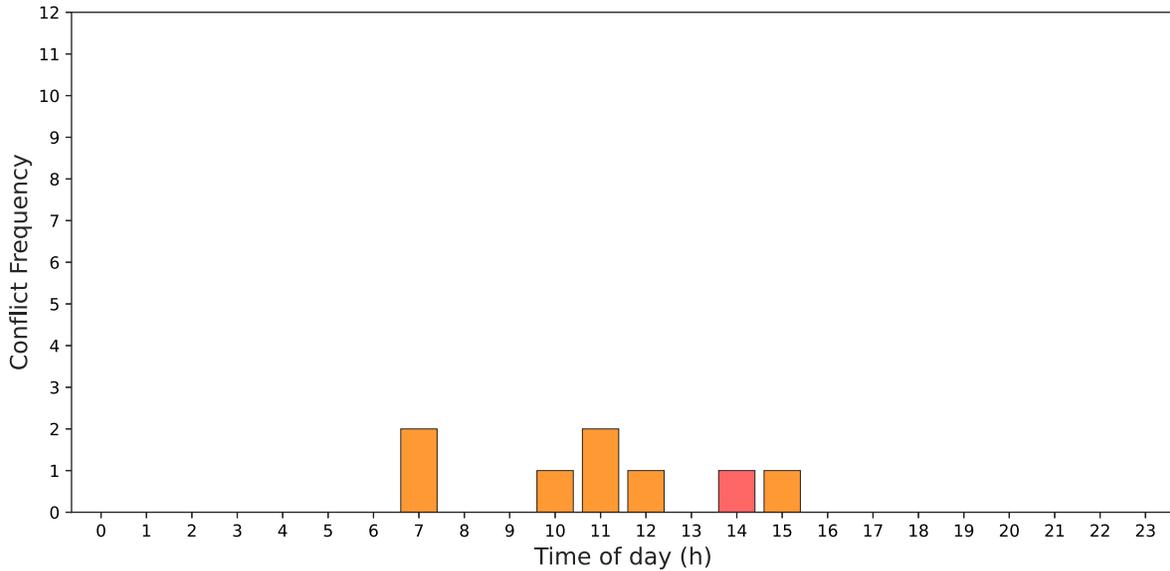
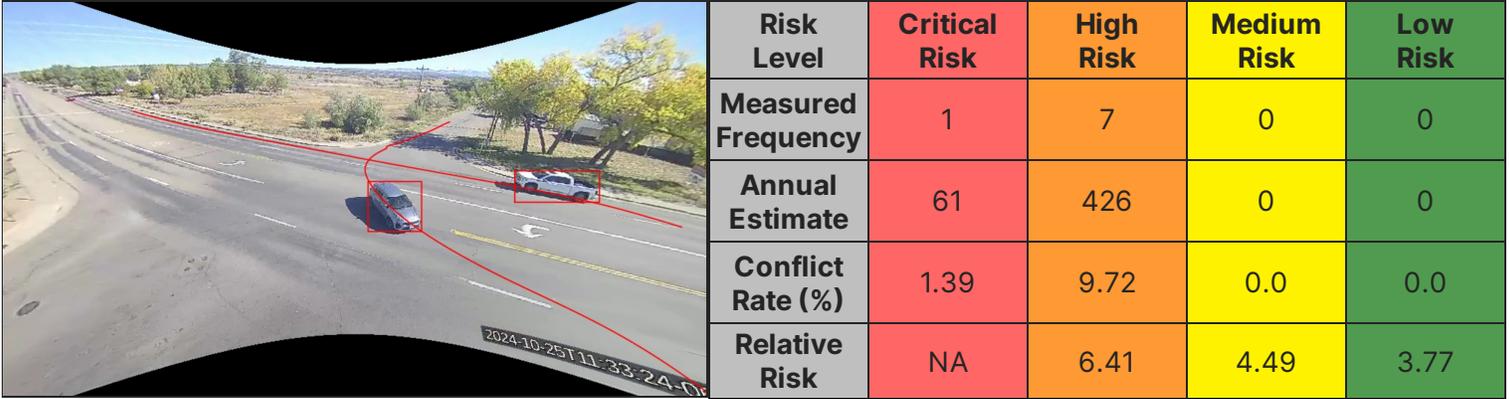


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	4	50	0	0
Annual Estimate	243	3042	0	0
Conflict Rate (%)	0.19	2.39	0.0	0.0
Relative Risk	NA	1.49	1.04	0.87





**West-Left Vehicle vs North-Through Vehicle**  
@ CO-145 and E Empire Street, 2024-Oct-22 to 2024-Oct-27





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Highway 491 And W Empire Street  
Cortez, CO  
Risk Diagnostic Report

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## **Contents**

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<b>Results Summary – Safe Systems Post Encroachment Time</b>	<b>4</b>
<b>South-Left Vehicle vs North-Through Vehicle</b>	<b>6</b>
<b>West-Left Vehicle vs North-Through Vehicle</b>	<b>7</b>



## General Information

### Report Details

<b>Site</b>	Highway 491 And W Empire Street, Cortez, CO
<b>Video Period</b>	2024-Nov-1 to 2024-Nov-6
<b>Video Length</b>	63 hours
<b>Report Notes</b>	VEH Conflict data is provided for Nov. 01-02 @ 07:45-18:15, Nov. 03-06 @ 06:45-17:15 each day.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
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[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.trpro.2016.05.396>



### Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

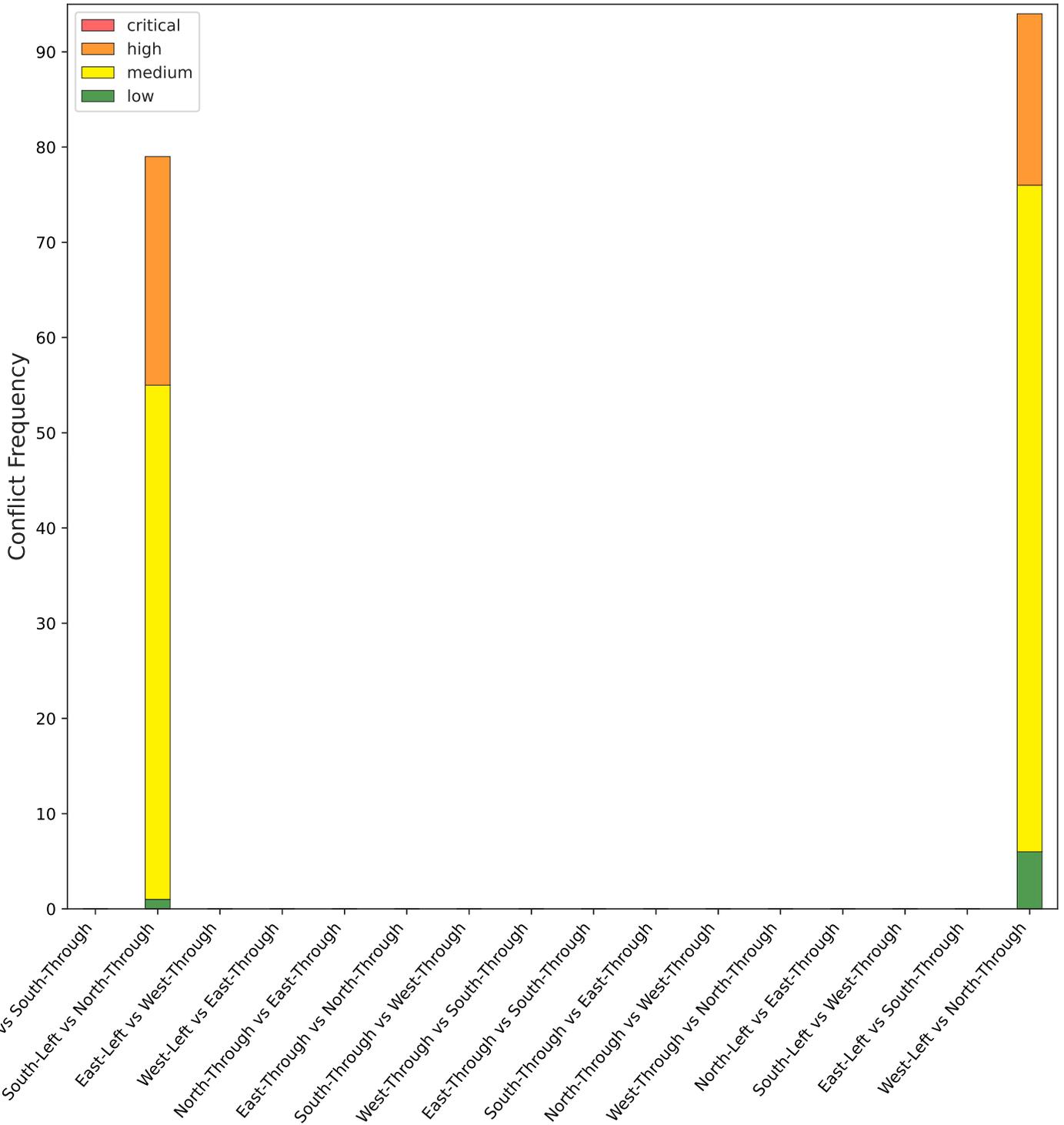


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Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	NM	NM	NM	NM
South-Left vs North-Through	1	54	24	0
East-Left vs West-Through	NM	NM	NM	NM
West-Left vs East-Through	NM	NM	NM	NM

### Right-Angle (Through Vehicle vs Through Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	NM	NM	NM	NM
East-Through vs North-Through	NM	NM	NM	NM
South-Through vs West-Through	NM	NM	NM	NM
West-Through vs South-Through	NM	NM	NM	NM
East-Through vs South-Through	NM	NM	NM	NM
South-Through vs East-Through	NM	NM	NM	NM
North-Through vs West-Through	NM	NM	NM	NM
West-Through vs North-Through	NM	NM	NM	NM

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

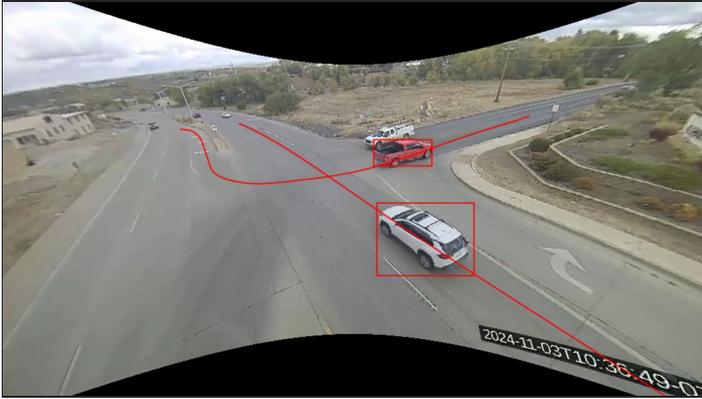
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	NM	NM	NM	NM
South-Left vs West-Through	NM	NM	NM	NM
East-Left vs South-Through	NM	NM	NM	NM
West-Left vs North-Through	6	70	18	0

NM = Not Measured

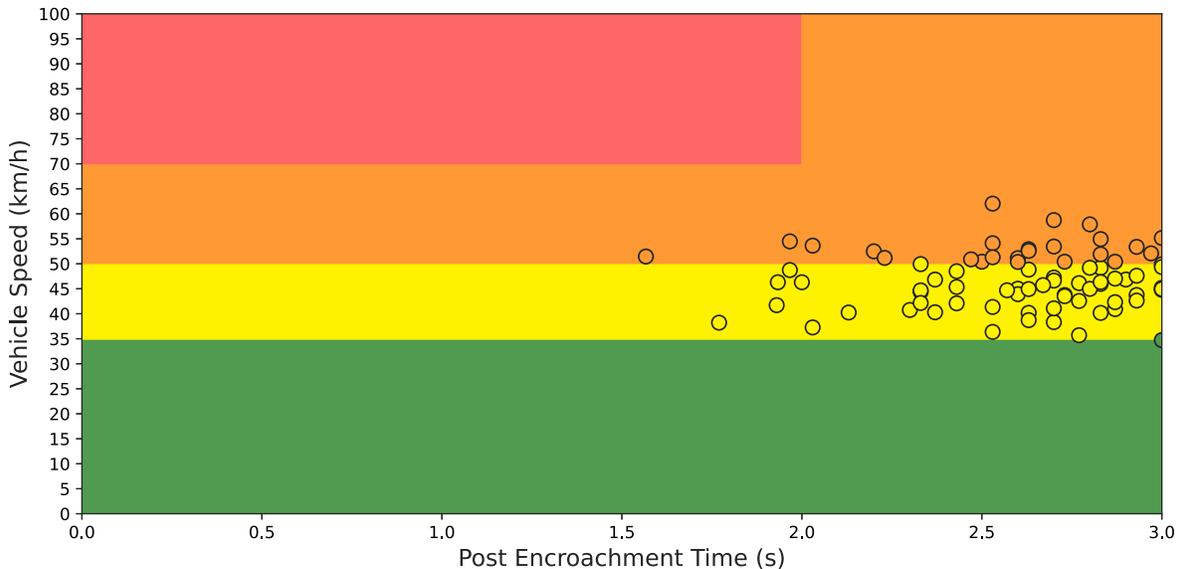
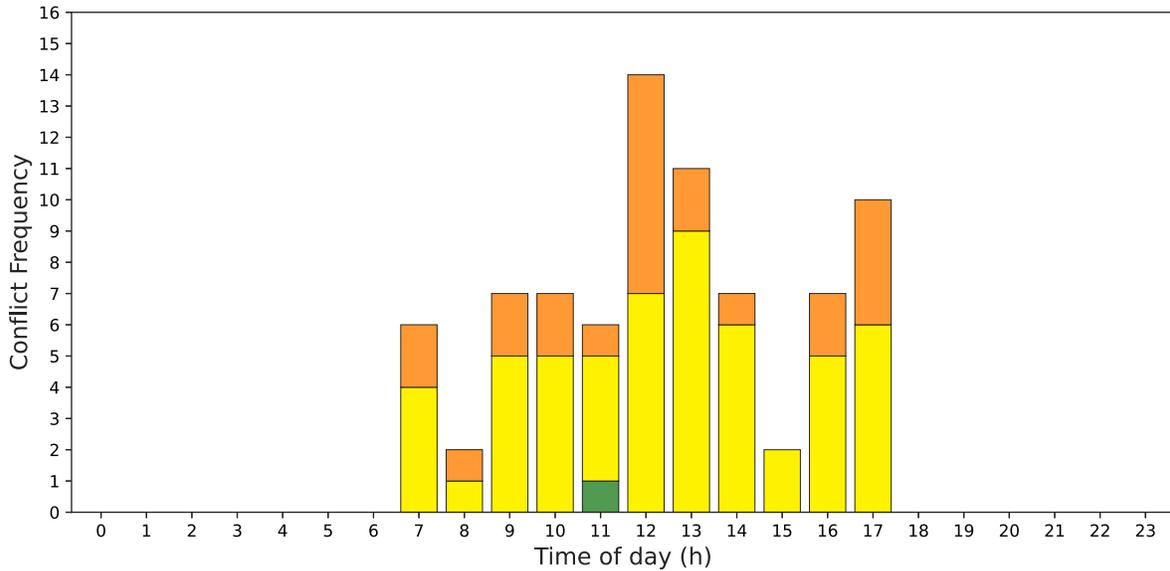


## South-Left Vehicle vs North-Through Vehicle

@ Highway 491 And W Empire Street, 2024-Nov-1 to 2024-Nov-6



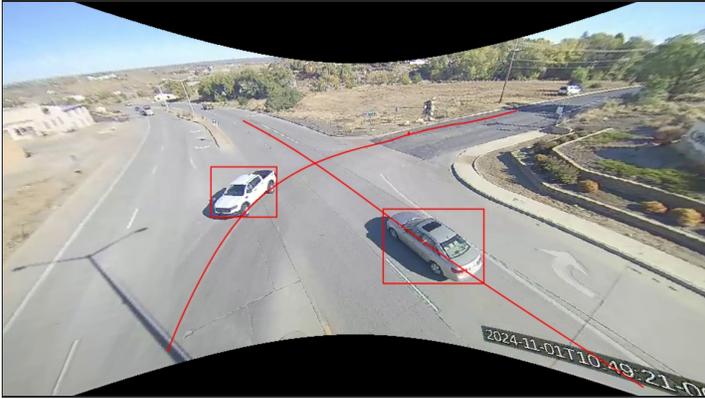
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	24	54	1
Annual Estimate	0	1460	3285	61
Conflict Rate (%)	0.0	0.46	1.03	0.02
Relative Risk	NA	0.17	0.42	0.39



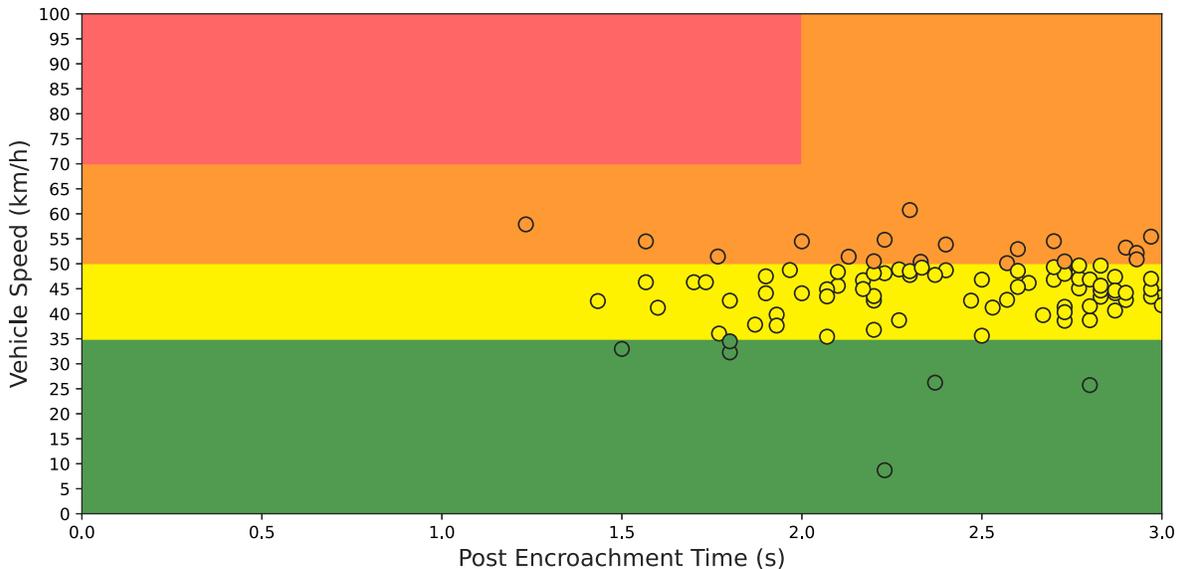
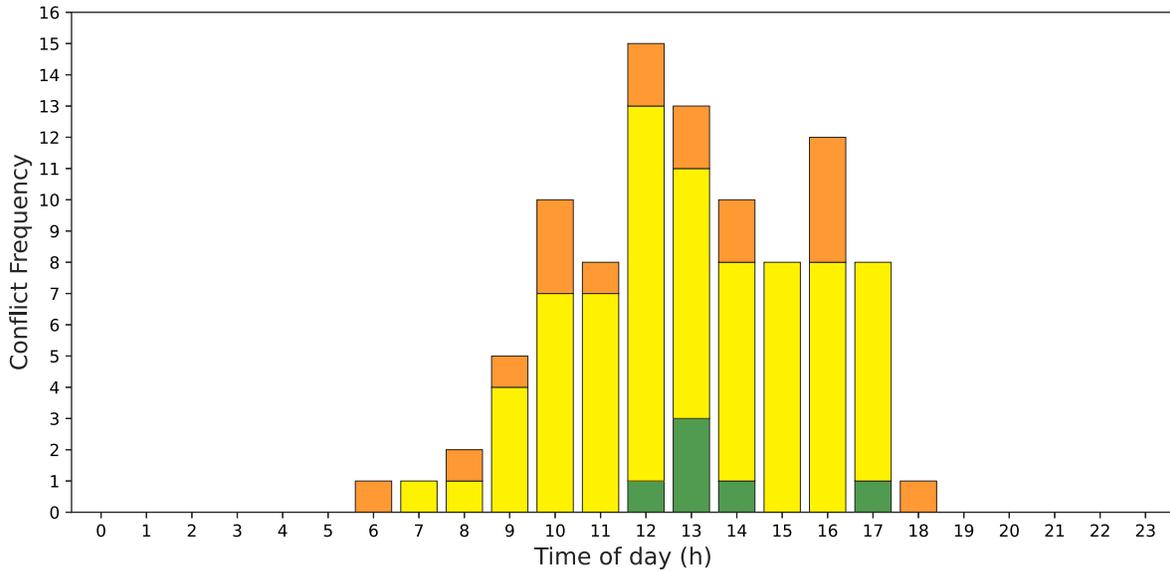


## West-Left Vehicle vs North-Through Vehicle

@ Highway 491 And W Empire Street, 2024-Nov-1 to 2024-Nov-6



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	18	70	6
Annual Estimate	0	1095	4258	365
Conflict Rate (%)	0.0	0.72	2.82	0.24
Relative Risk	NA	0.42	1.43	1.28





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U.S. Highway 145 & Alamosa Road  
Cortez, Colorado  
Risk Diagnostic Report

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## General Information

### Report Details

<b>Site</b>	U.S. Highway 145 & Alamosa Road, Cortez, Colorado
<b>Video Period</b>	2024-Dec-7 to 2024-Dec-12
<b>Video Length</b>	60 hours
<b>Report Notes</b>	Conflict data is provided for Dec. 07-12 @ 07:00-17:00 each day. No VRU conflicts were found.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
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[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.trpro.2016.05.396>



## Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

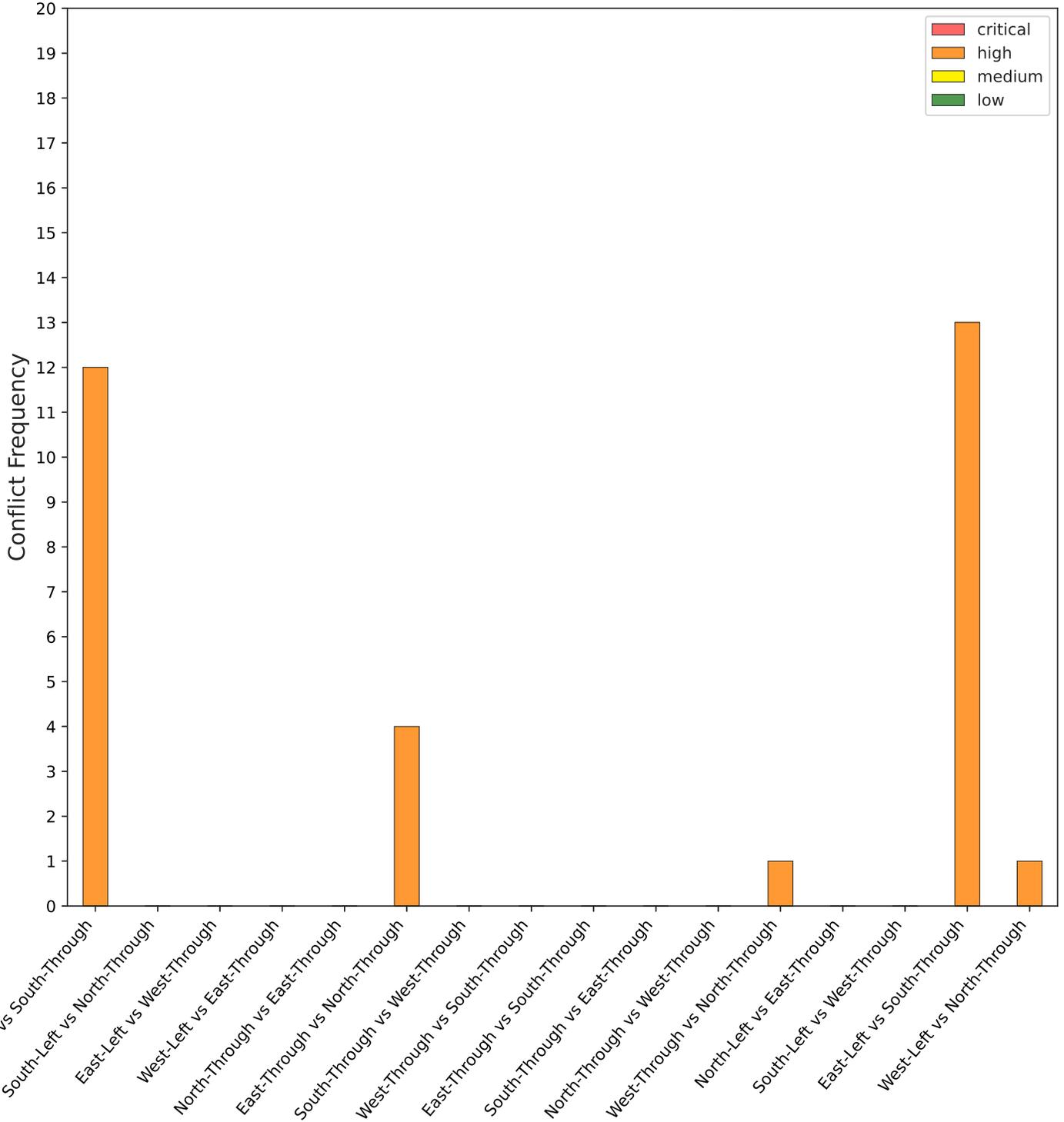


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	0	0	12	0
South-Left vs North-Through	0	0	0	0
East-Left vs West-Through	NM	NM	NM	NM
West-Left vs East-Through	NM	NM	NM	NM

### Right-Angle (Through Vehicle vs Through Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	NM	NM	NM	NM
East-Through vs North-Through	0	0	4	0
South-Through vs West-Through	NM	NM	NM	NM
West-Through vs South-Through	0	0	0	0
East-Through vs South-Through	0	0	0	0
South-Through vs East-Through	NM	NM	NM	NM
North-Through vs West-Through	NM	NM	NM	NM
West-Through vs North-Through	0	0	1	0

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

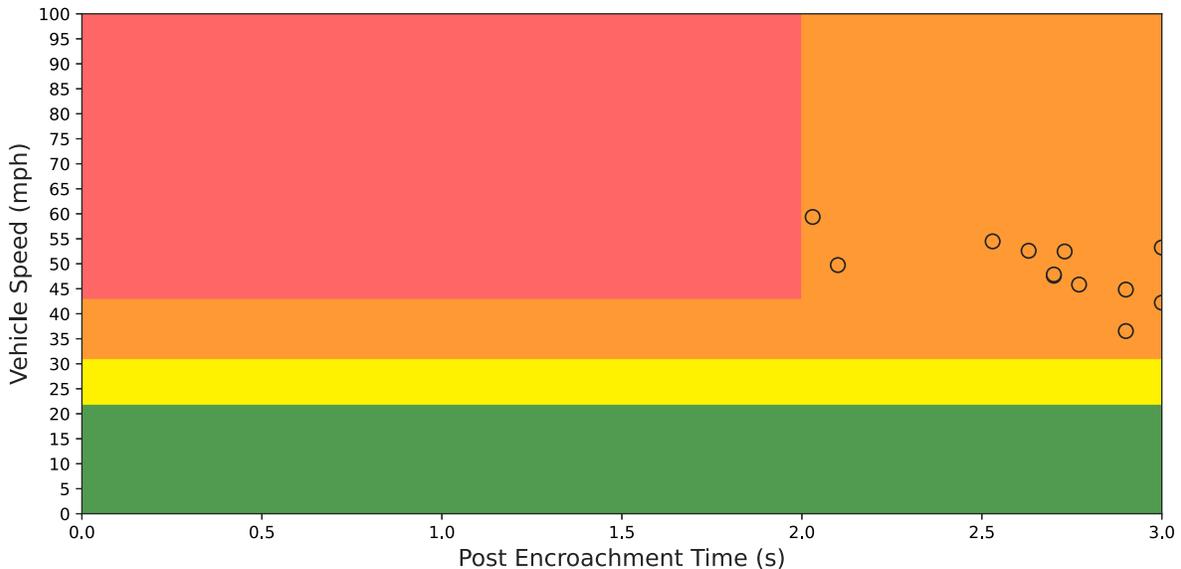
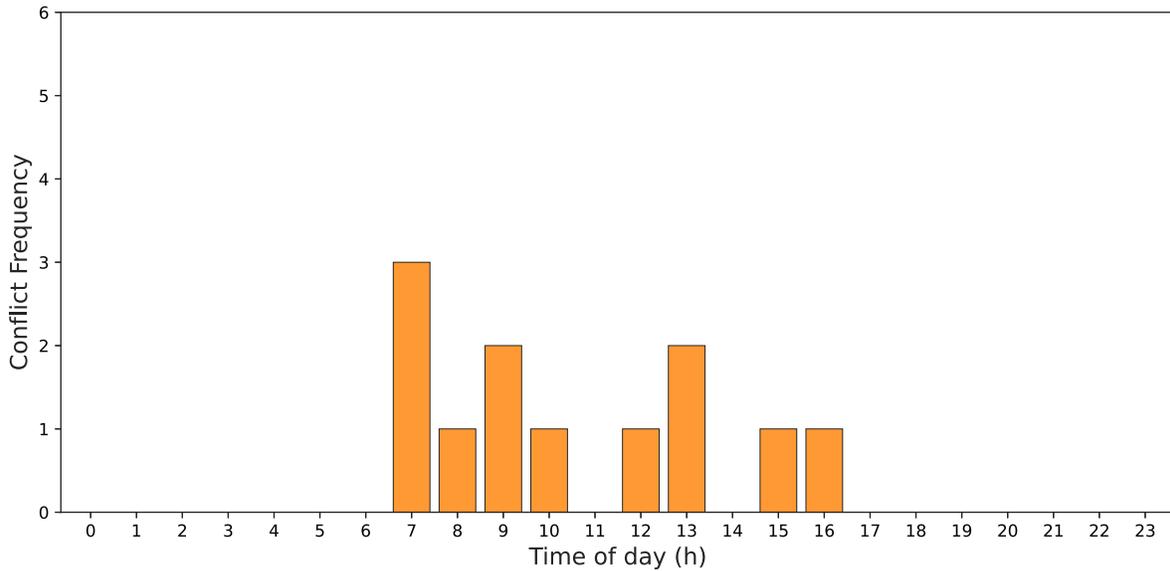
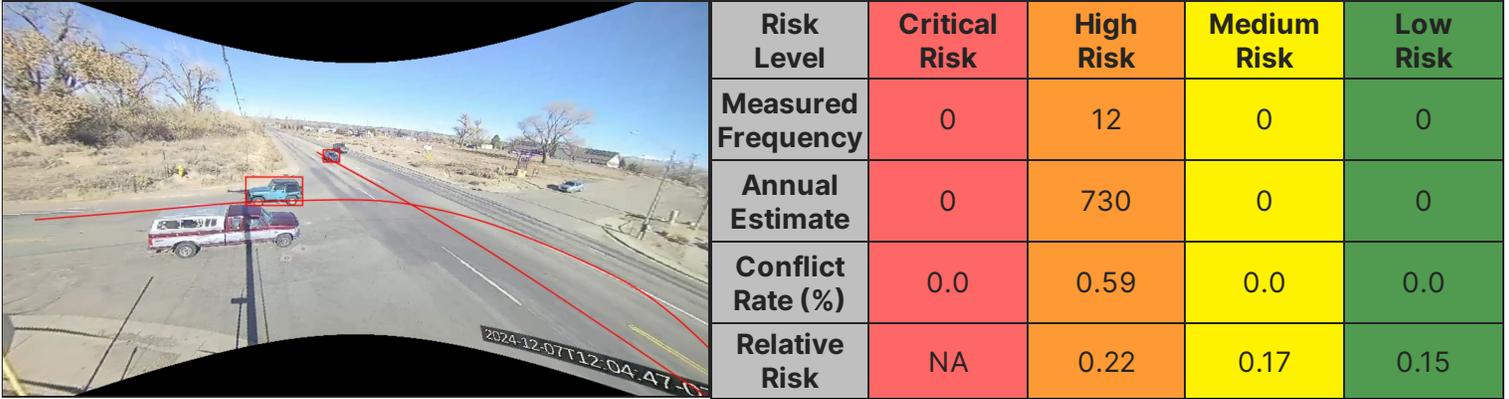
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	NM	NM	NM	NM
South-Left vs West-Through	NM	NM	NM	NM
East-Left vs South-Through	0	0	13	0
West-Left vs North-Through	0	0	1	0

NM = Not Measured



## North-Left Vehicle vs South-Through Vehicle

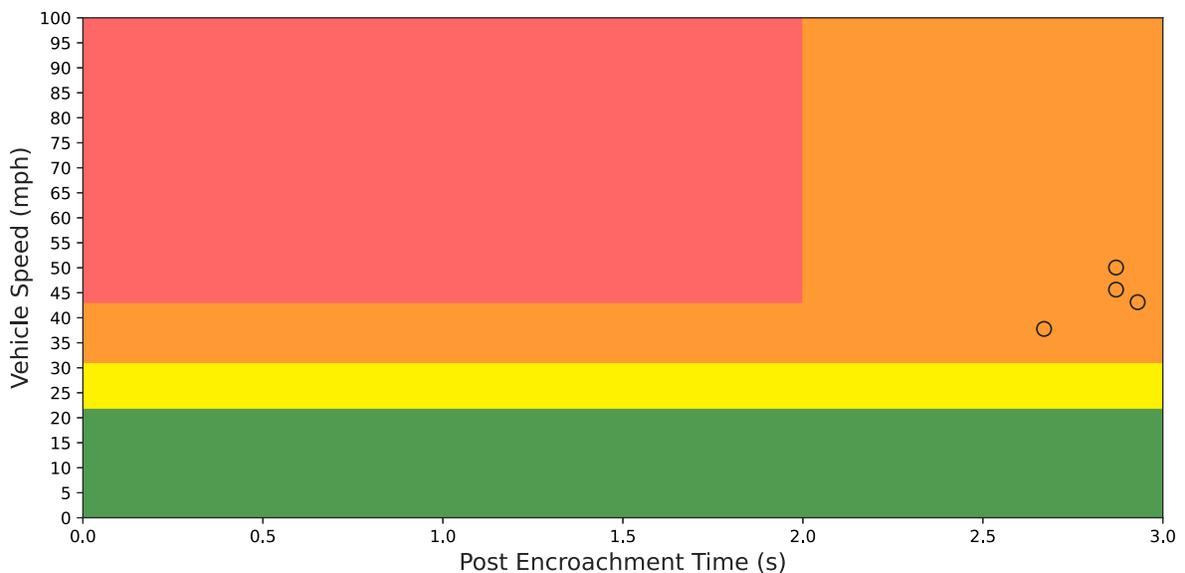
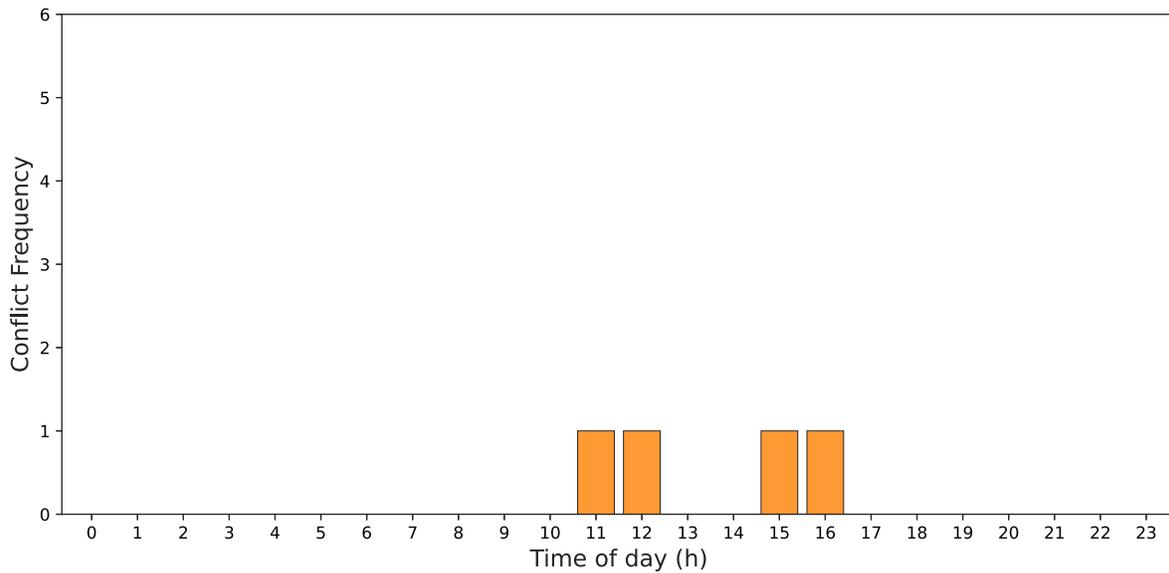
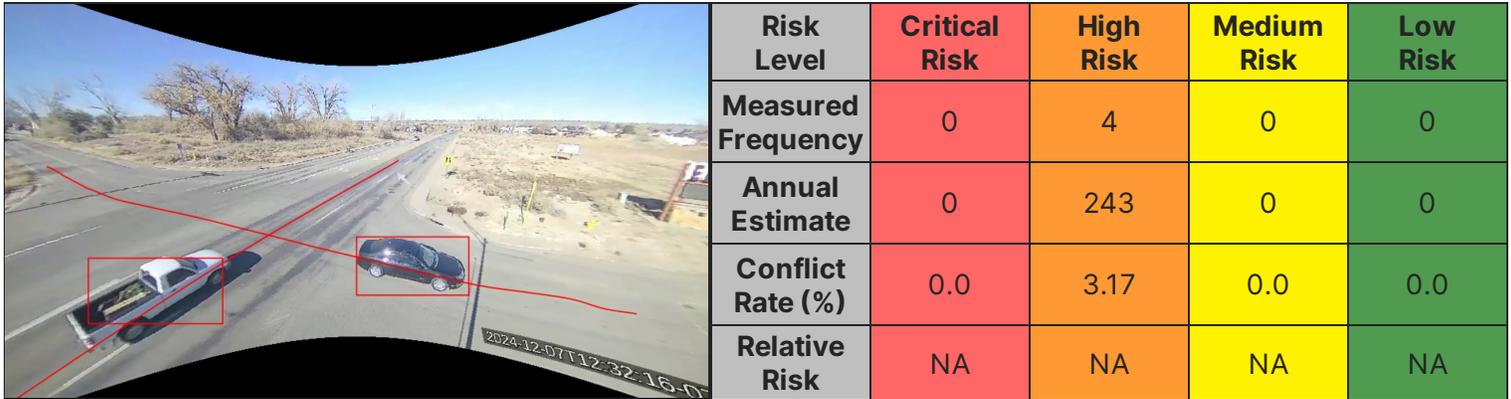
@ U.S. Highway 145 & Alamosa Road, 2024-Dec-7 to 2024-Dec-12





## East-Through Vehicle vs North-Through Vehicle

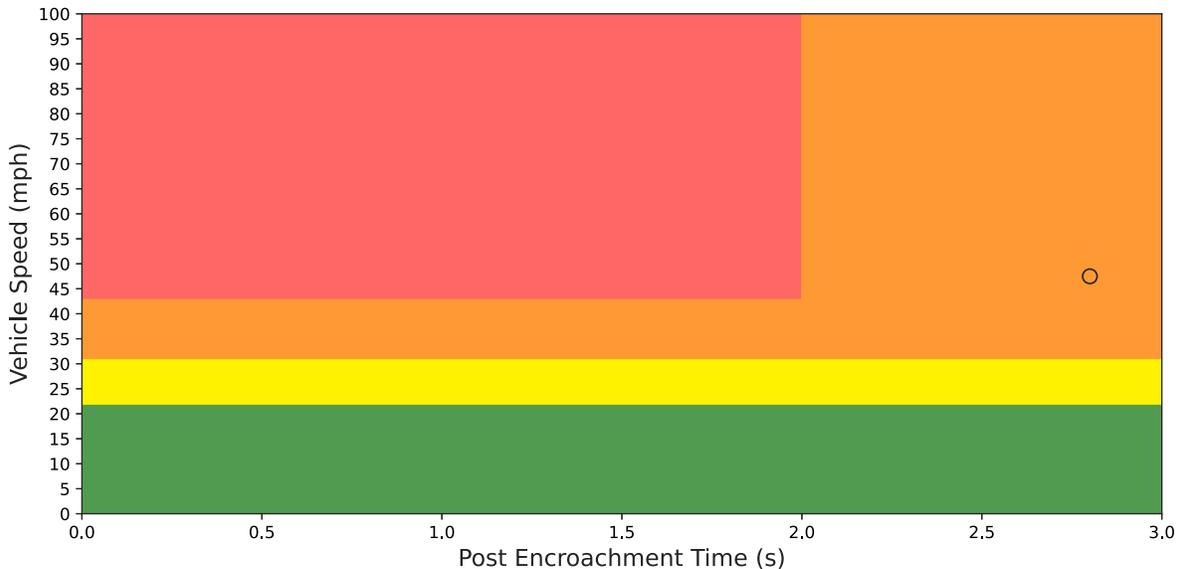
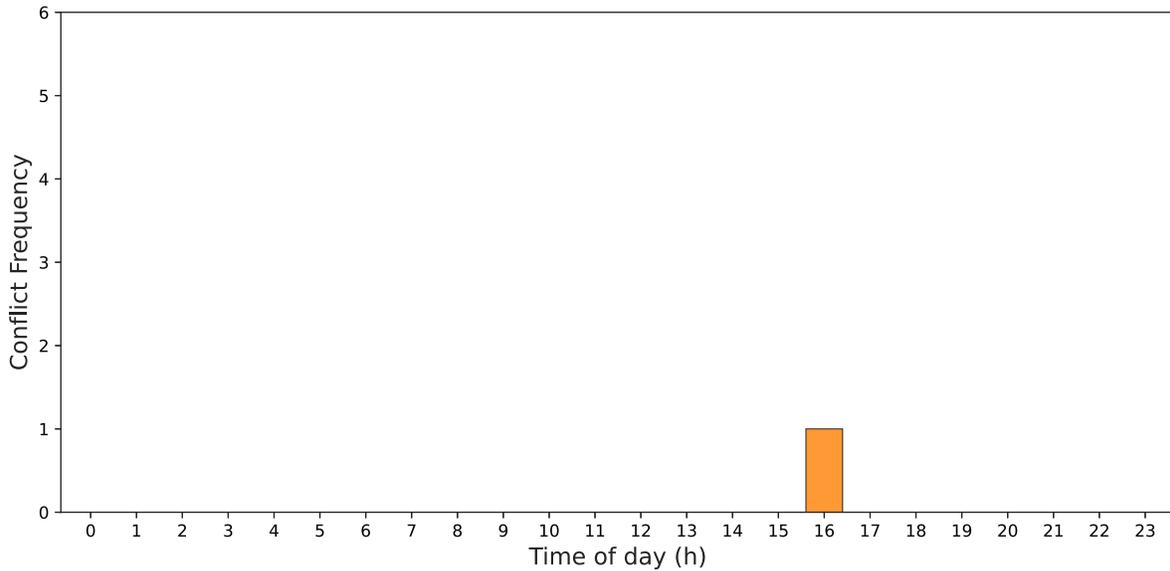
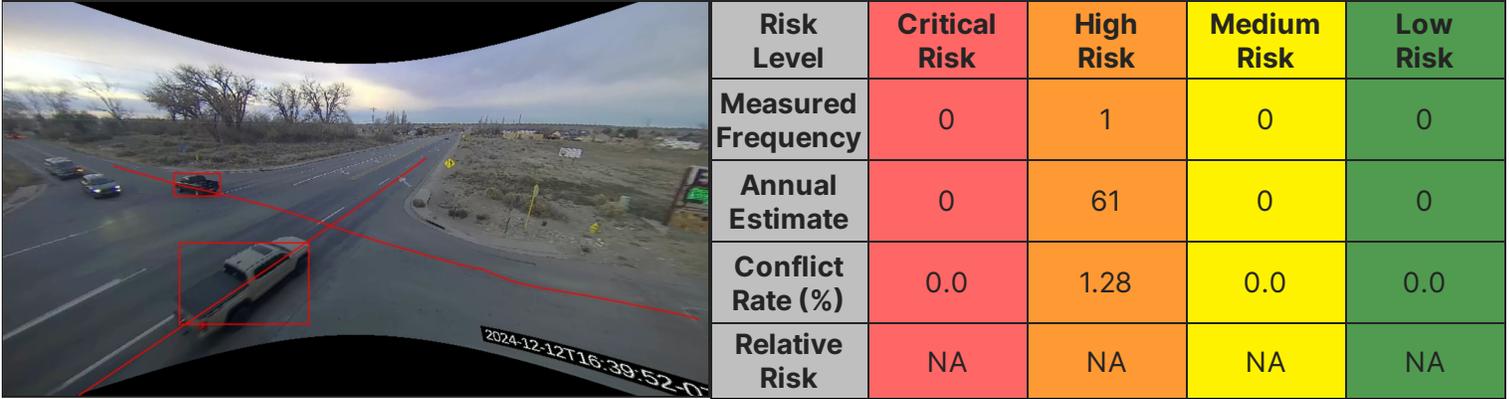
@ U.S. Highway 145 & Alamosa Road, 2024-Dec-7 to 2024-Dec-12





## West-Through Vehicle vs North-Through Vehicle

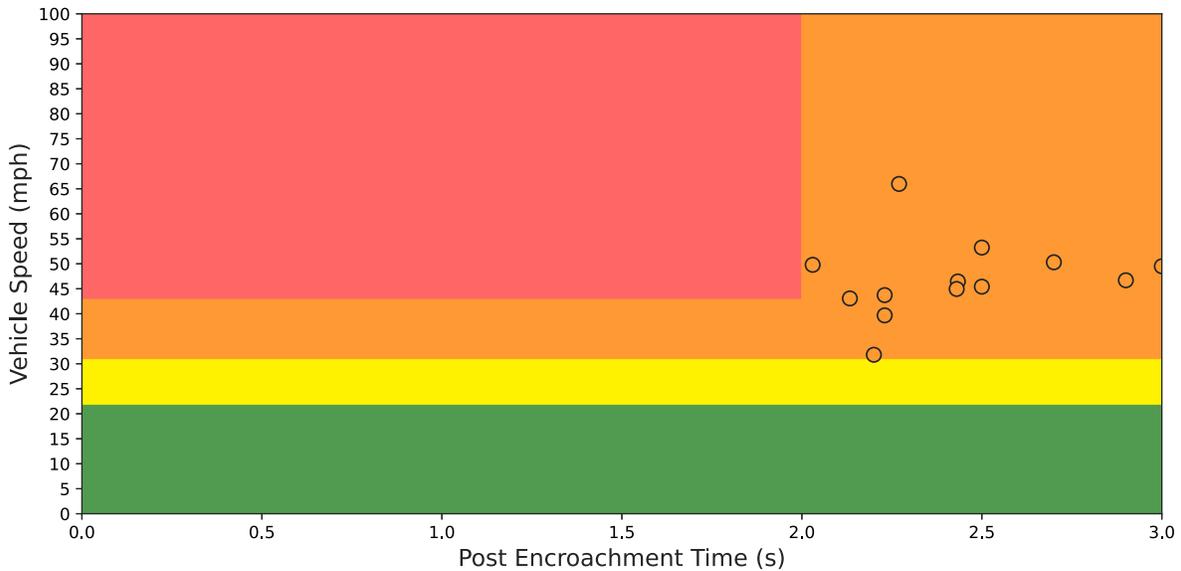
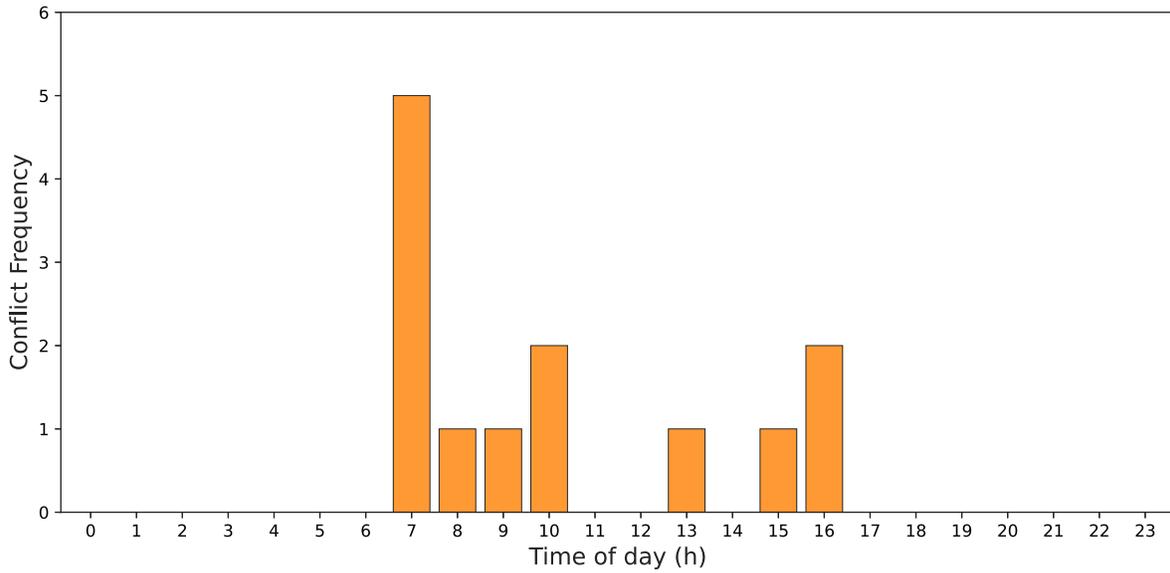
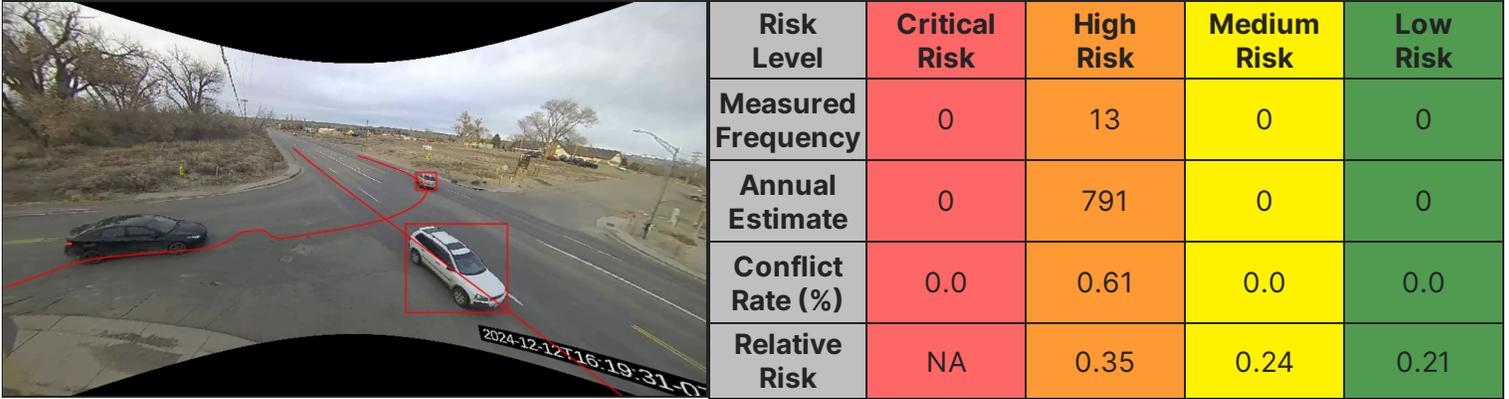
@ U.S. Highway 145 & Alamosa Road, 2024-Dec-7 to 2024-Dec-12





### East-Left Vehicle vs South-Through Vehicle

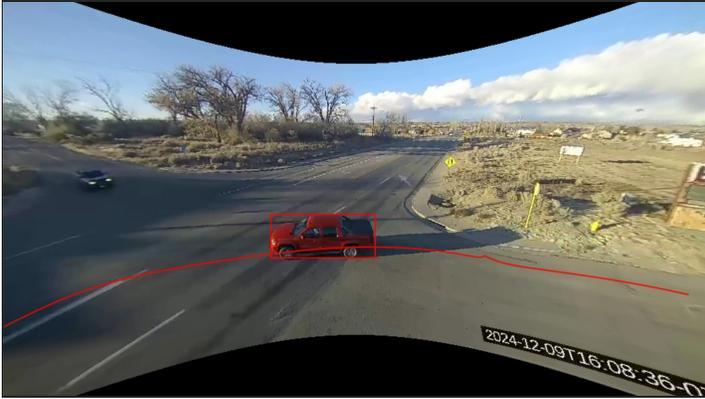
@ U.S. Highway 145 & Alamosa Road, 2024-Dec-7 to 2024-Dec-12



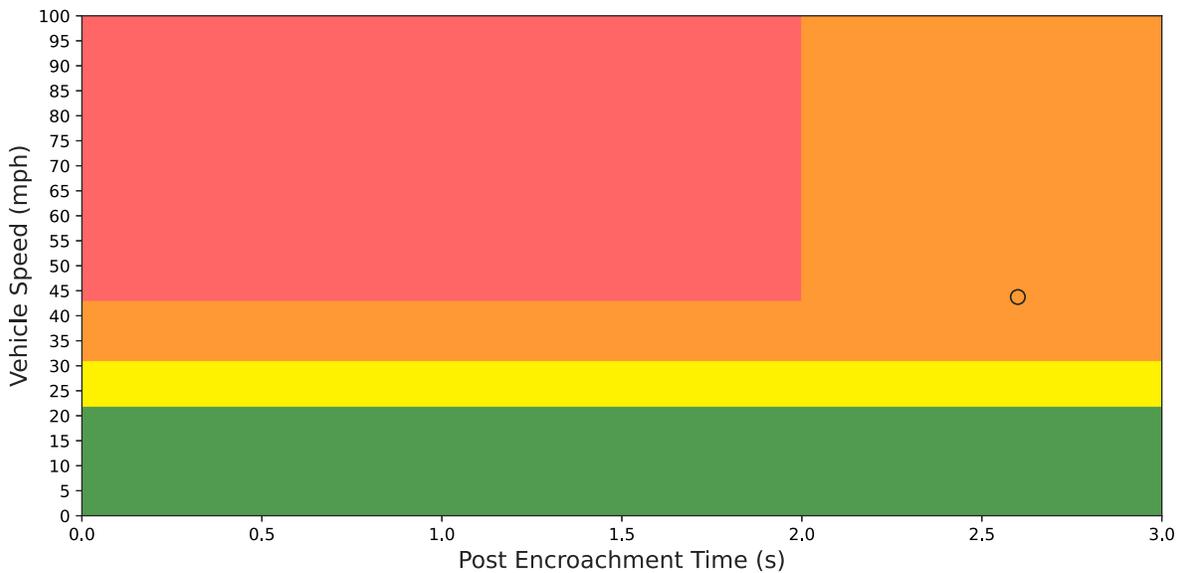
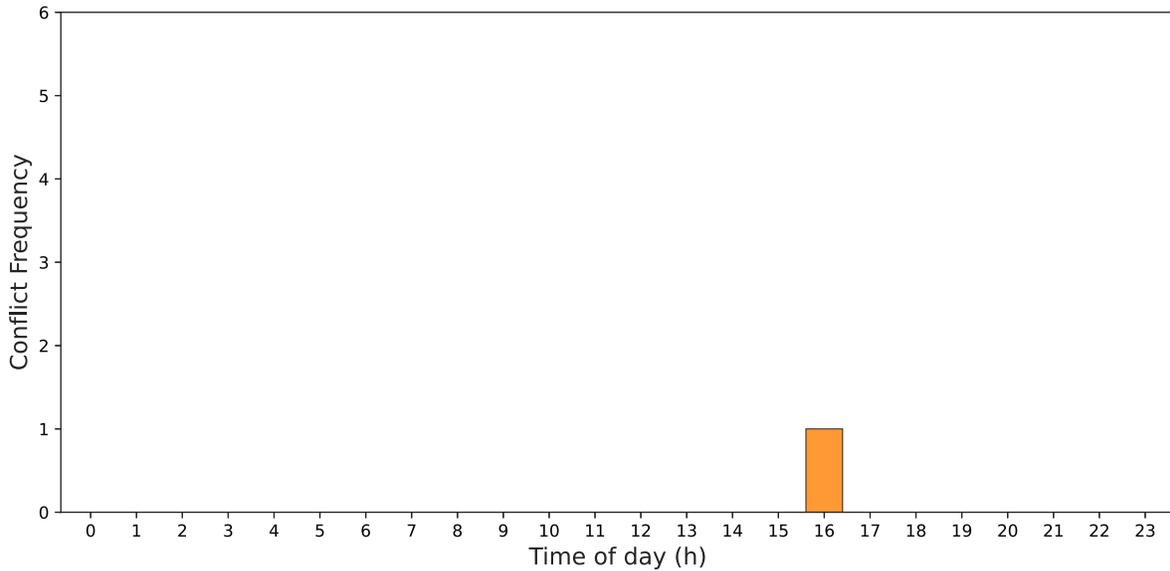


### West-Left Vehicle vs North-Through Vehicle

@ U.S. Highway 145 & Alamosa Road, 2024-Dec-7 to 2024-Dec-12



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	1	0	0
Annual Estimate	0	61	0	0
Conflict Rate (%)	0.0	0.54	0.0	0.0
Relative Risk	NA	0.31	0.22	0.18





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U.S. Highway 491 & Lebanon Road  
Cortez, Colorado  
Risk Diagnostic Report

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<b>West-Left Vehicle vs North-Through Vehicle</b>	<b>7</b>



## General Information

### Report Details

<b>Site</b>	U.S. Highway 491 & Lebanon Road, Cortez, Colorado
<b>Video Period</b>	2024-Nov-26 to 2024-Dec-1
<b>Video Length</b>	60 hours
<b>Report Notes</b>	Conflict data is provided for Nov.26-30 and Dec.01 @ 07:00-17:00. Only one hour of footage was usable from the NE angle camera on Nov.27 @ 07:00 - 08:00, northbound-left vs southbound-through conflict accuracy was affected. No VRU conflicts were found.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
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[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.trpro.2016.05.396>



## Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

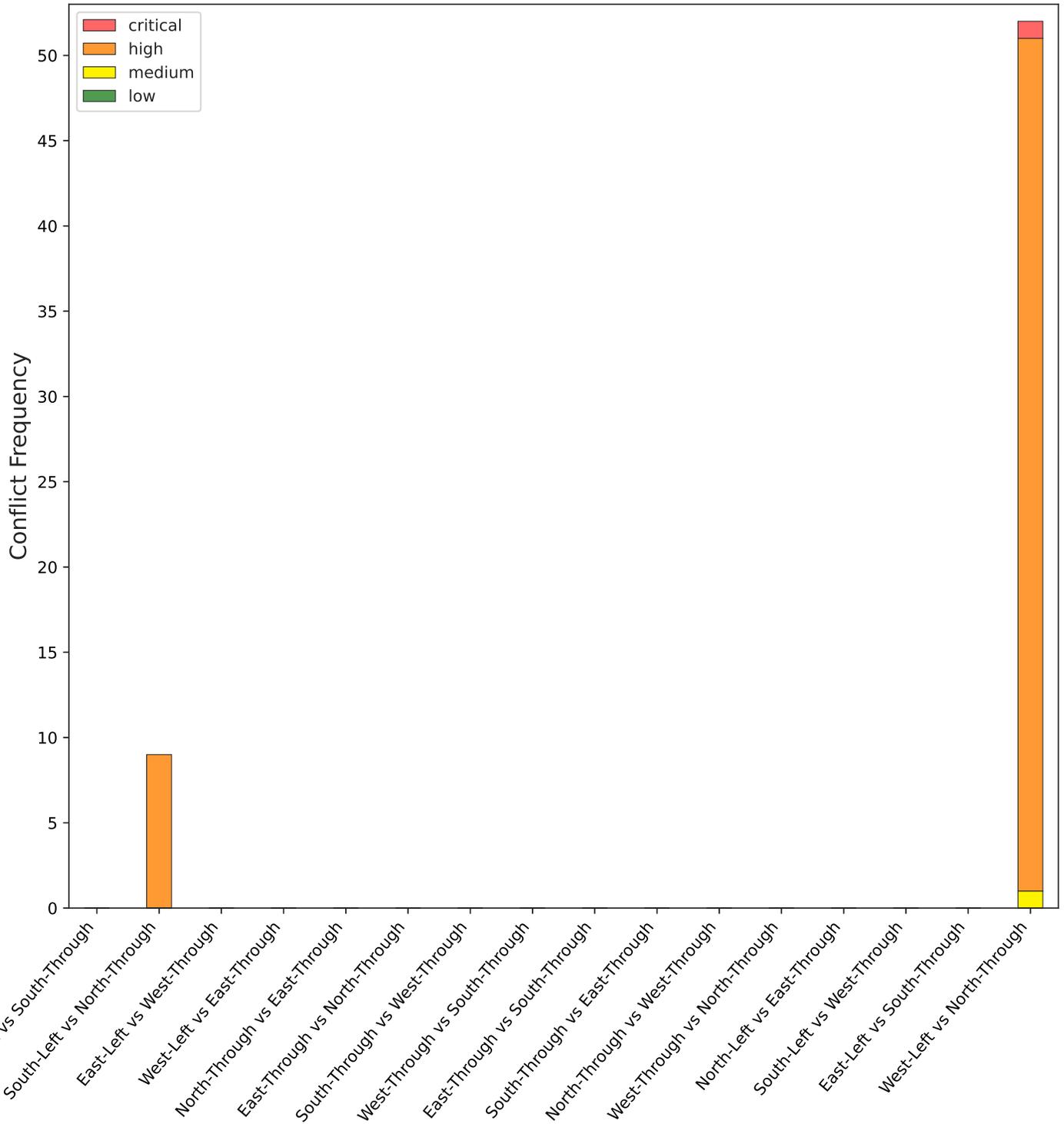


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	NM	NM	NM	NM
South-Left vs North-Through	0	0	9	0
East-Left vs West-Through	NM	NM	NM	NM
West-Left vs East-Through	NM	NM	NM	NM

### Right-Angle (Through Vehicle vs Through Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	NM	NM	NM	NM
East-Through vs North-Through	NM	NM	NM	NM
South-Through vs West-Through	NM	NM	NM	NM
West-Through vs South-Through	NM	NM	NM	NM
East-Through vs South-Through	NM	NM	NM	NM
South-Through vs East-Through	NM	NM	NM	NM
North-Through vs West-Through	NM	NM	NM	NM
West-Through vs North-Through	NM	NM	NM	NM

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	NM	NM	NM	NM
South-Left vs West-Through	NM	NM	NM	NM
East-Left vs South-Through	NM	NM	NM	NM
West-Left vs North-Through	0	1	50	1

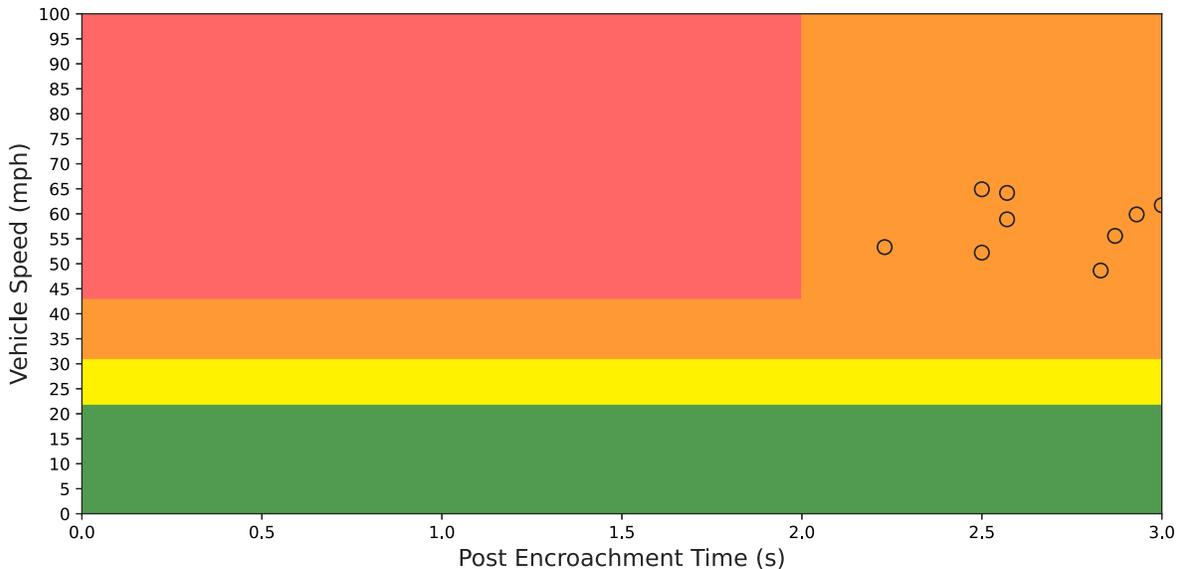
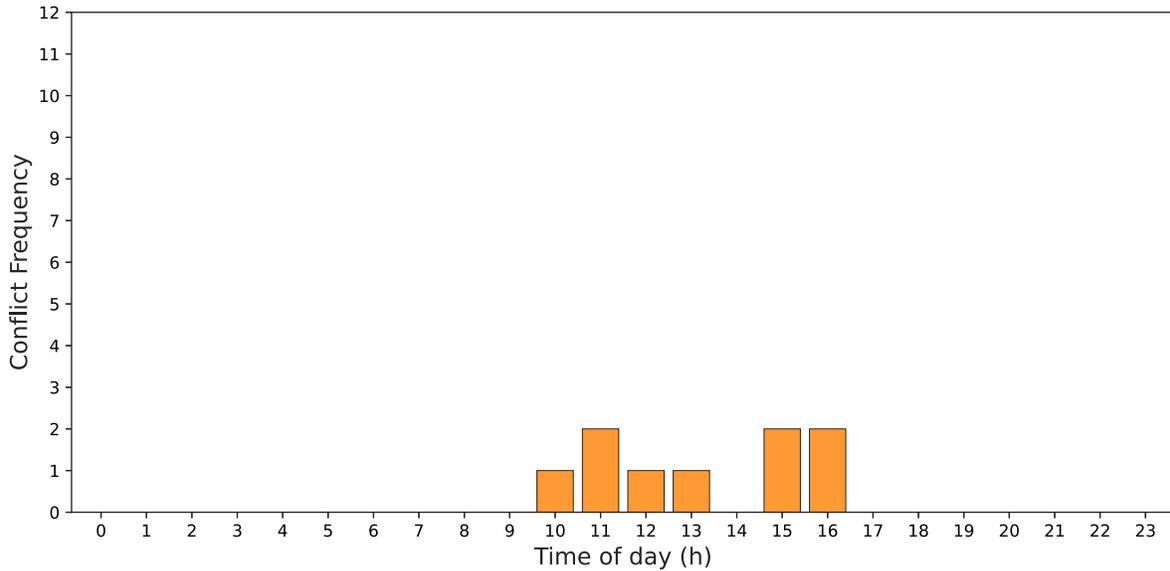
NM = Not Measured



### South-Left Vehicle vs North-Through Vehicle

@ U.S. Highway 491 & Lebanon Road, 2024-Nov-26 to 2024-Dec-1

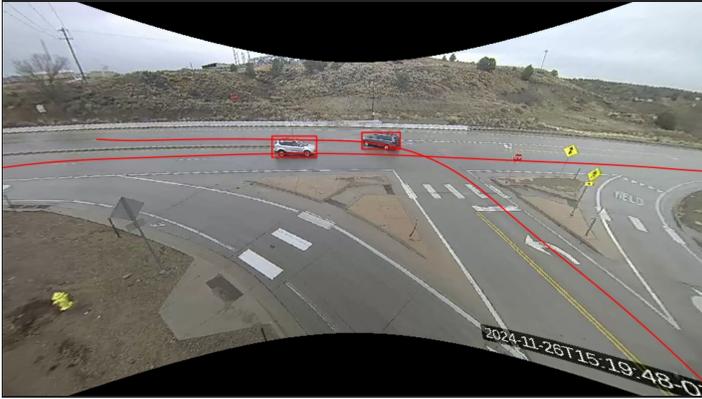
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	9	0	0
	Annual Estimate	0	548	0	0
	Conflict Rate (%)	0.0	2.94	0.0	0.0
	Relative Risk	NA	NA	NA	NA



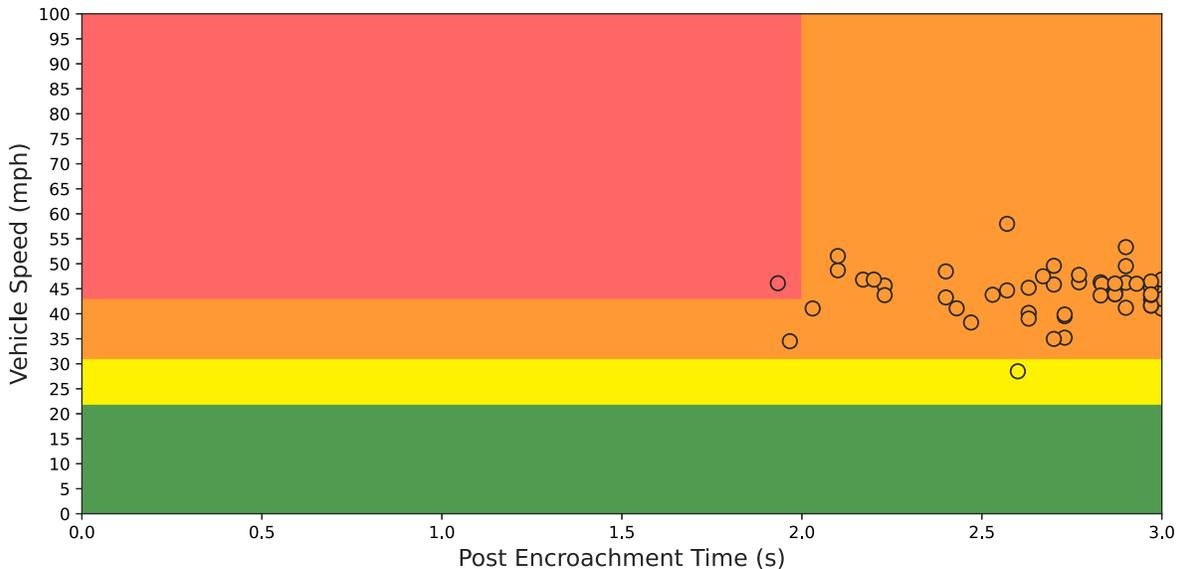
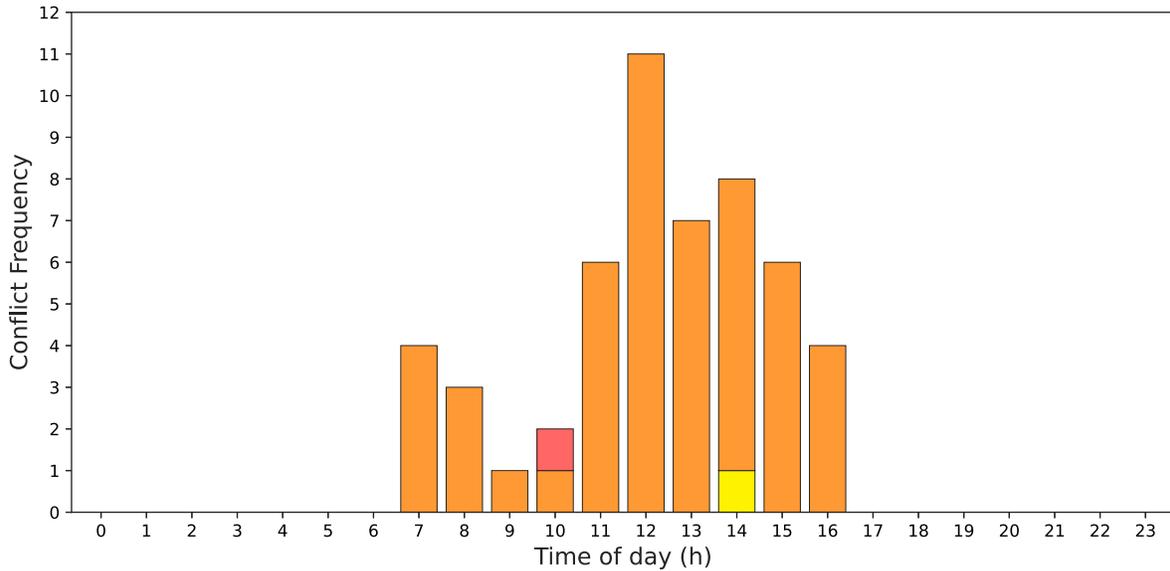


## West-Left Vehicle vs North-Through Vehicle

@ U.S. Highway 491 & Lebanon Road, 2024-Nov-26 to 2024-Dec-1



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	1	50	1	0
Annual Estimate	61	3042	61	0
Conflict Rate (%)	0.06	2.98	0.06	0.0
Relative Risk	NA	NA	NA	NA





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Sligo Street and U.S. Highway 160  
Cortez, Colorado  
Risk Diagnostic Report

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<b>South-Through Vehicle vs East-Through Vehicle</b>	<b>13</b>
<b>North-Left Vehicle vs East-Through Vehicle</b>	<b>14</b>
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## General Information

### Report Details

<b>Site</b>	Sligo Street and U.S. Highway 160, Cortez, Colorado
<b>Video Period</b>	2025-Jan-31 to 2025-Feb-5
<b>Video Length</b>	60 hours
<b>Report Notes</b>	Conflict data is provided for Jan. 31 and Feb. 01-05 @ 07:30-17:30. VRU Conflict Rates and Relative Risks were omitted due to limited TMC for the 1 day recording period analysed. Conflict analysis may have been affected due to Camera Stability, Position, and Occlusion from traffic poles.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
<b>Vulnerable Road User Safe Systems Risk Indicator (VRUss)</b>	VRUss is a categorical risk indicator that uses an adapted version of Post Encroachment Time (PET) and the vehicle impact speed to determine the nearness and probability of a severe injury collision (MAIS 3+) using biomechanical injury thresholds for vehicle-pedestrian collisions [1]. This indicator is used to measure risk to VRUs.

[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256.  
<https://doi.org/10.1016/j.trpro.2016.05.396>



### Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

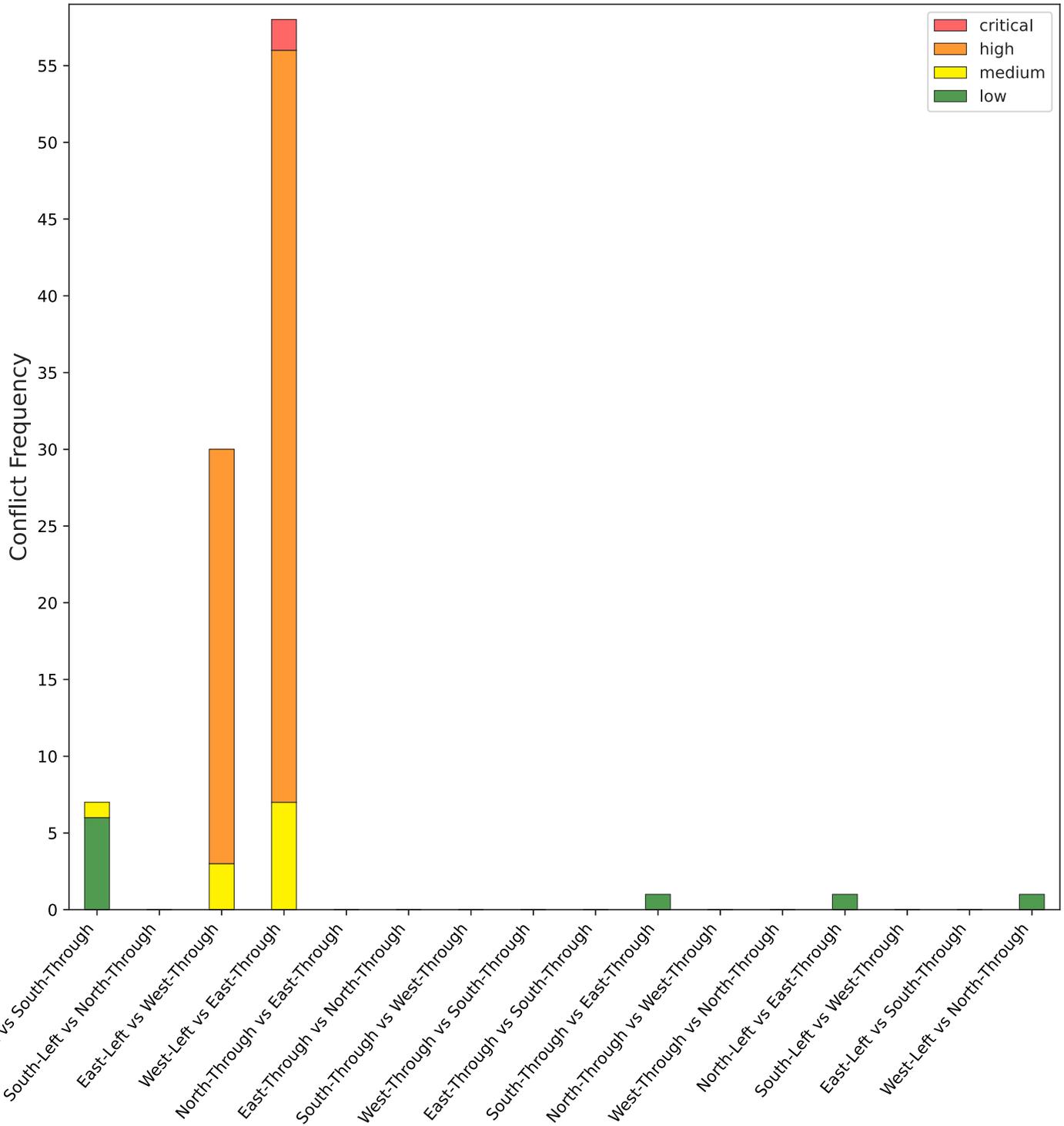


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	6	1	0	0
South-Left vs North-Through	0	0	0	0
East-Left vs West-Through	0	3	27	0
West-Left vs East-Through	0	7	49	2

### Right-Angle (Through Vehicle vs Through Vehicle)

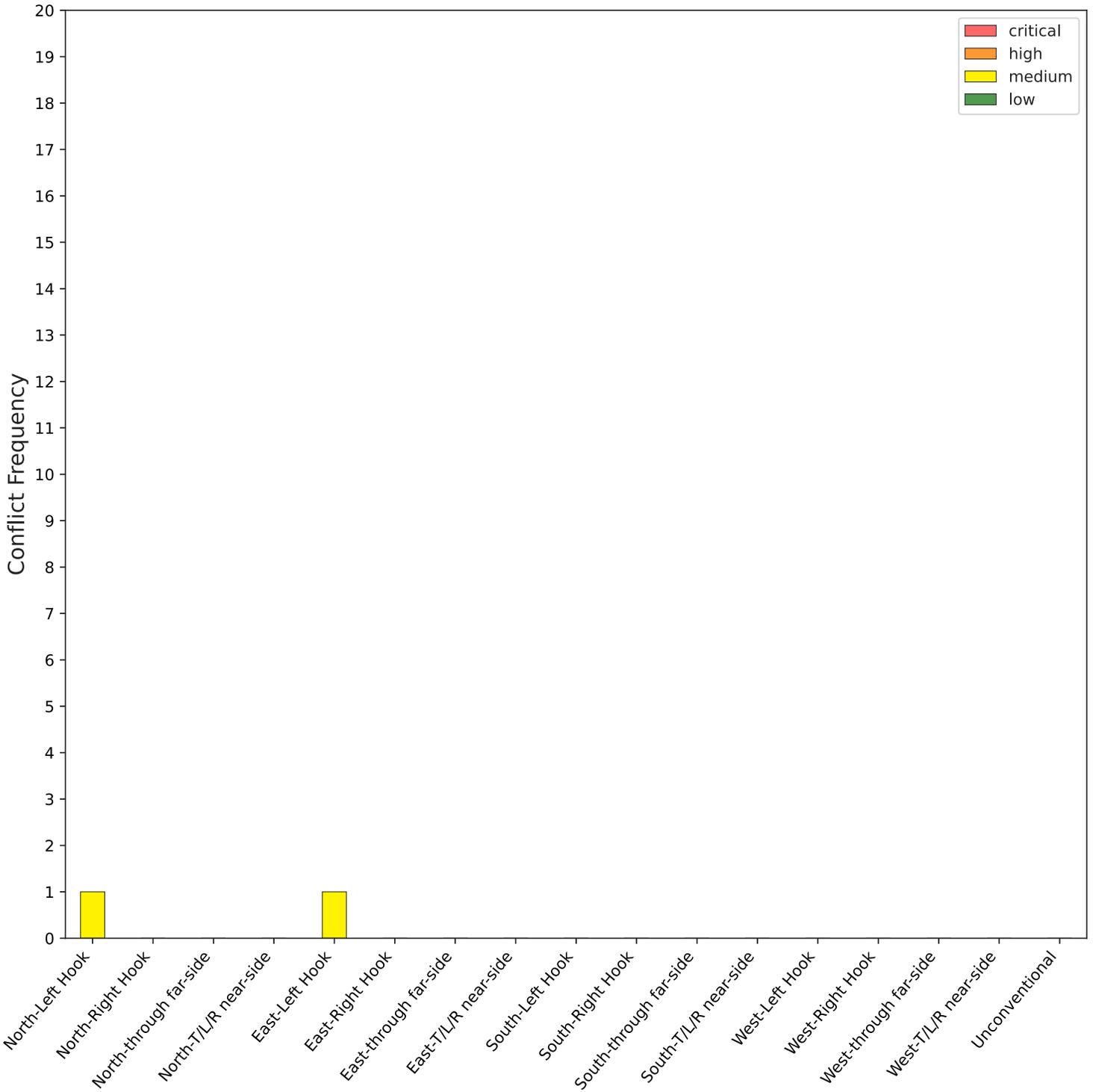
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	0	0	0	0
East-Through vs North-Through	0	0	0	0
South-Through vs West-Through	0	0	0	0
West-Through vs South-Through	0	0	0	0
East-Through vs South-Through	0	0	0	0
South-Through vs East-Through	1	0	0	0
North-Through vs West-Through	0	0	0	0
West-Through vs North-Through	0	0	0	0

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	1	0	0	0
South-Left vs West-Through	0	0	0	0
East-Left vs South-Through	0	0	0	0
West-Left vs North-Through	1	0	0	0



## Results Summary – Cyclist Safe Systems Risk Indicator





## Results Summary – Cyclist Safe Systems Risk Indicator

### Cyclist vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	0	1	0	0
North-Right Hook	0	0	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	0	0	0	0

### Cyclist vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	1	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	0	0	0	0

### Cyclist vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	0	0	0
South-Right Hook	0	0	0	0
South-through far-side	0	0	0	0
South-T/L/R near-side	0	0	0	0

### Cyclist vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	0	0	0	0
West-Right Hook	0	0	0	0
West-through far-side	0	0	0	0
West-T/L/R near-side	0	0	0	0

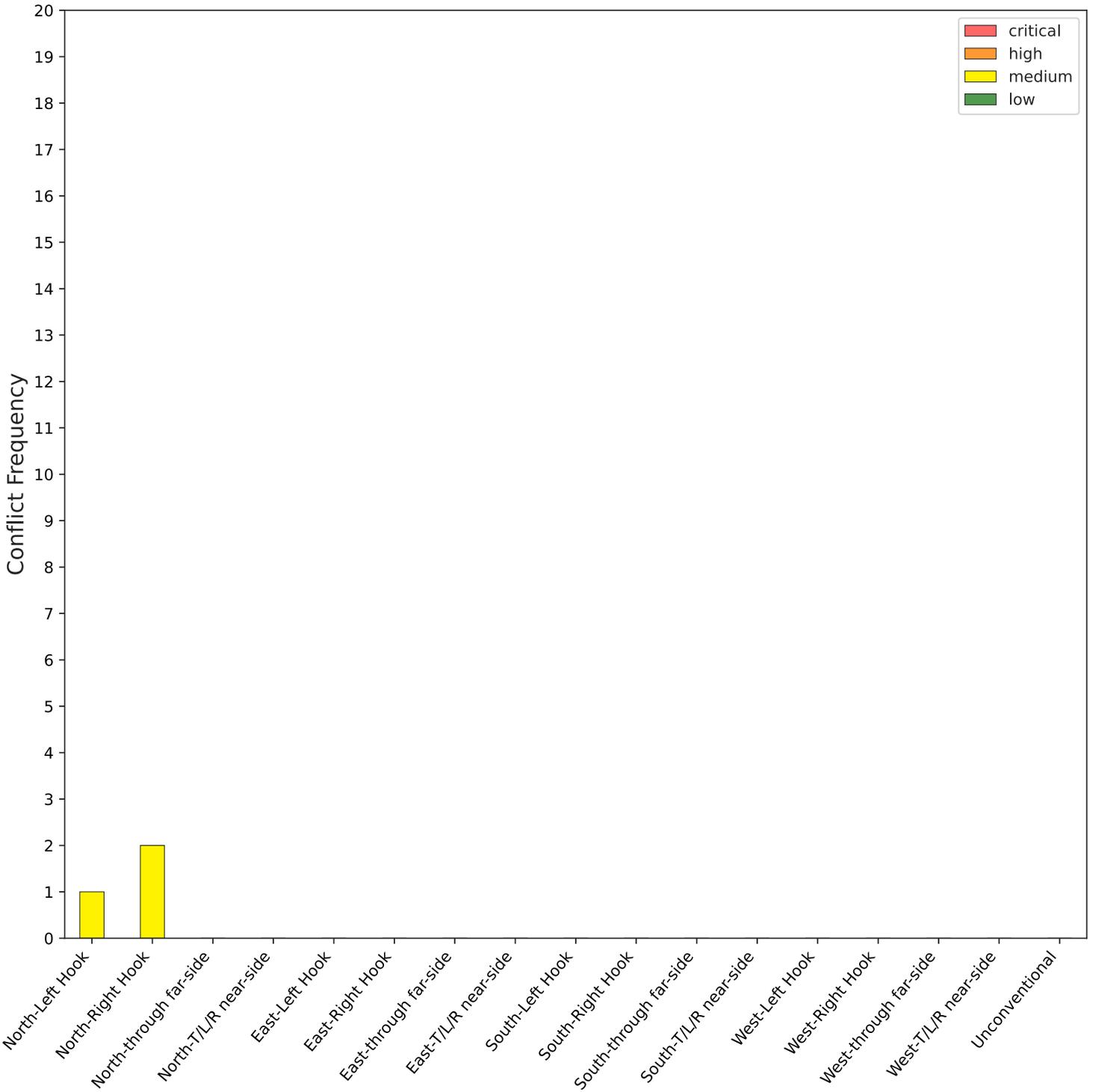
### Unconventional Cyclist Movement vs Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	NM	NM	NM	NM

NM = Not Measured



## Results Summary – Pedestrian Safe Systems Risk Indicator





## Results Summary – Pedestrian Safe Systems Risk Indicator

### Pedestrian vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	0	1	0	0
North-Right Hook	0	2	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	0	0	0	0

### Pedestrian vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	0	0	0	0

### Pedestrian vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	0	0	0
South-Right Hook	0	0	0	0
South-through far-side	0	0	0	0
South-T/L/R near-side	0	0	0	0

### Pedestrian vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	0	0	0	0
West-Right Hook	0	0	0	0
West-through far-side	0	0	0	0
West-T/L/R near-side	0	0	0	0

### Unconventional Pedestrian Movement vs Vehicle Conflicts

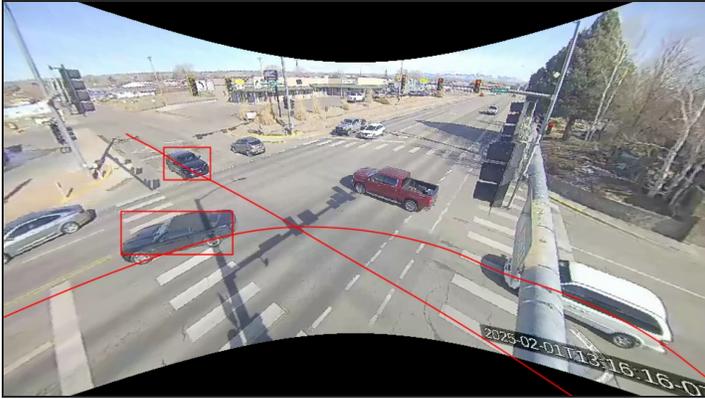
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	NM	NM	NM	NM

NM = Not Measured

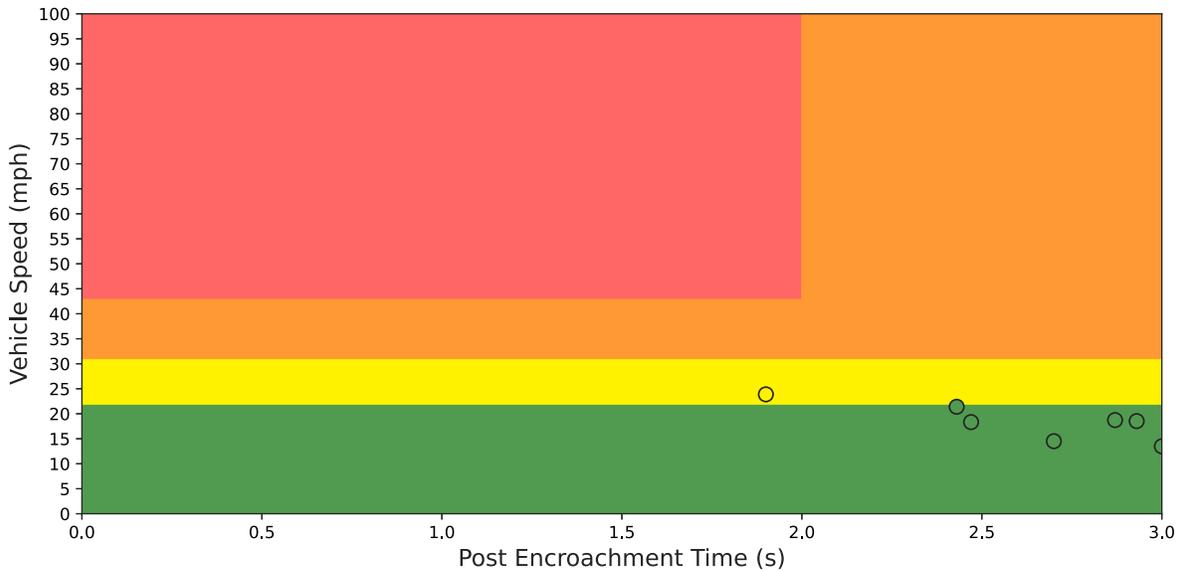
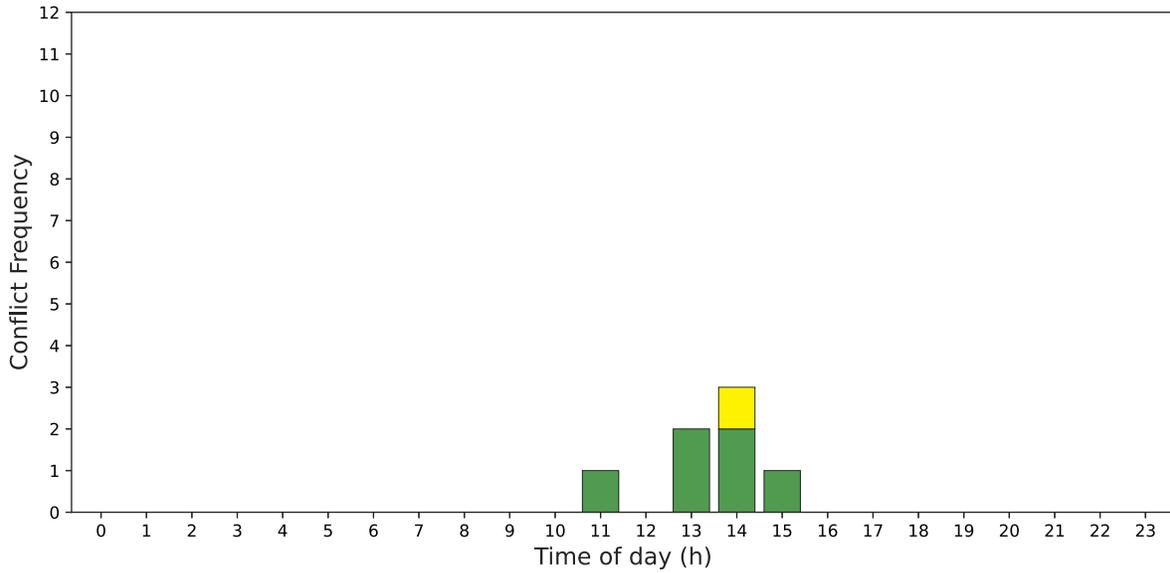


## North-Left Vehicle vs South-Through Vehicle

@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5



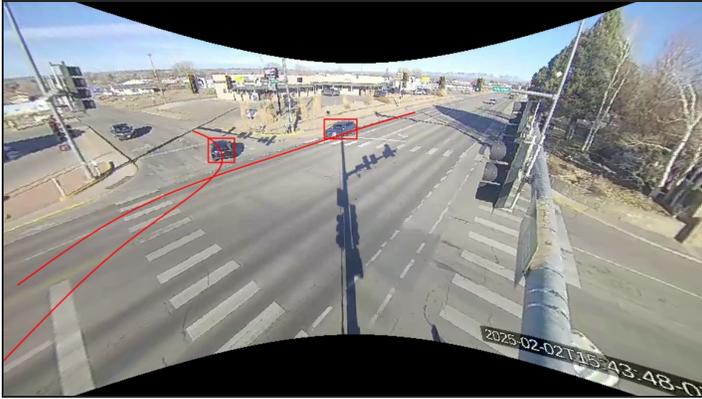
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	6
Annual Estimate	0	0	61	365
Conflict Rate (%)	0.0	0.0	0.01	0.06
Relative Risk	NA	0.0	0.01	0.04

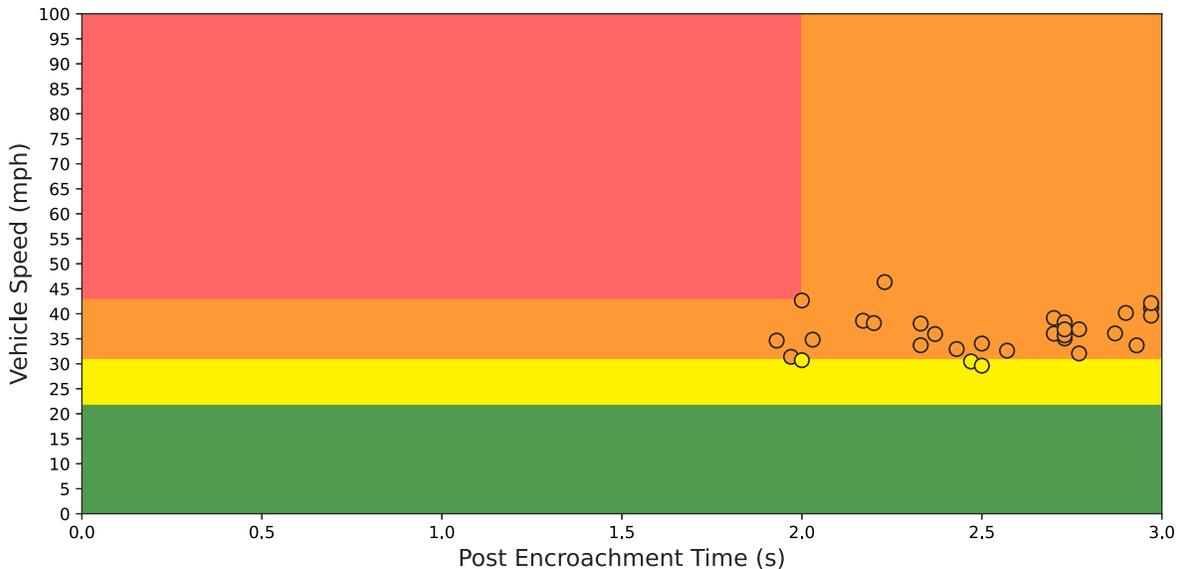
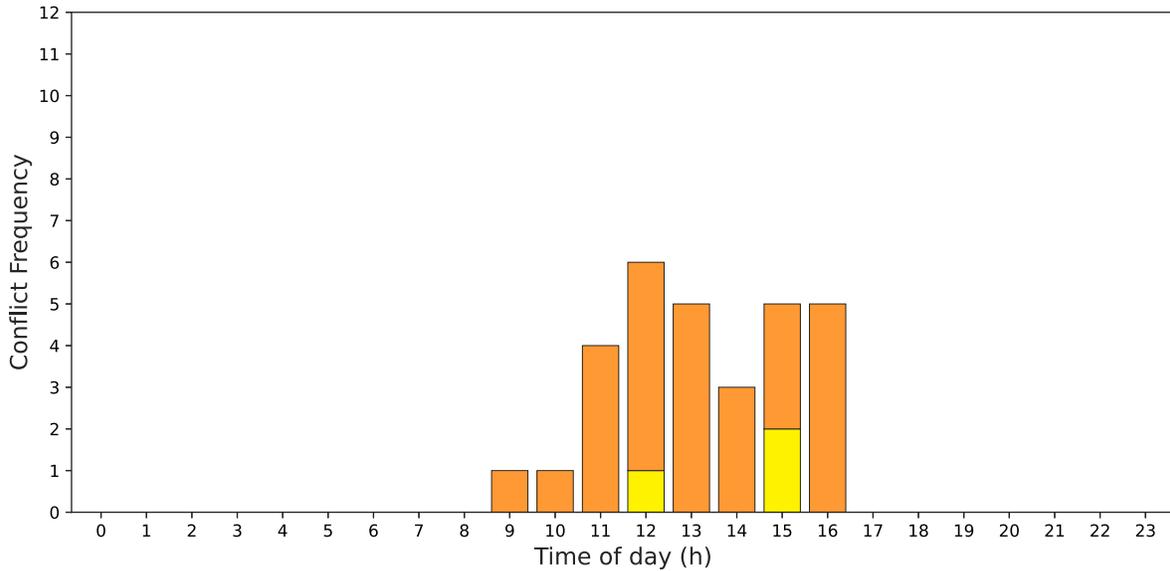




### East-Left Vehicle vs West-Through Vehicle

@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5

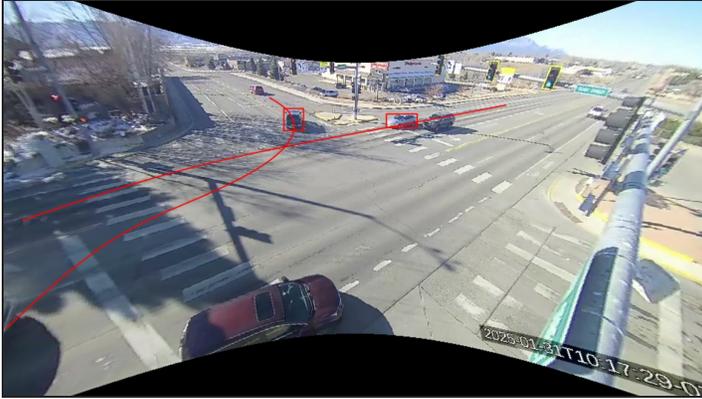
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	27	3	0
	Annual Estimate	0	1642	182	0
	Conflict Rate (%)	0.0	5.06	0.56	0.0
	Relative Risk	NA	5.27	3.72	2.95

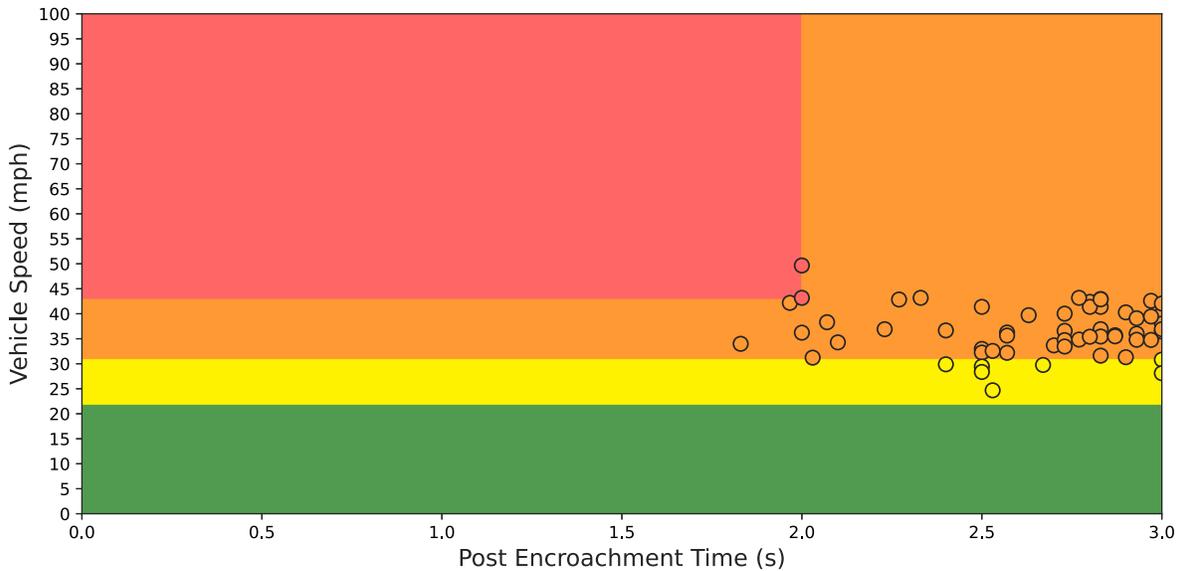
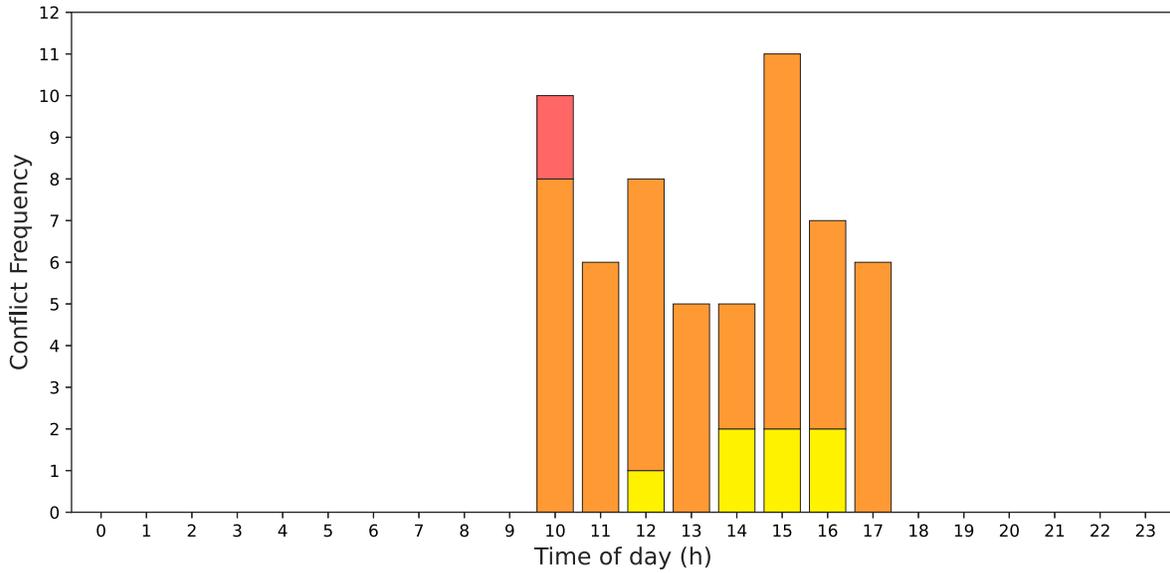




## West-Left Vehicle vs East-Through Vehicle

@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5

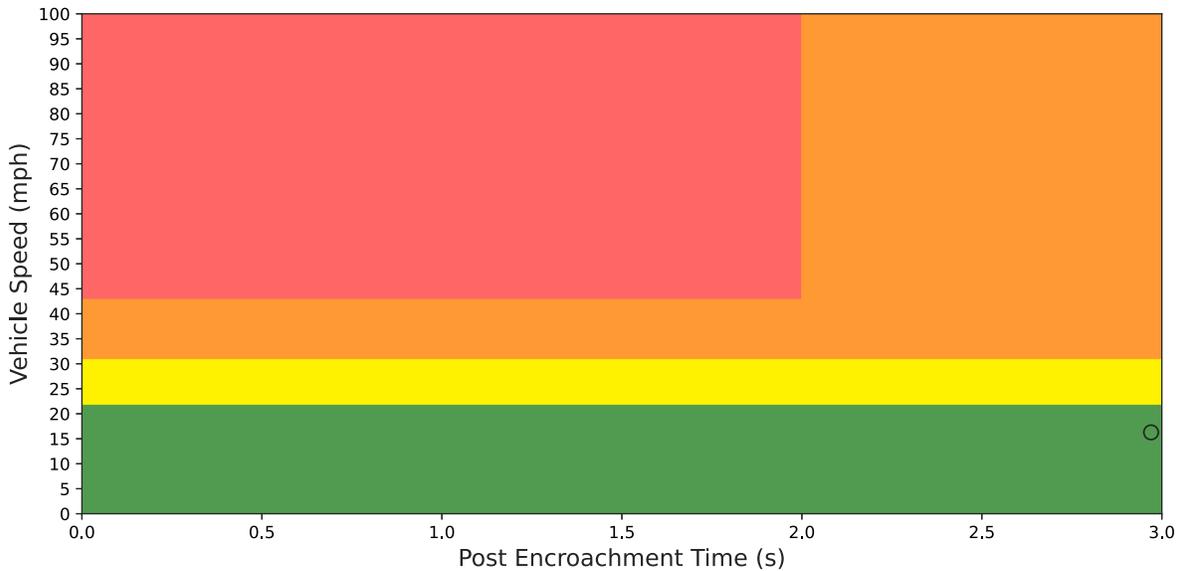
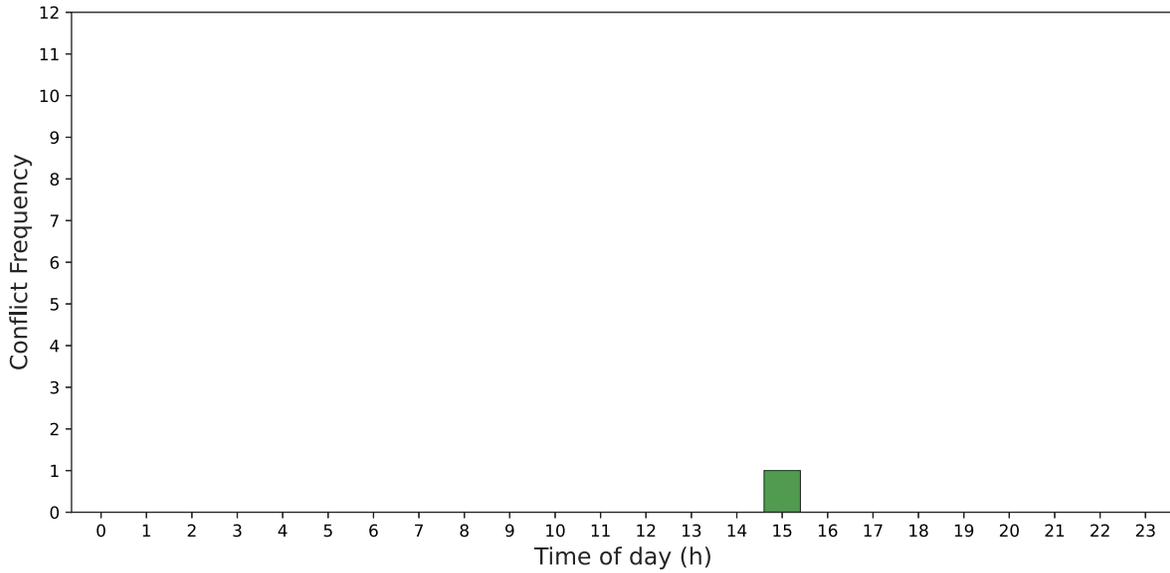
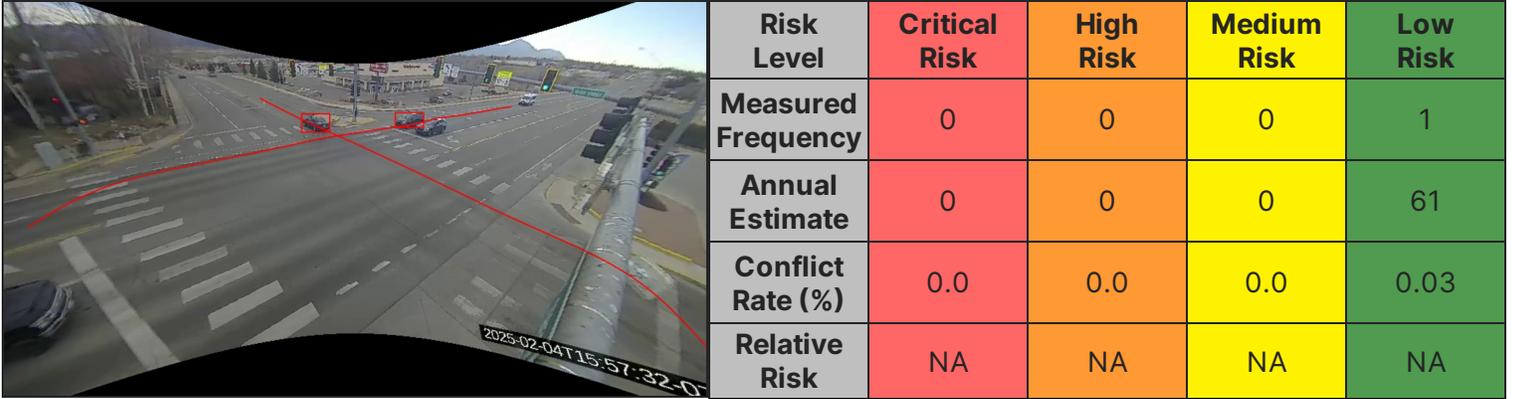
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	2	49	7	0
	Annual Estimate	122	2981	426	0
	Conflict Rate (%)	0.09	2.11	0.3	0.0
	Relative Risk	NA	2.29	1.66	1.31





## South-Through Vehicle vs East-Through Vehicle

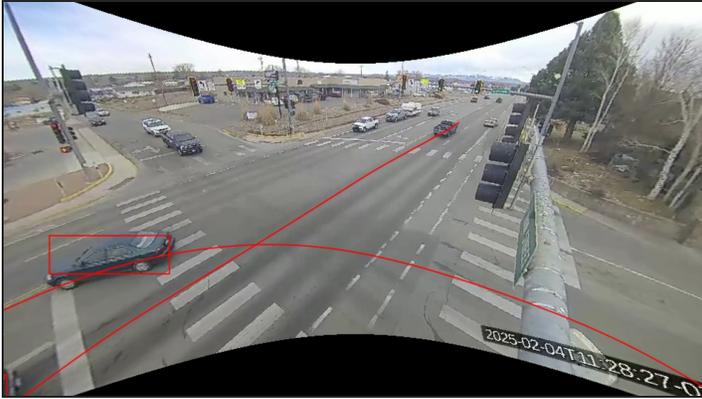
@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5



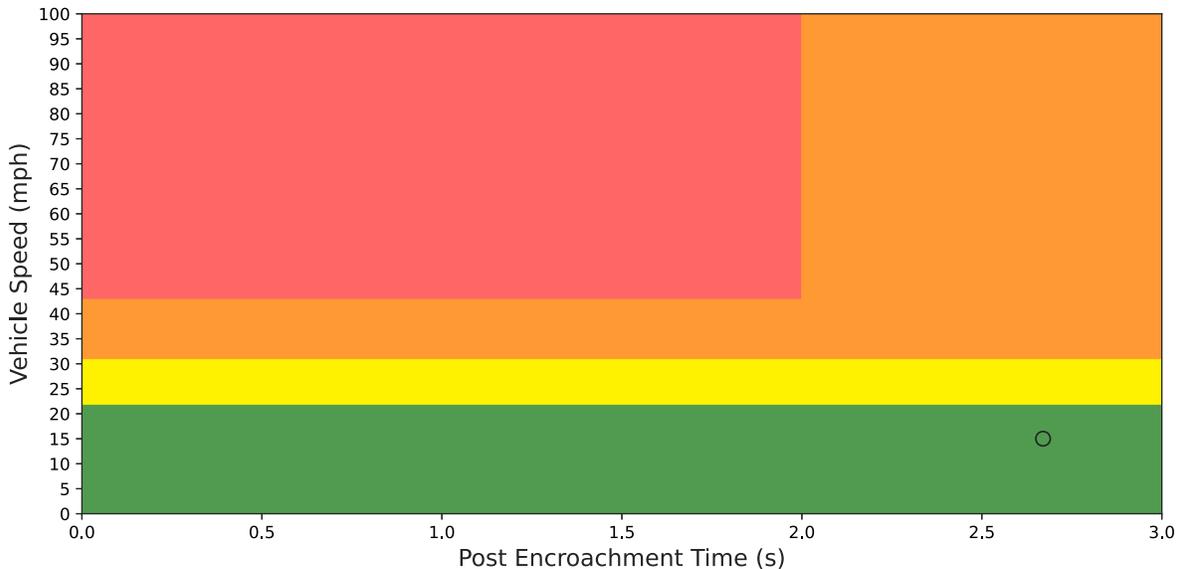
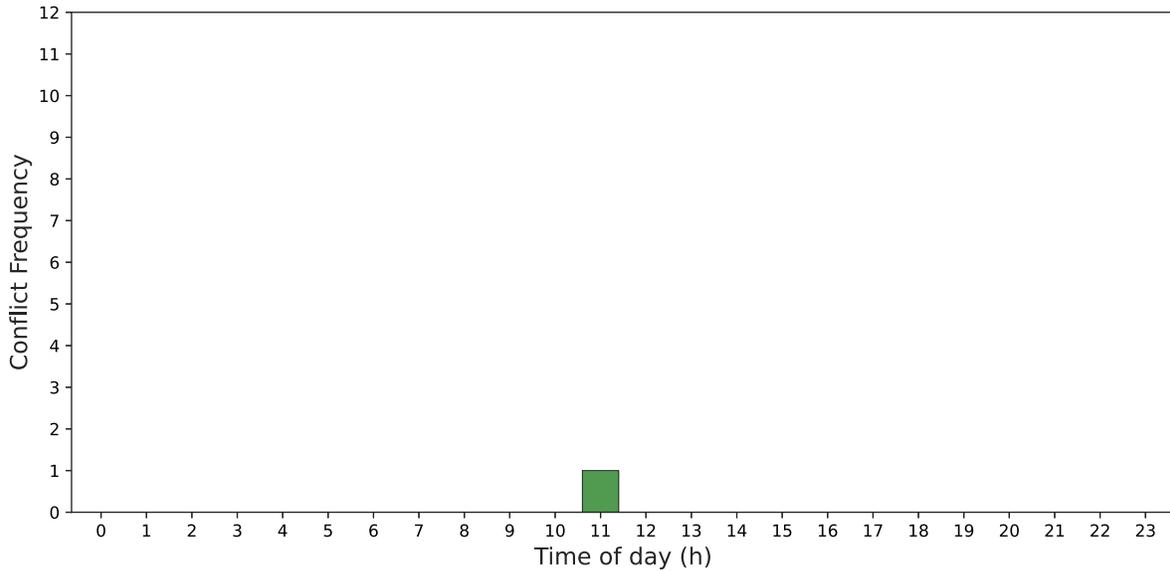


### North-Left Vehicle vs East-Through Vehicle

@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5



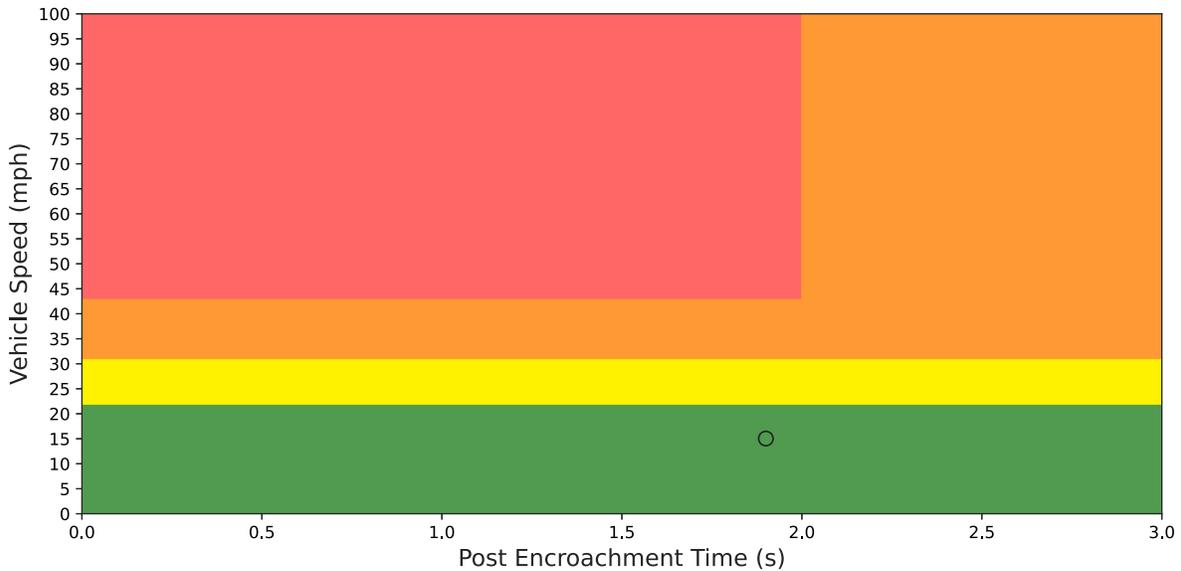
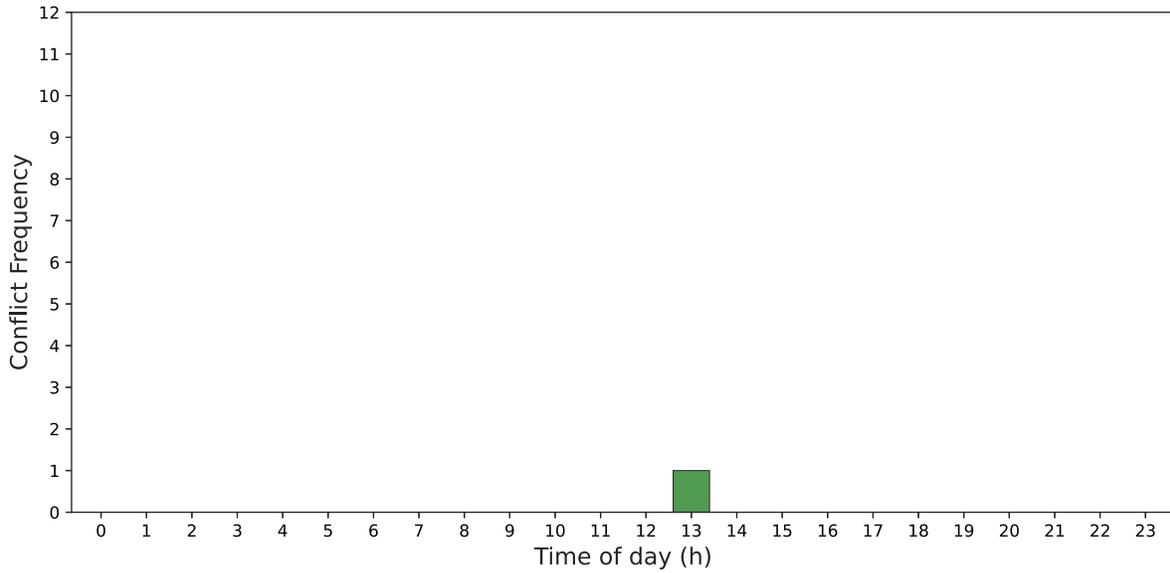
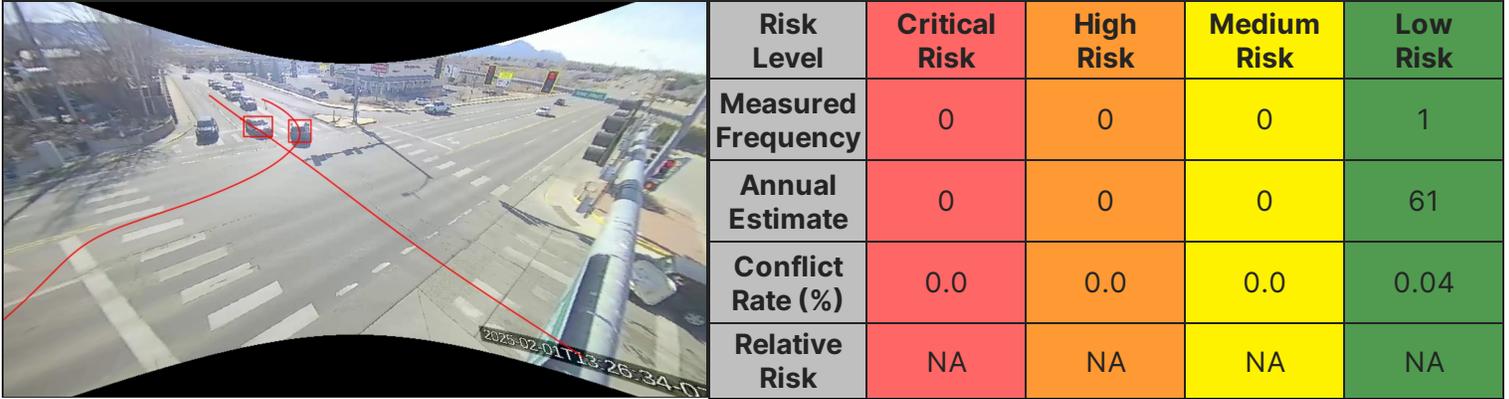
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	0.01
Relative Risk	NA	NA	NA	NA





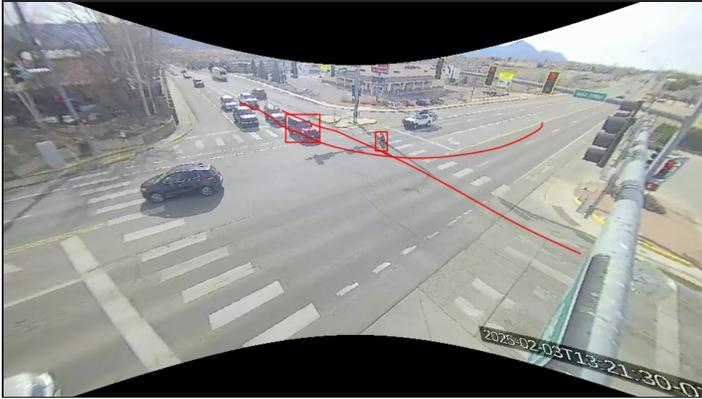
## West-Left Vehicle vs North-Through Vehicle

@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5

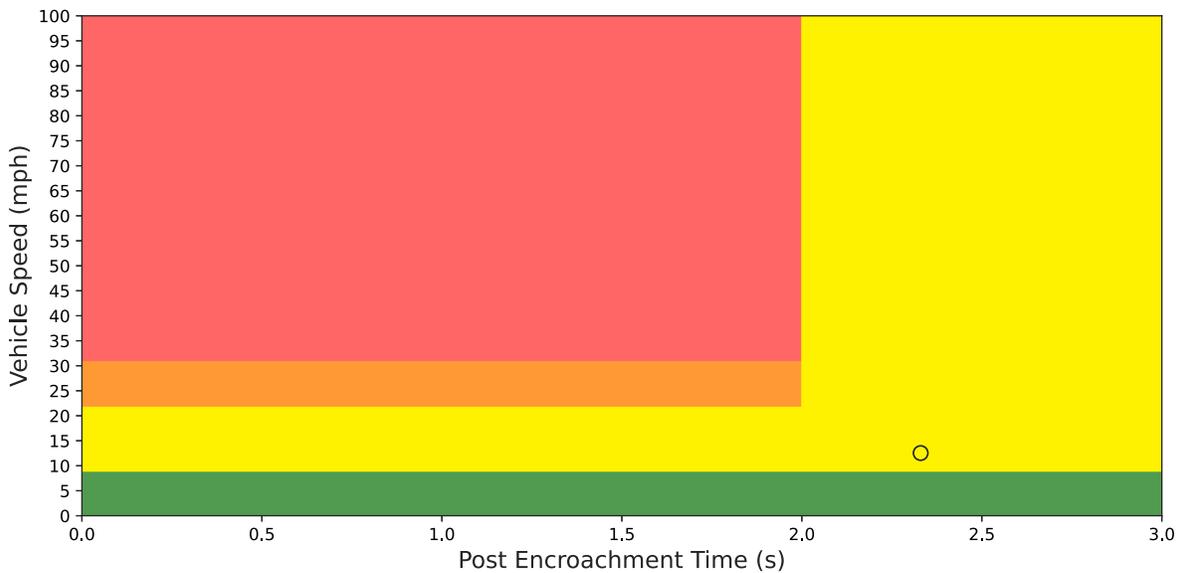
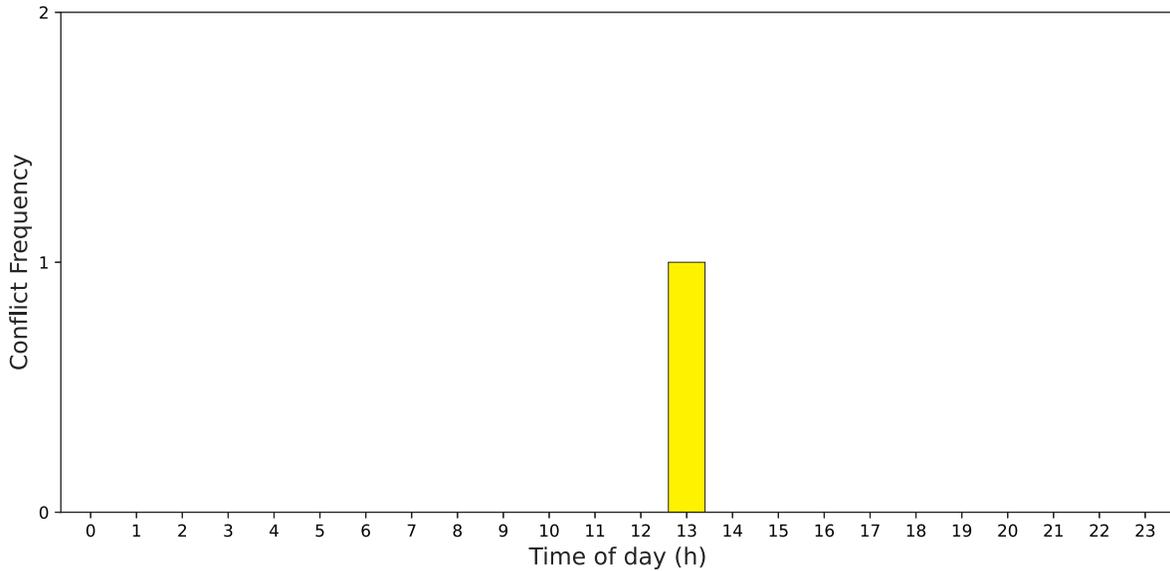




**North-Left Vehicle vs Cyclist on West Side (North-Left Hook)**  
@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5



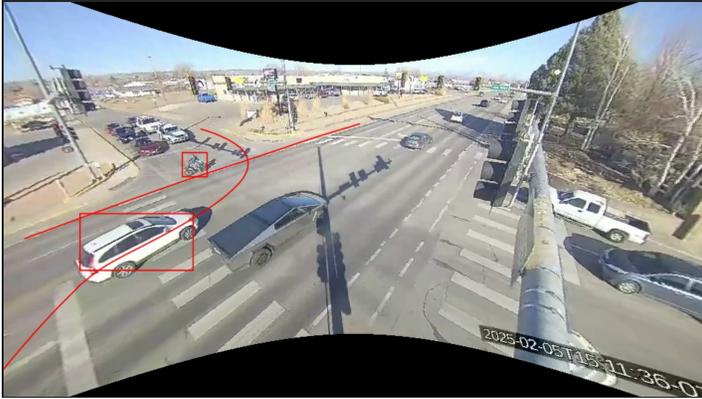
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA



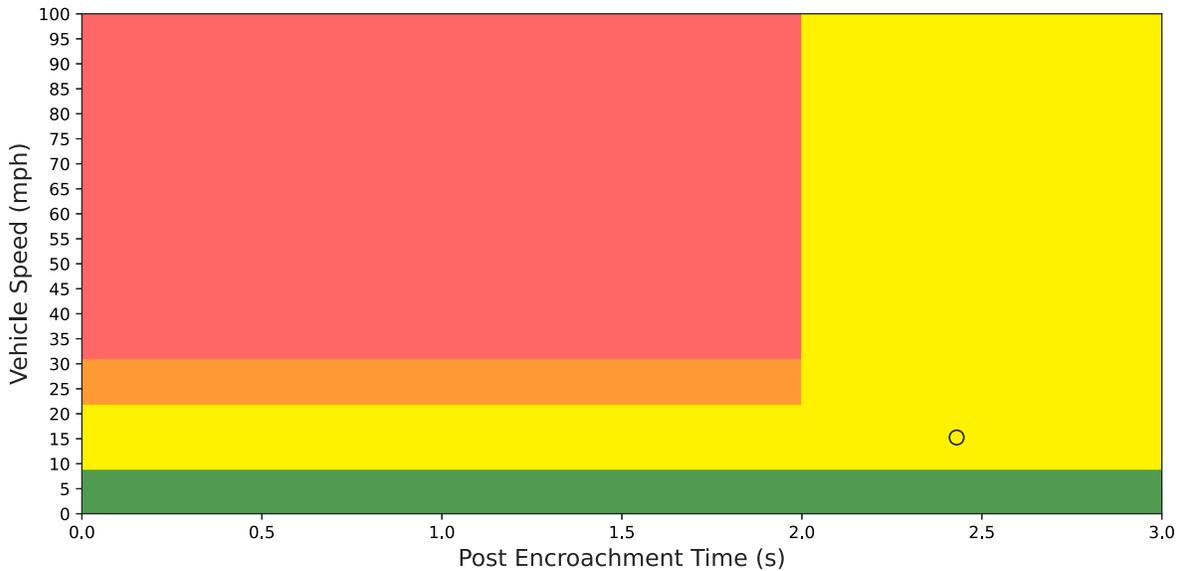
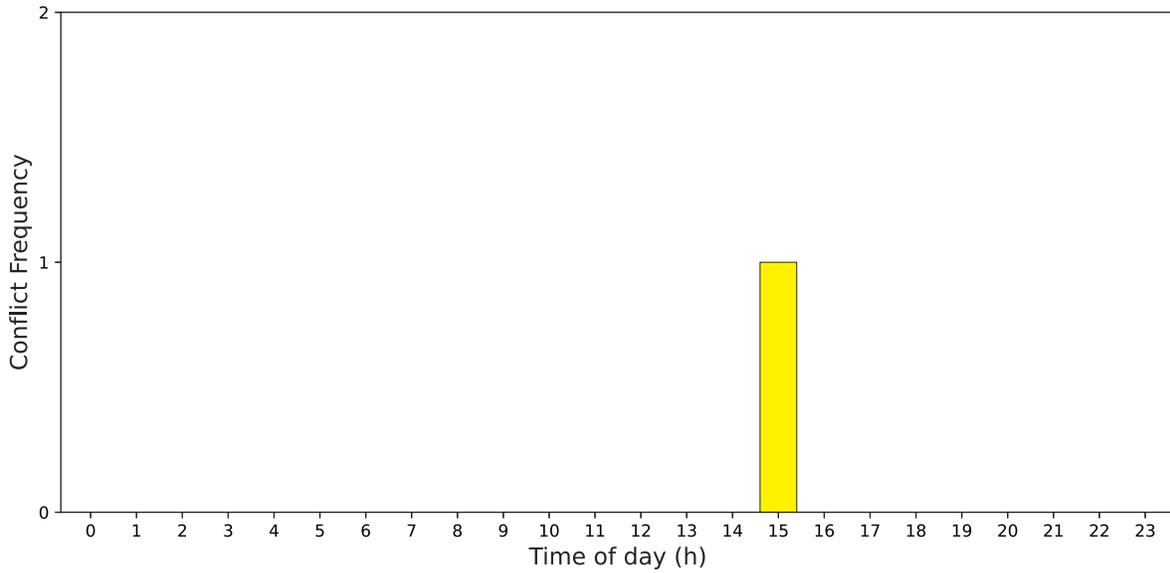


## East-Left Vehicle vs Cyclist on North Side (East-Left Hook)

@ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5

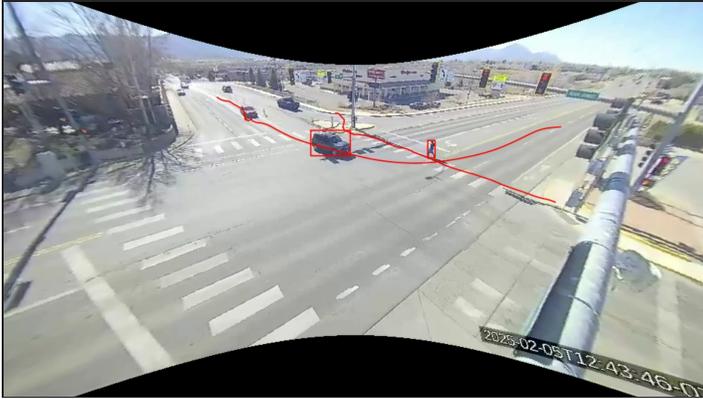


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA

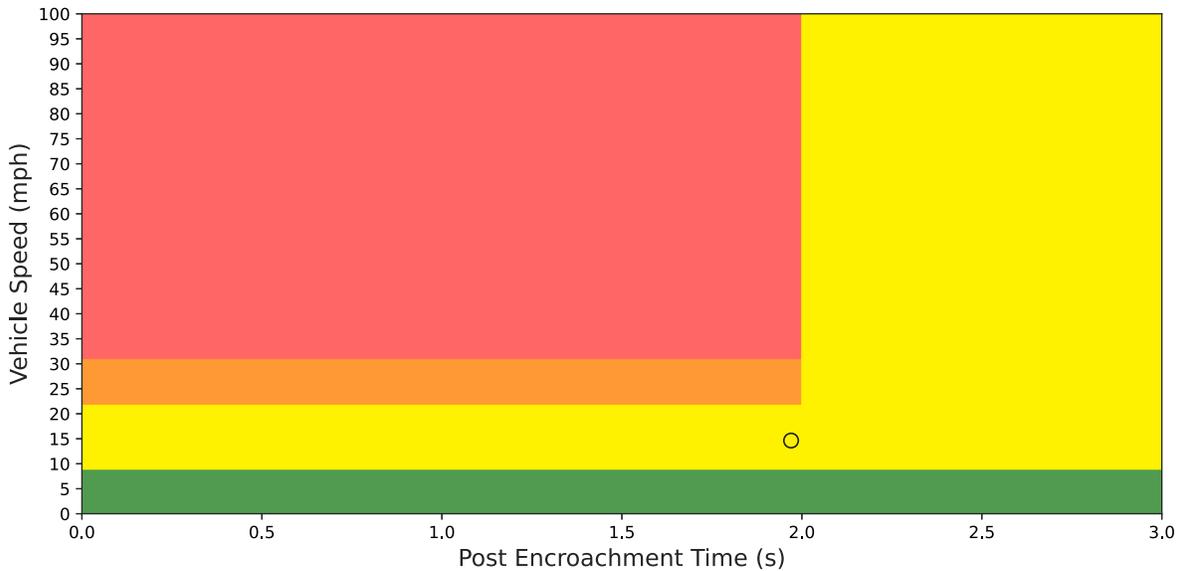
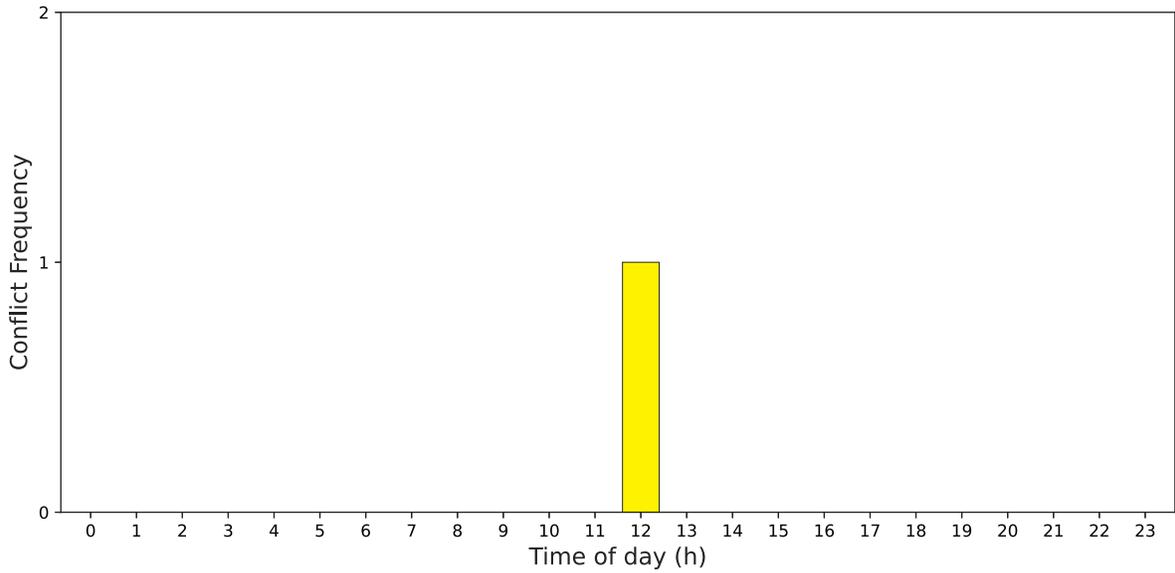




### North-Left Vehicle vs Pedestrian on West Side (North-Left Hook) @ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5

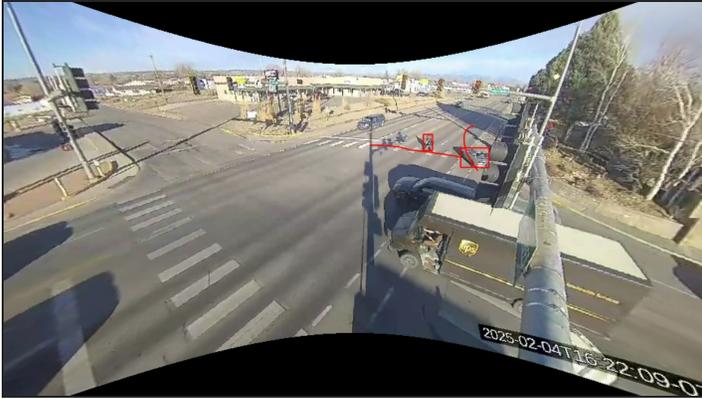


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA

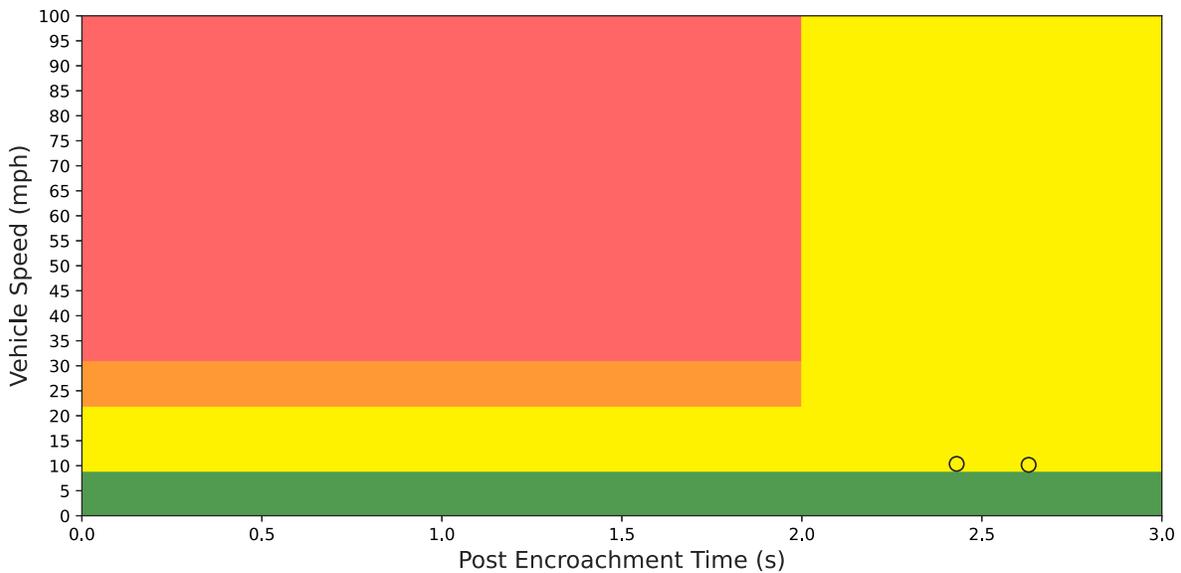
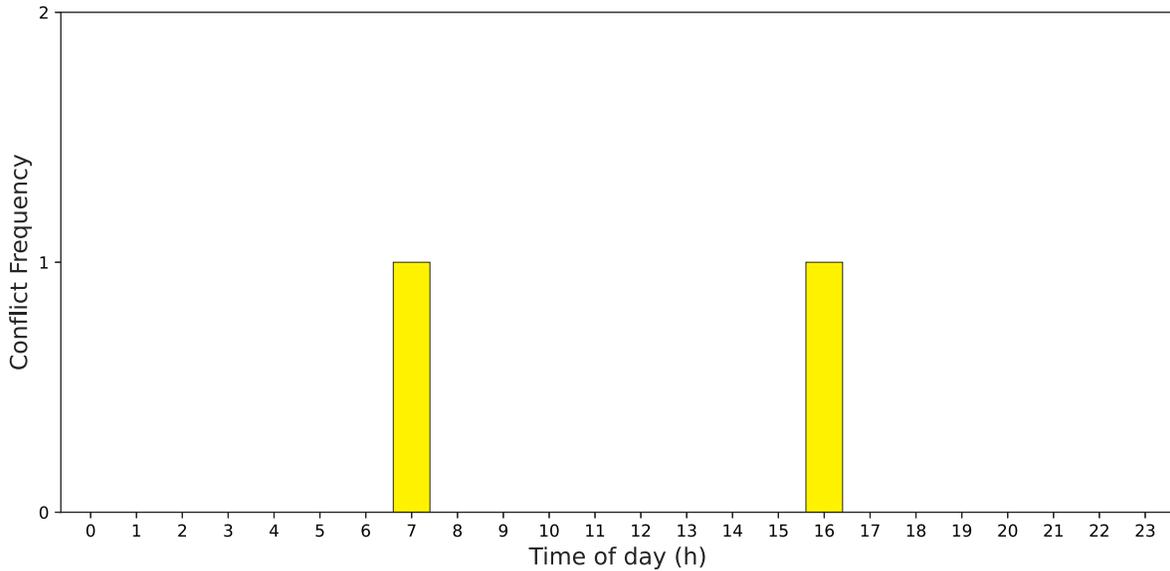




### North-Right Vehicle vs Pedestrian on East Side (North-Right Hook) @ Sligo Street and U.S. Highway 160, 2025-Jan-31 to 2025-Feb-5



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	2	0
Annual Estimate	0	0	122	0
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA





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Harrison Street & U.S. Highway 160  
Cortez, Colorado  
Risk Diagnostic Report

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## General Information

### Report Details

<b>Site</b>	Harrison Street & U.S. Highway 160, Cortez, Colorado
<b>Video Period</b>	2025-Feb-20 to 2025-Feb-25
<b>Video Length</b>	60 hours
<b>Report Notes</b>	Conflict data is provided for East and South Crossing Feb. 20-25 @ 07:30-17:30, West and North Crossing Feb. 20, 22-25 @ 07:30-17:30 each day. Annual Estimates and Conflict Rates are calculated based on six days of video recordings.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
<b>Vulnerable Road User Safe Systems Risk Indicator (VRUss)</b>	VRUss is a categorical risk indicator that uses an adapted version of Post Encroachment Time (PET) and the vehicle impact speed to determine the nearness and probability of a severe injury collision (MAIS 3+) using biomechanical injury thresholds for vehicle-pedestrian collisions [1]. This indicator is used to measure risk to VRUs.

[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.trpro.2016.05.396>



**Overview of Conflict Types**

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

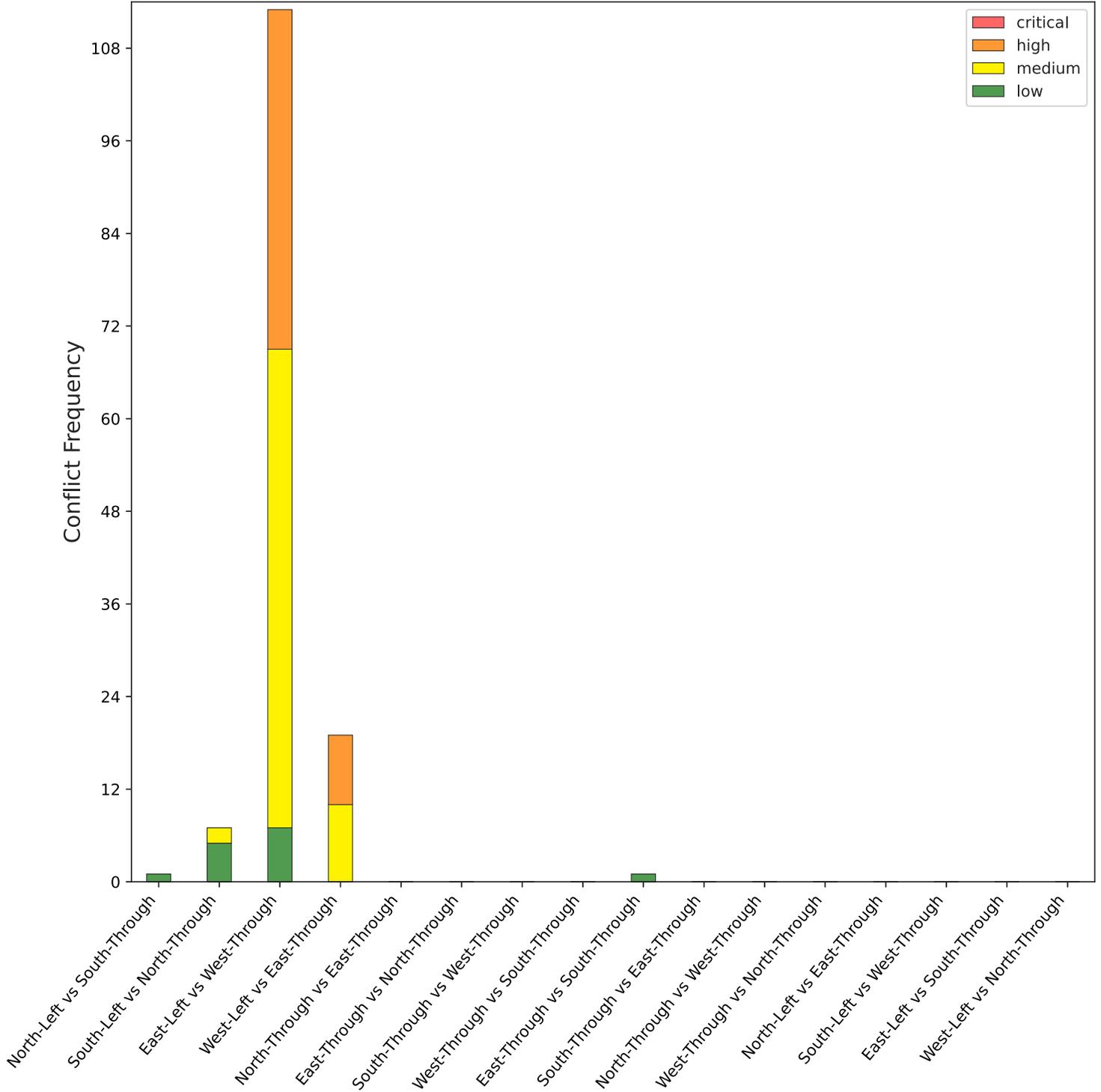


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	1	0	0	0
South-Left vs North-Through	5	2	0	0
East-Left vs West-Through	7	62	44	0
West-Left vs East-Through	0	10	9	0

### Right-Angle (Through Vehicle vs Through Vehicle)

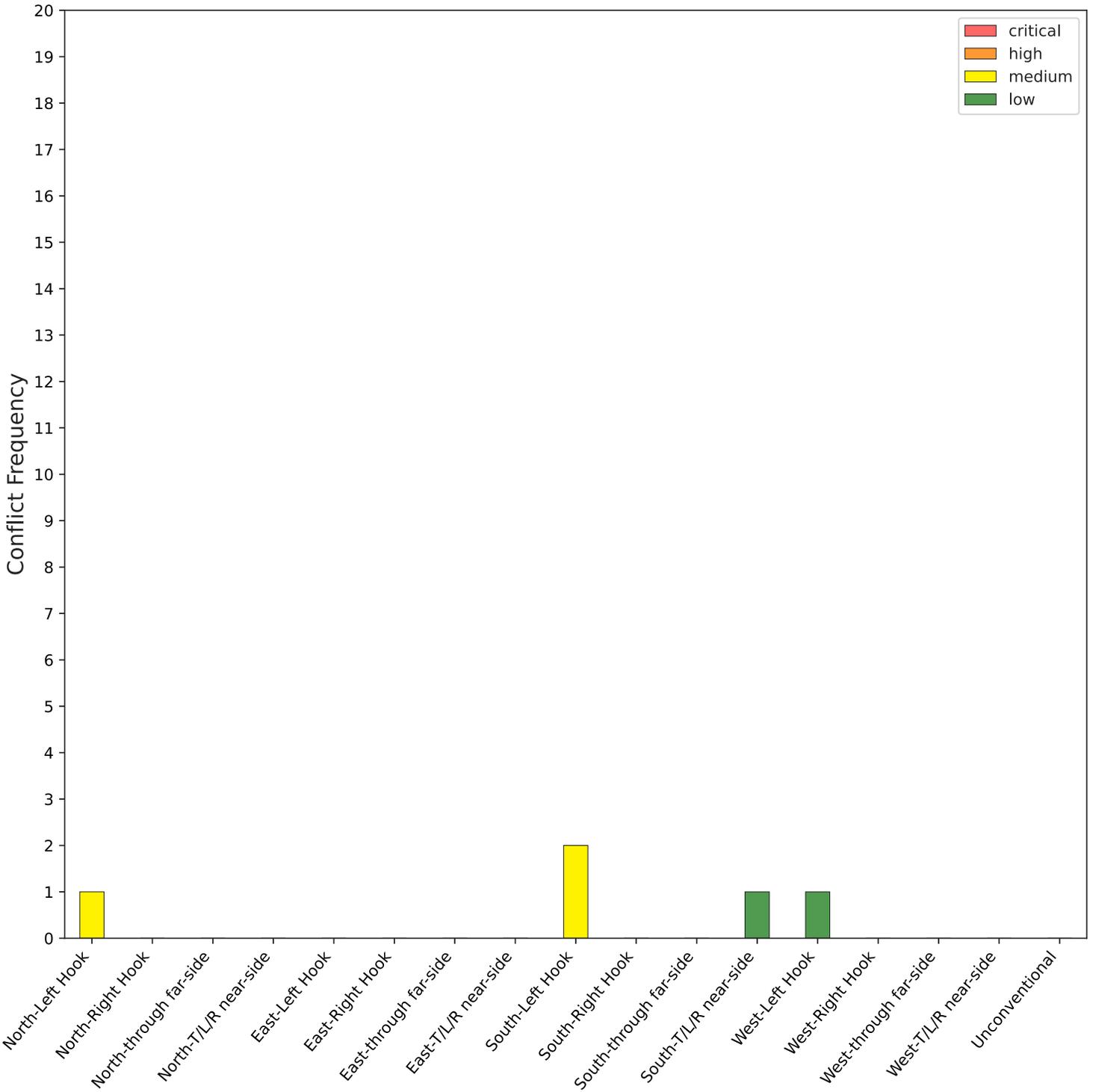
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	0	0	0	0
East-Through vs North-Through	0	0	0	0
South-Through vs West-Through	0	0	0	0
West-Through vs South-Through	0	0	0	0
East-Through vs South-Through	1	0	0	0
South-Through vs East-Through	0	0	0	0
North-Through vs West-Through	0	0	0	0
West-Through vs North-Through	0	0	0	0

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	0	0	0	0
South-Left vs West-Through	0	0	0	0
East-Left vs South-Through	0	0	0	0
West-Left vs North-Through	0	0	0	0



## Results Summary – Cyclist Safe Systems Risk Indicator





## Results Summary – Cyclist Safe Systems Risk Indicator

### Cyclist vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	0	1	0	0
North-Right Hook	0	0	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	0	0	0	0

### Cyclist vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	0	0	0	0

### Cyclist vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	2	0	0
South-Right Hook	0	0	0	0
South-through far-side	0	0	0	0
South-T/L/R near-side	1	0	0	0

### Cyclist vs Westbound Vehicle Conflicts

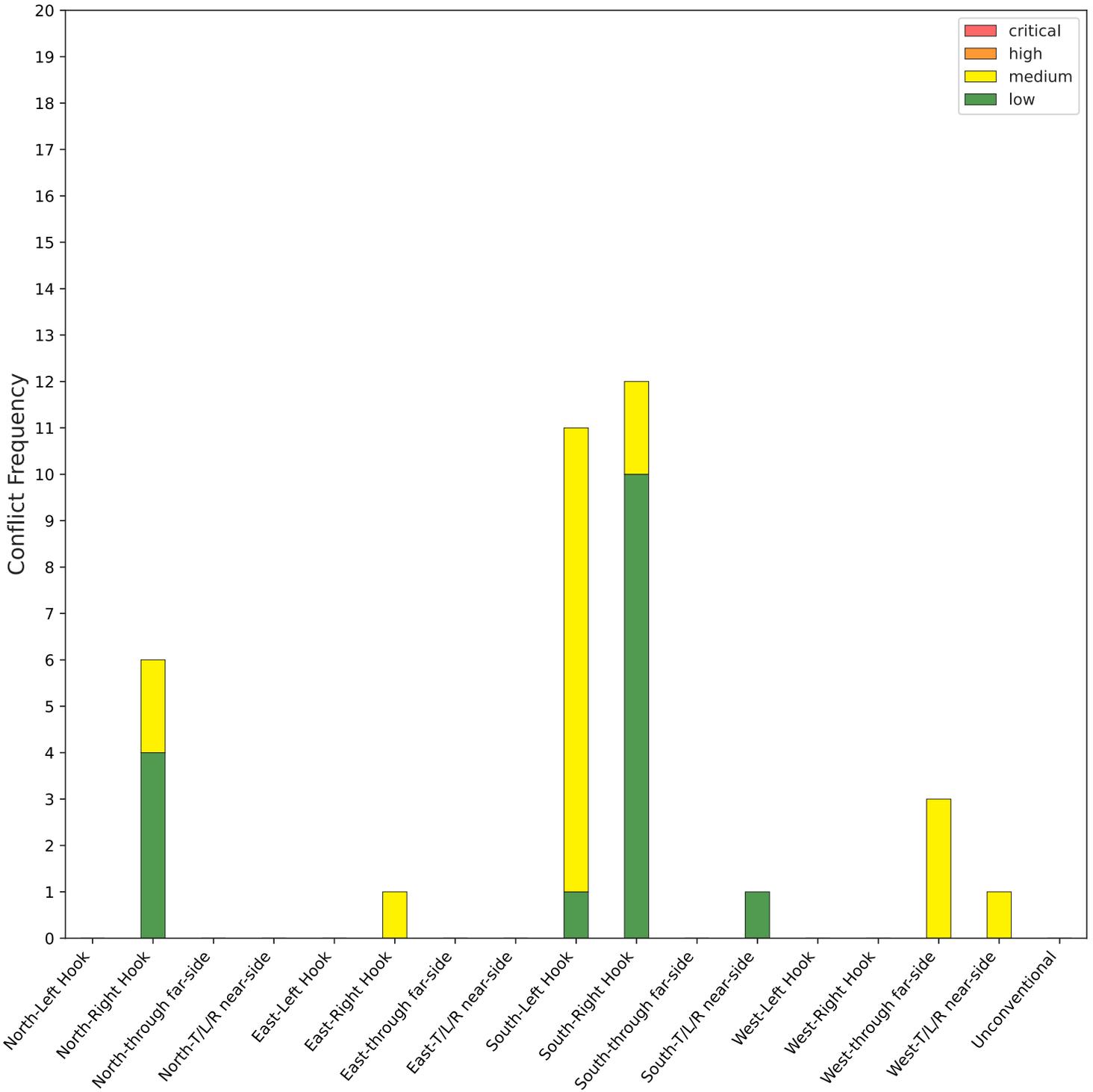
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	1	0	0	0
West-Right Hook	0	0	0	0
West-through far-side	0	0	0	0
West-T/L/R near-side	0	0	0	0

### Unconventional Cyclist Movement vs Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	0	0	0	0



## Results Summary – Pedestrian Safe Systems Risk Indicator





## Results Summary – Pedestrian Safe Systems Risk Indicator

### Pedestrian vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	0	0	0	0
North-Right Hook	4	2	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	0	0	0	0

### Pedestrian vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	1	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	0	0	0	0

### Pedestrian vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	1	10	0	0
South-Right Hook	10	2	0	0
South-through far-side	0	0	0	0
South-T/L/R near-side	1	0	0	0

### Pedestrian vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	0	0	0	0
West-Right Hook	0	0	0	0
West-through far-side	0	3	0	0
West-T/L/R near-side	0	1	0	0

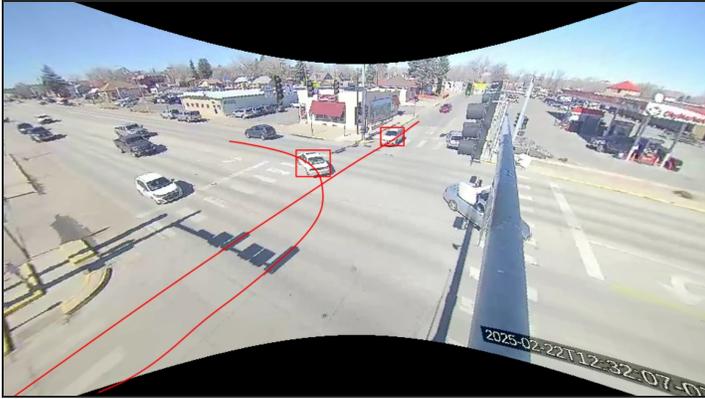
### Unconventional Pedestrian Movement vs Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	0	0	0	0

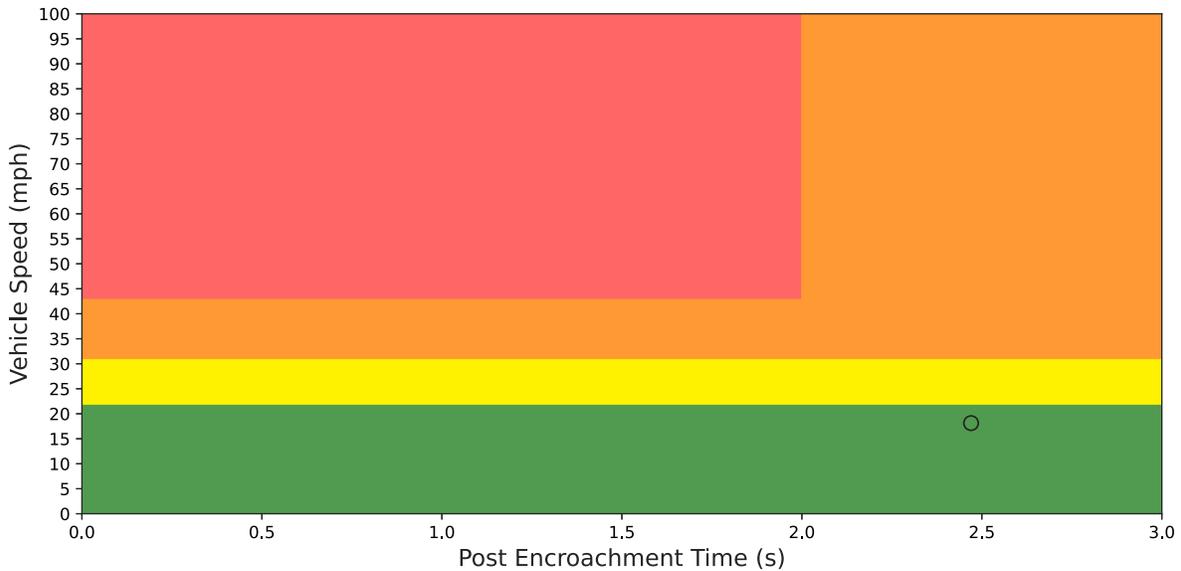
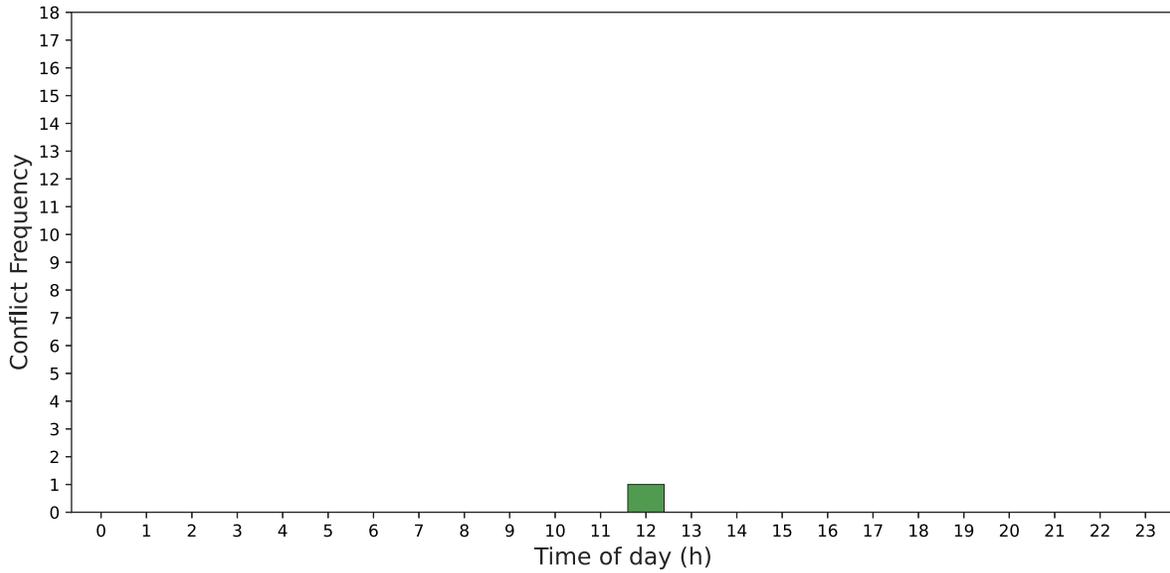


### North-Left Vehicle vs South-Through Vehicle

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



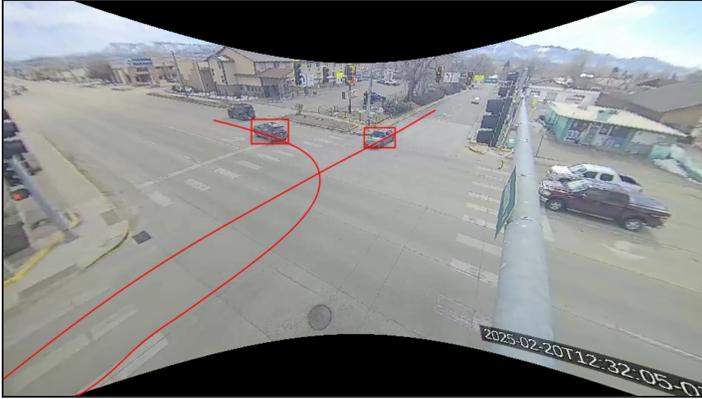
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	0.18
Relative Risk	NA	0.0	0.0	0.1



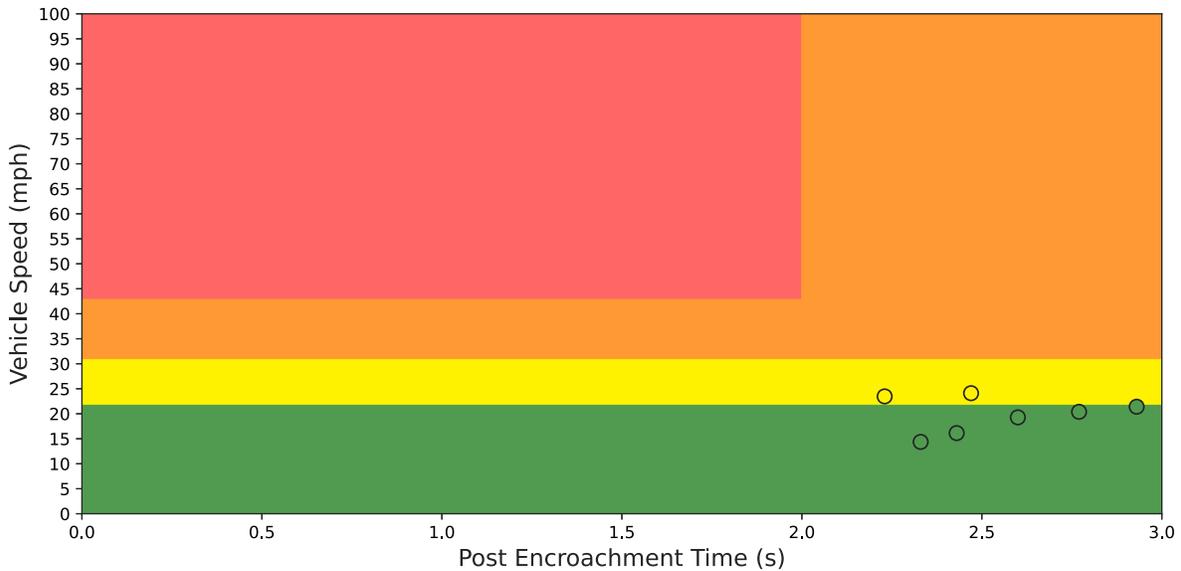
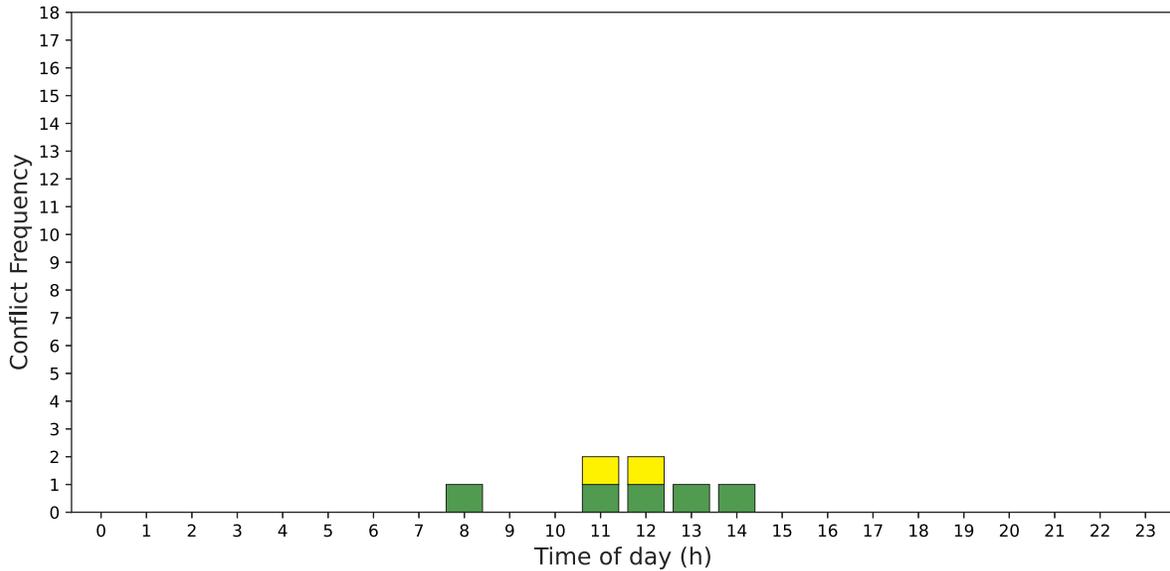


### South-Left Vehicle vs North-Through Vehicle

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



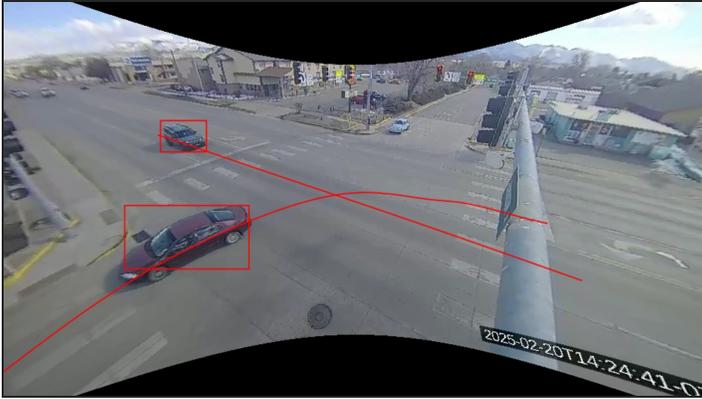
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	2	5
Annual Estimate	0	0	122	304
Conflict Rate (%)	0.0	0.0	0.05	0.13
Relative Risk	NA	0.0	0.04	0.1



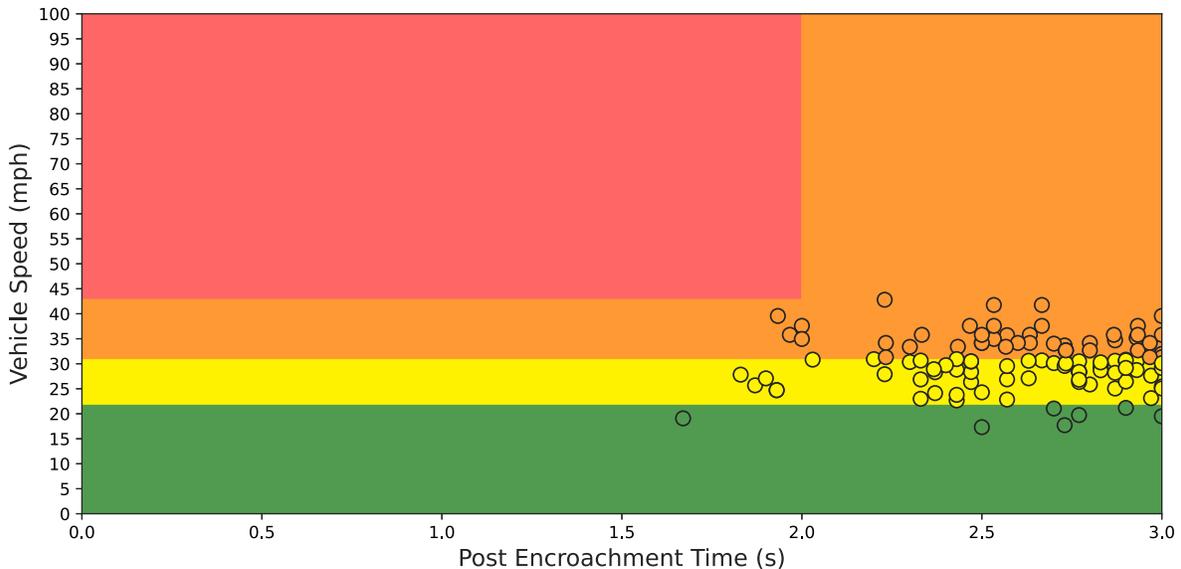
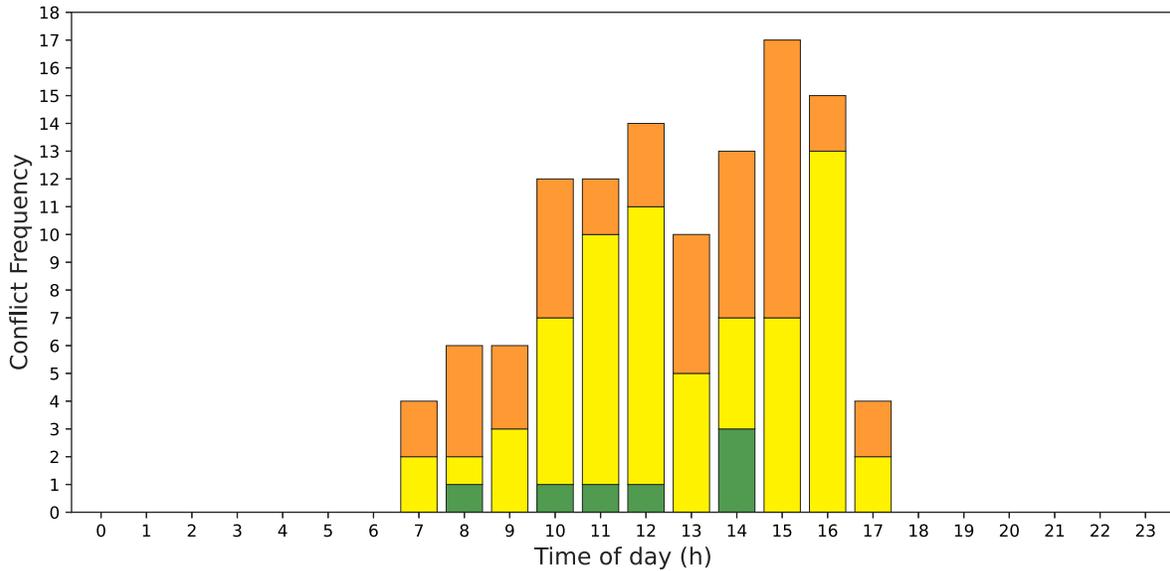


## East-Left Vehicle vs West-Through Vehicle

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



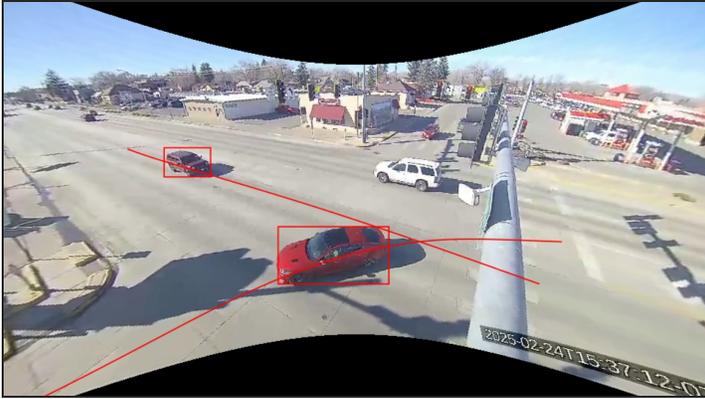
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	44	62	7
Annual Estimate	0	2677	3772	426
Conflict Rate (%)	0.0	1.43	2.01	0.23
Relative Risk	NA	1.49	2.28	1.92



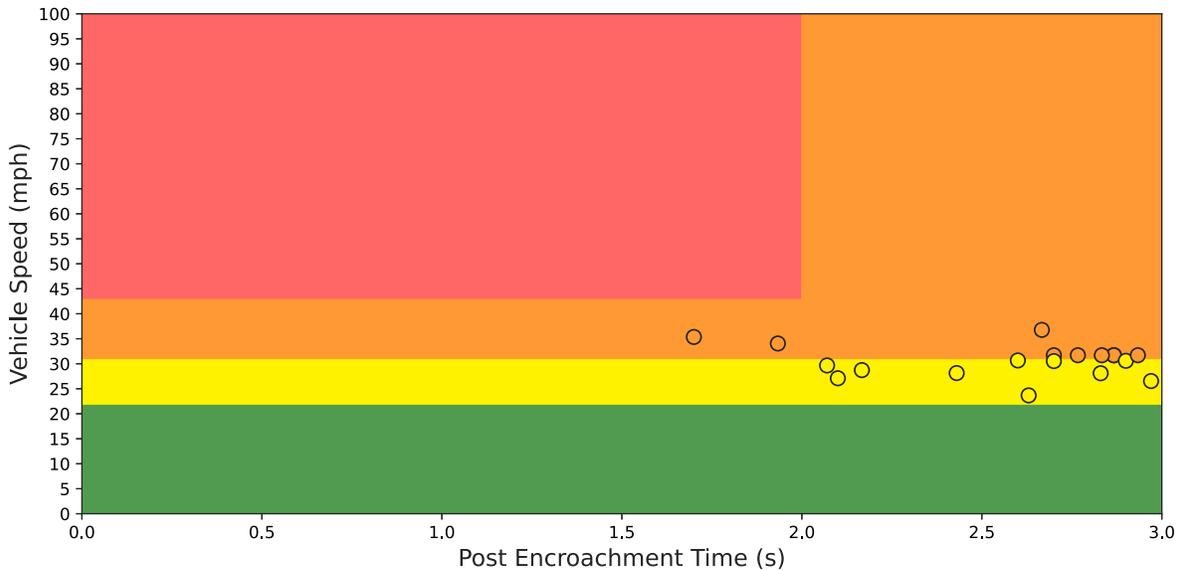
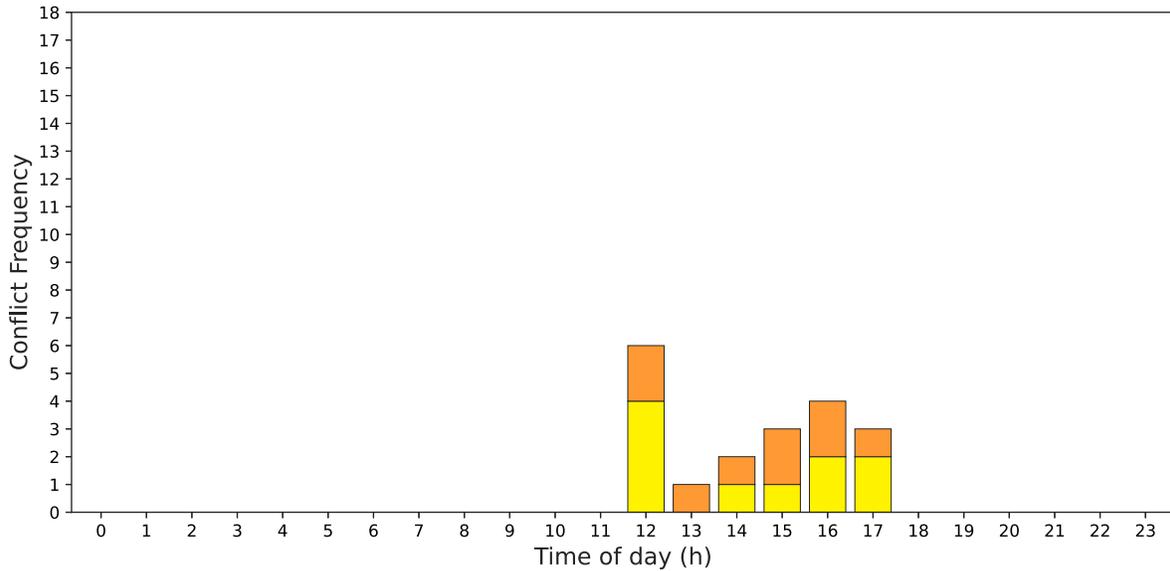


## West-Left Vehicle vs East-Through Vehicle

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



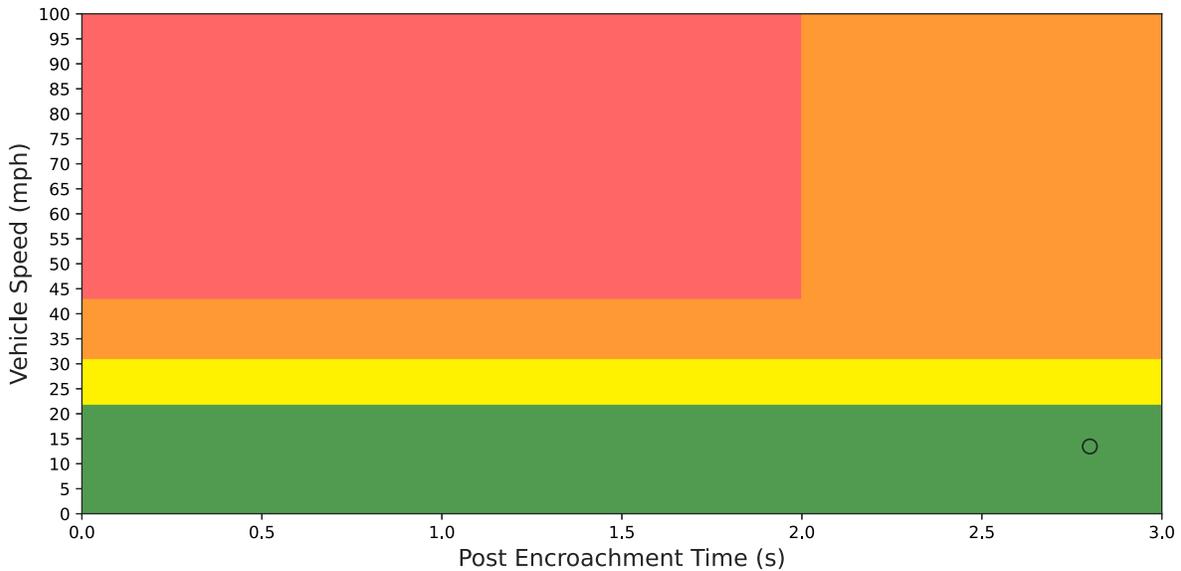
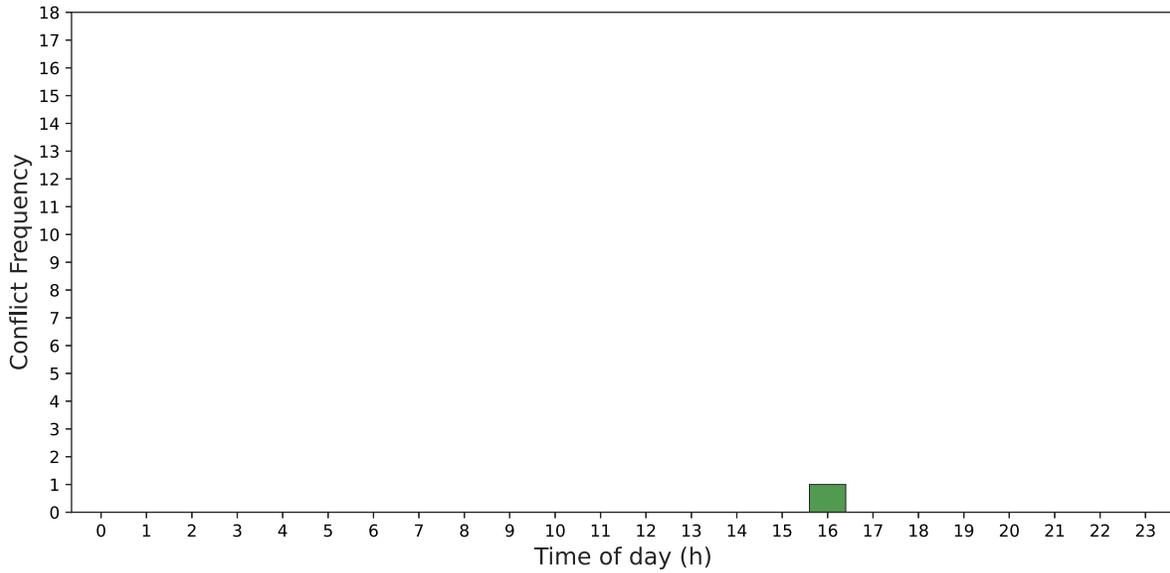
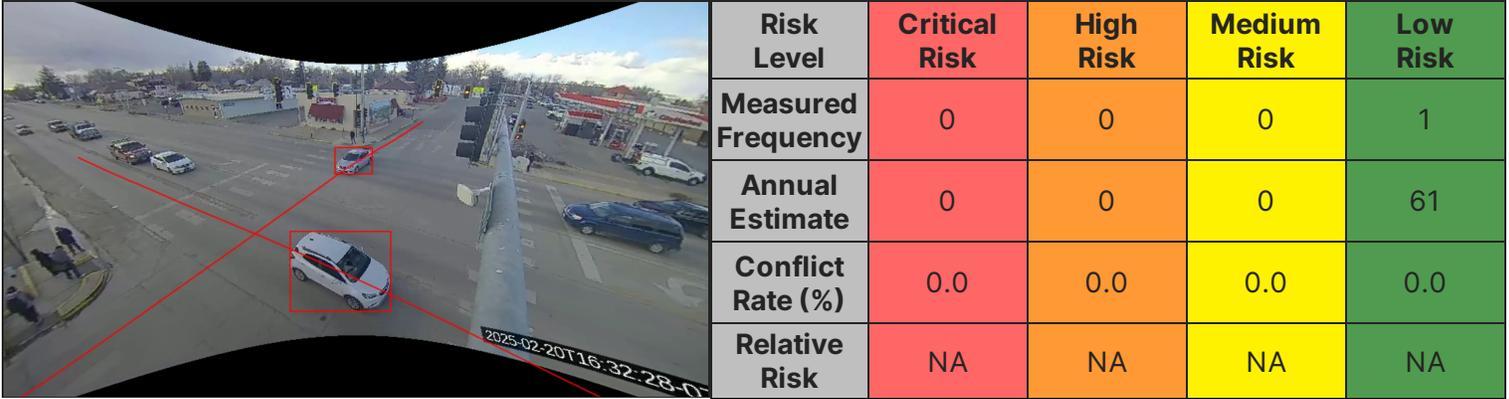
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	9	10	0
Annual Estimate	0	548	608	0
Conflict Rate (%)	0.0	1.25	1.39	0.0
Relative Risk	NA	1.3	1.75	1.38





### East-Through Vehicle vs South-Through Vehicle

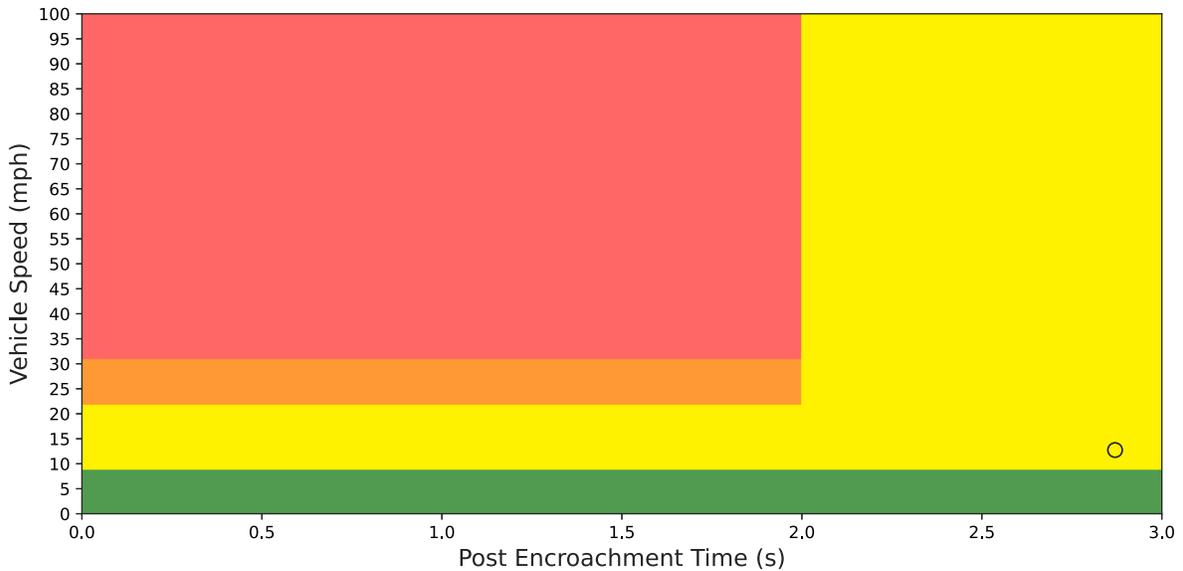
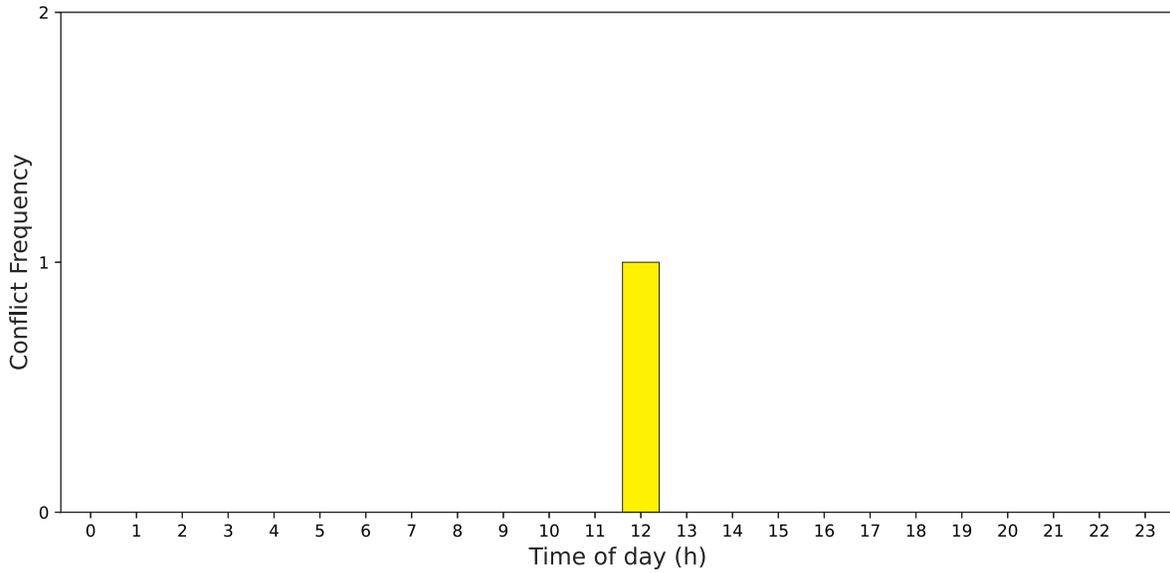
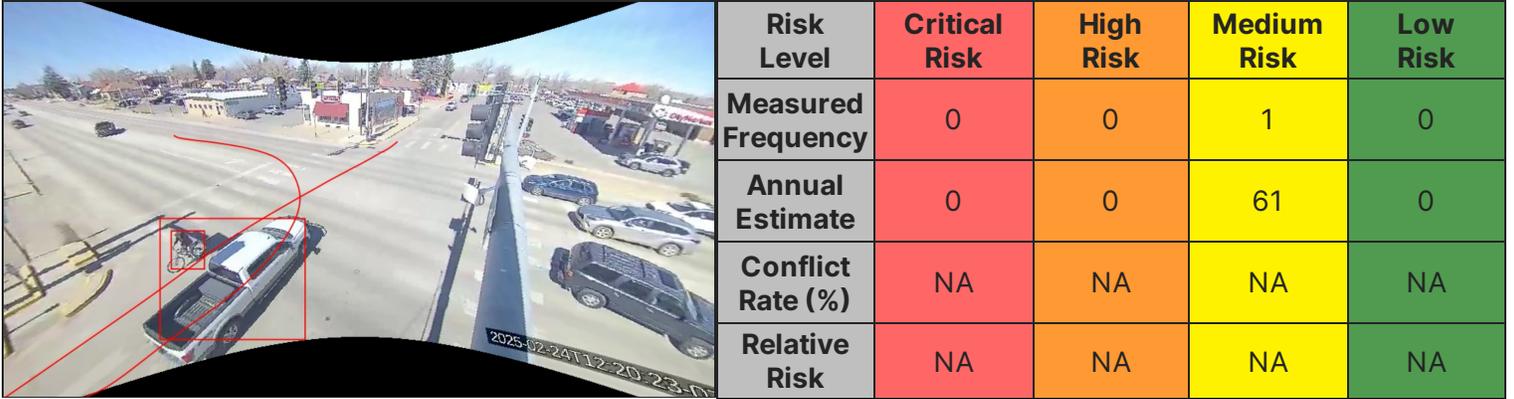
@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25





## North-Left Vehicle vs Cyclist on West Side (North-Left Hook)

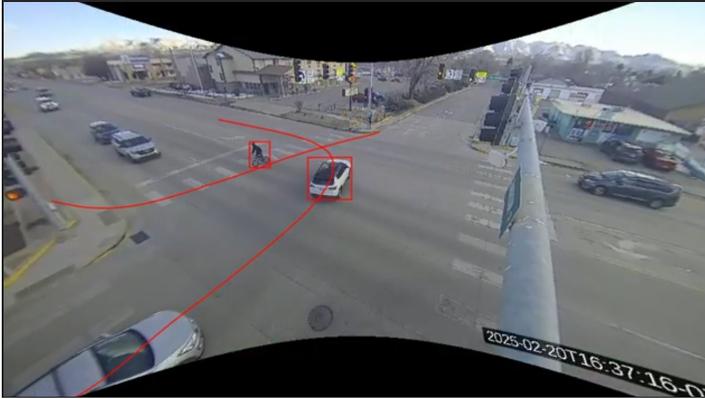
@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



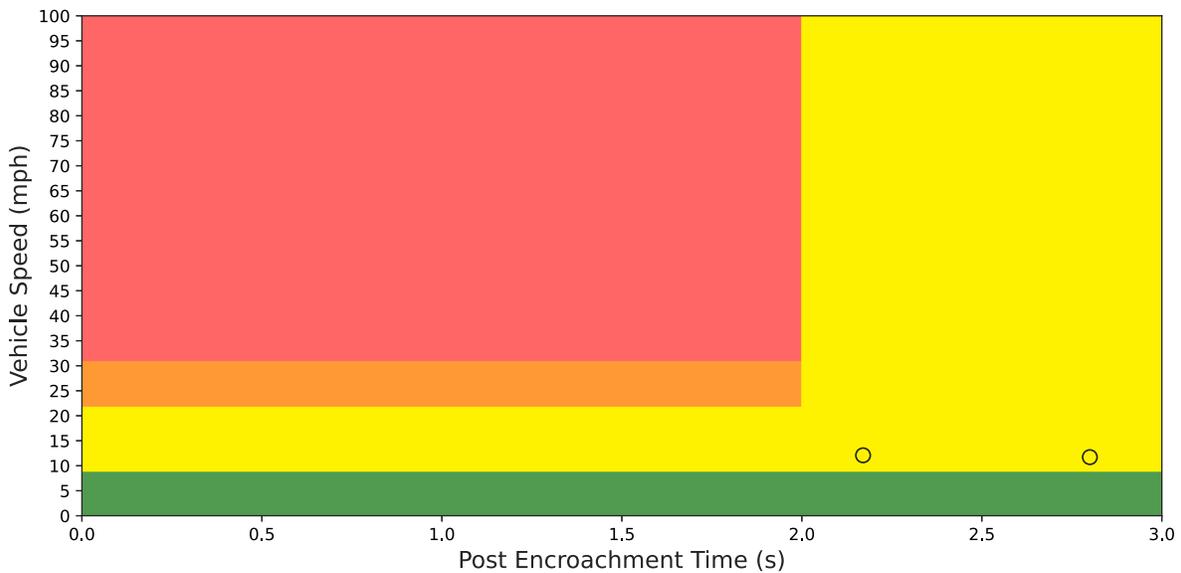
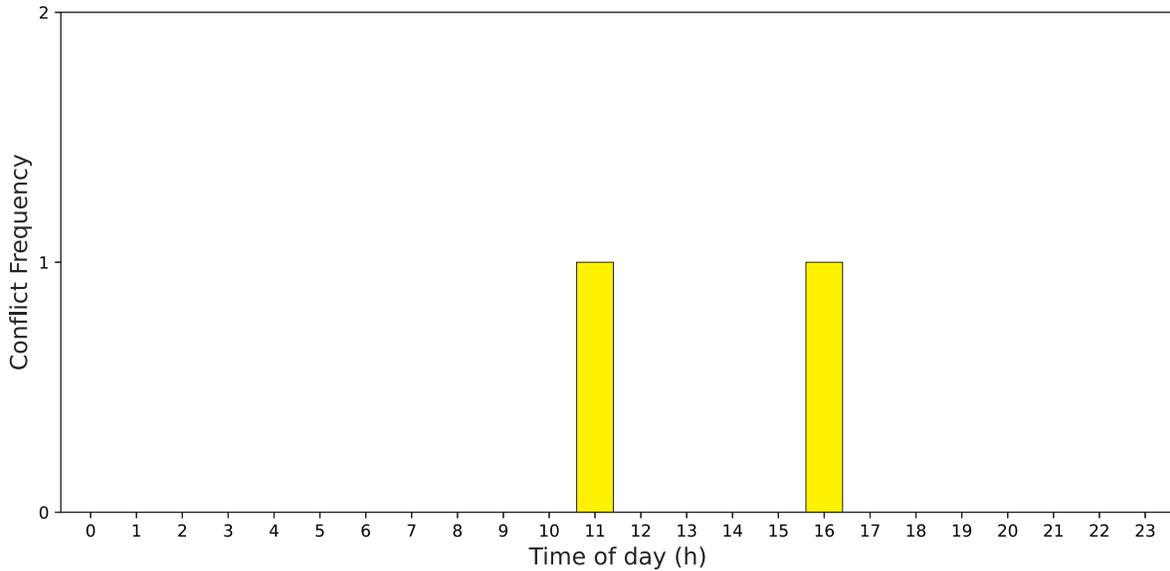


### South-Left Vehicle vs Cyclist on East Side (South-Left Hook)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	2	0
Annual Estimate	0	0	122	0
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA



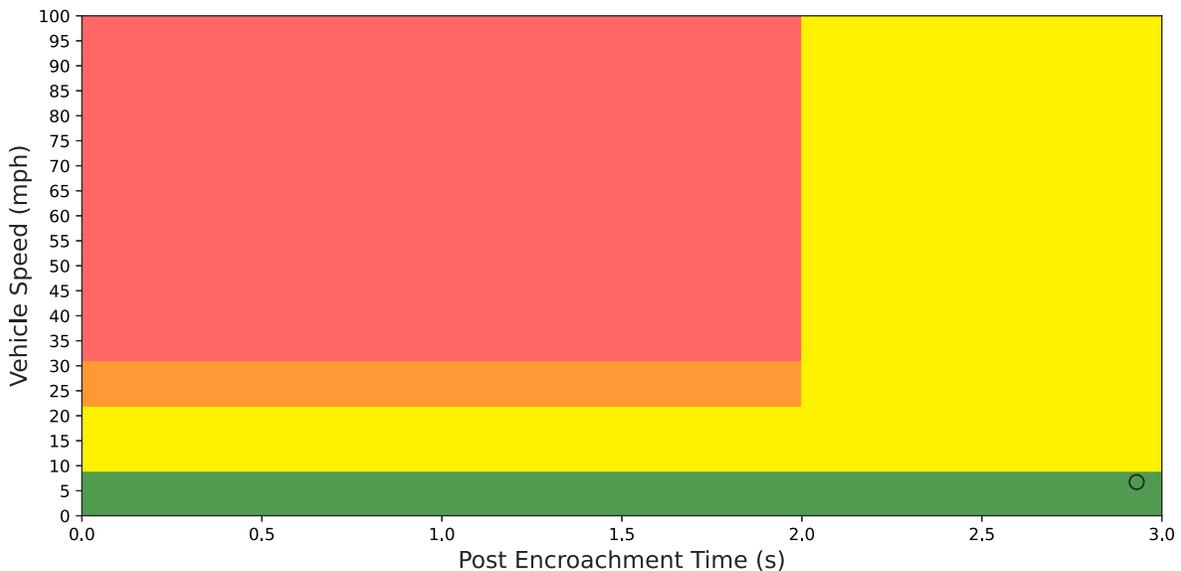
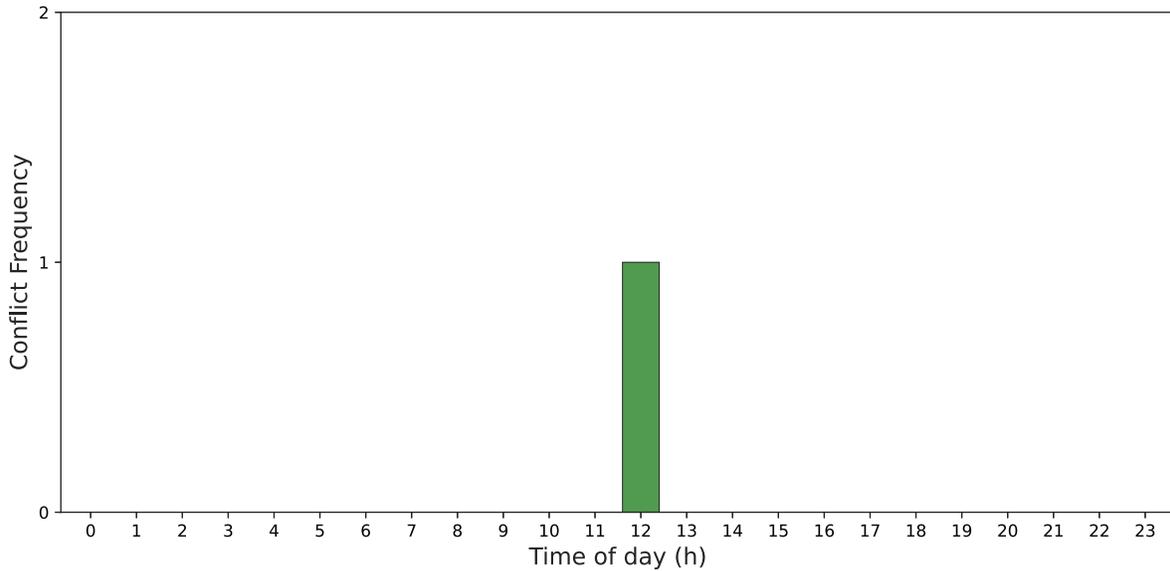


### South-T/L/R Vehicle vs Cyclist on North Side (South-T/L/R near-side)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



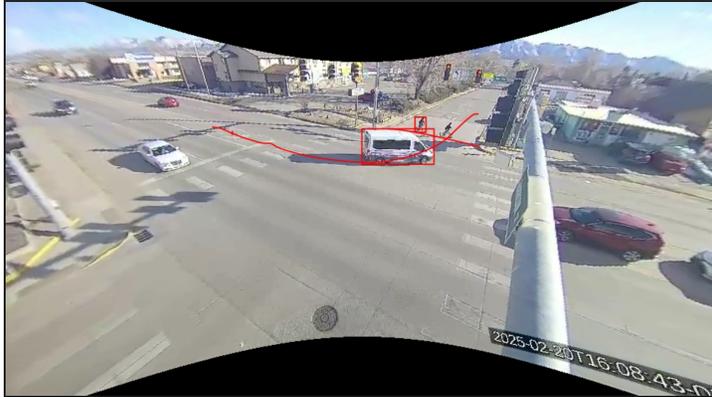
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA



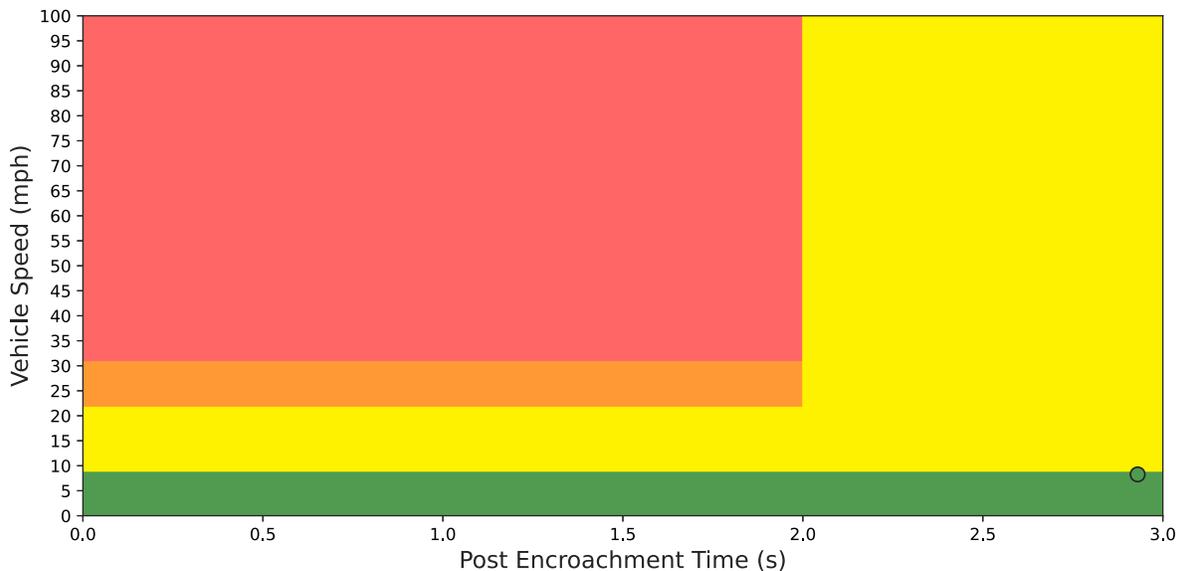
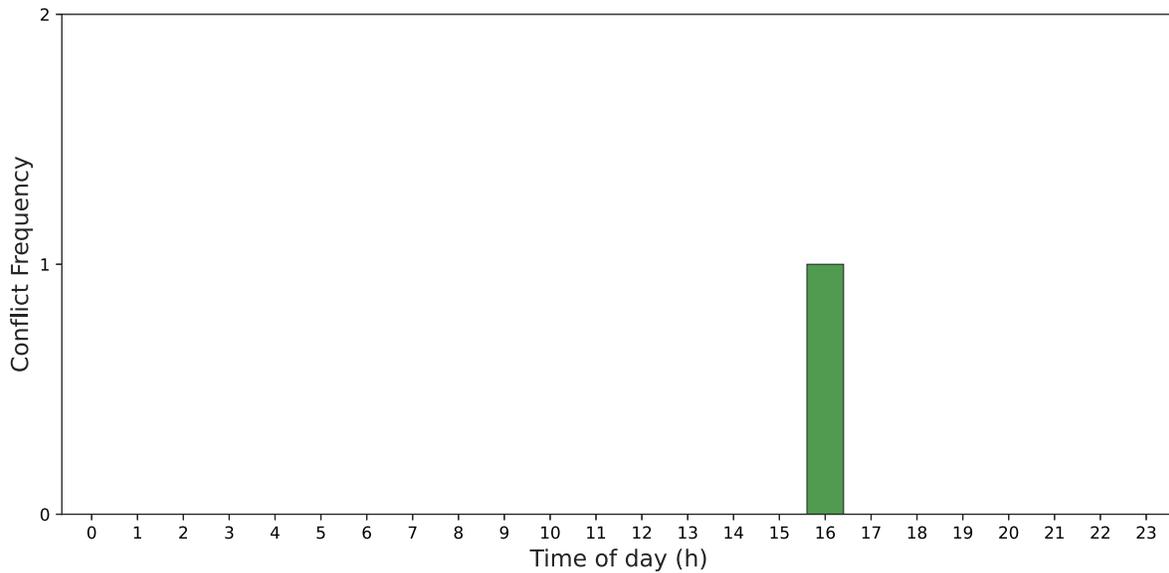


## West-Left Vehicle vs Cyclist on South Side (West-Left Hook)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



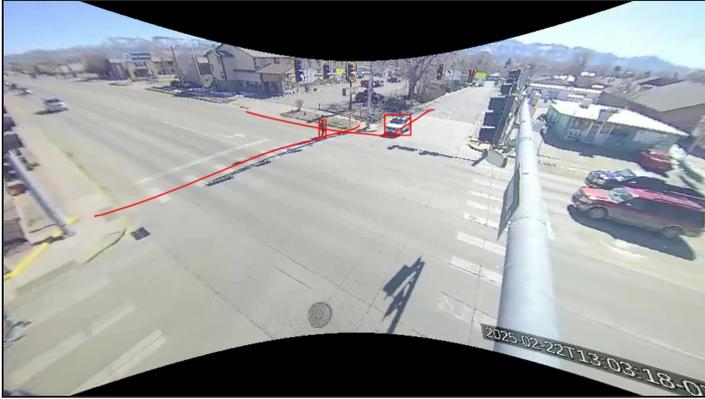
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA



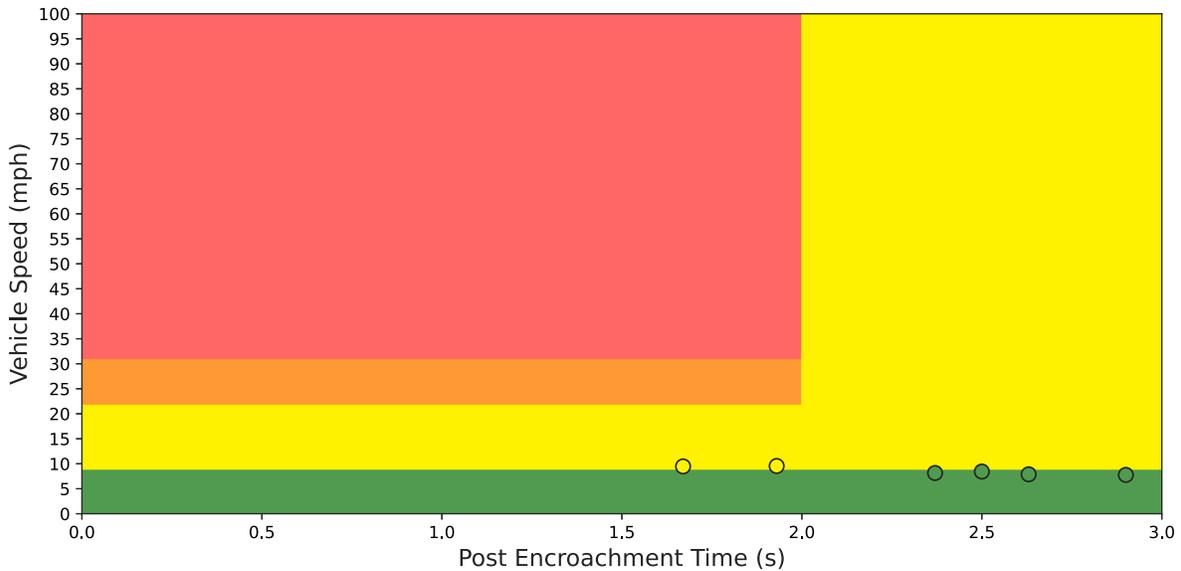
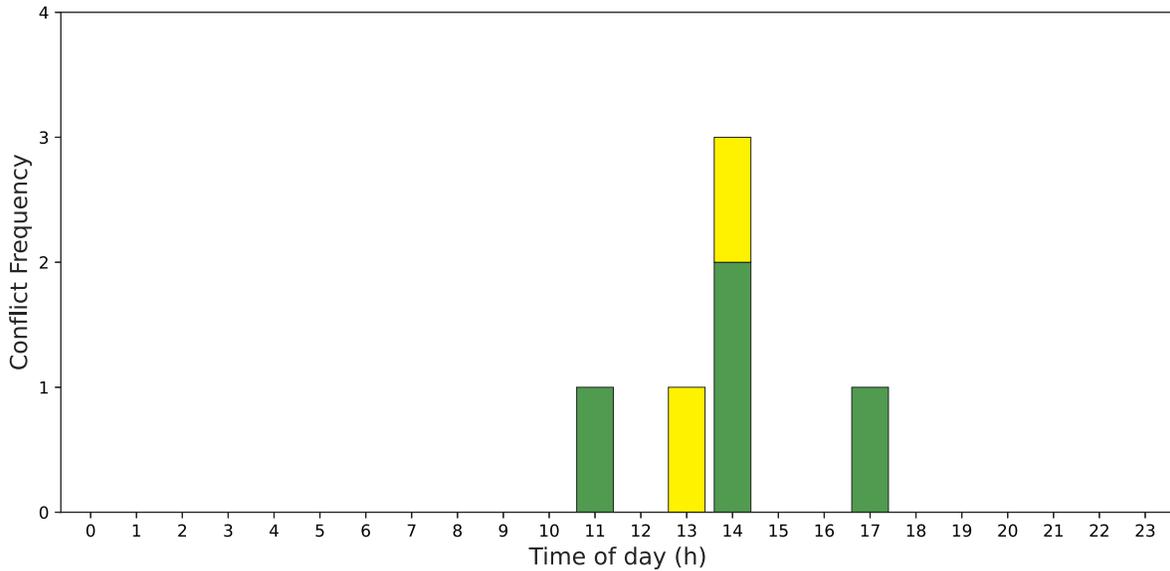


## North-Right Vehicle vs Pedestrian on East Side (North-Right Hook)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	2	4
Annual Estimate	0	0	122	243
Conflict Rate (%)	0.0	0.0	0.56	1.11
Relative Risk	NA	NA	0.24	0.53

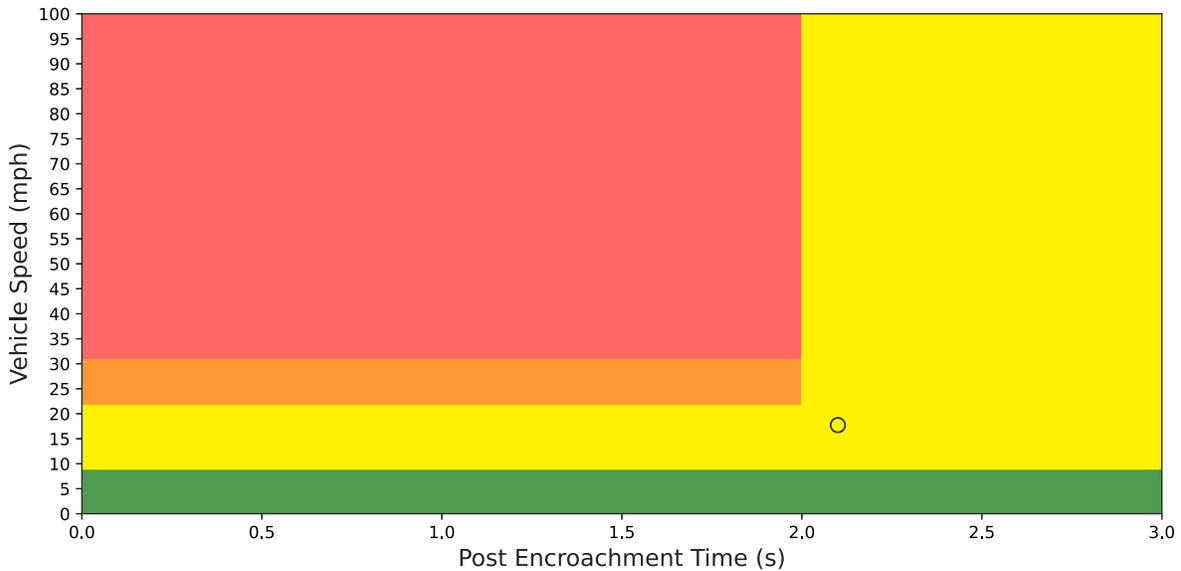
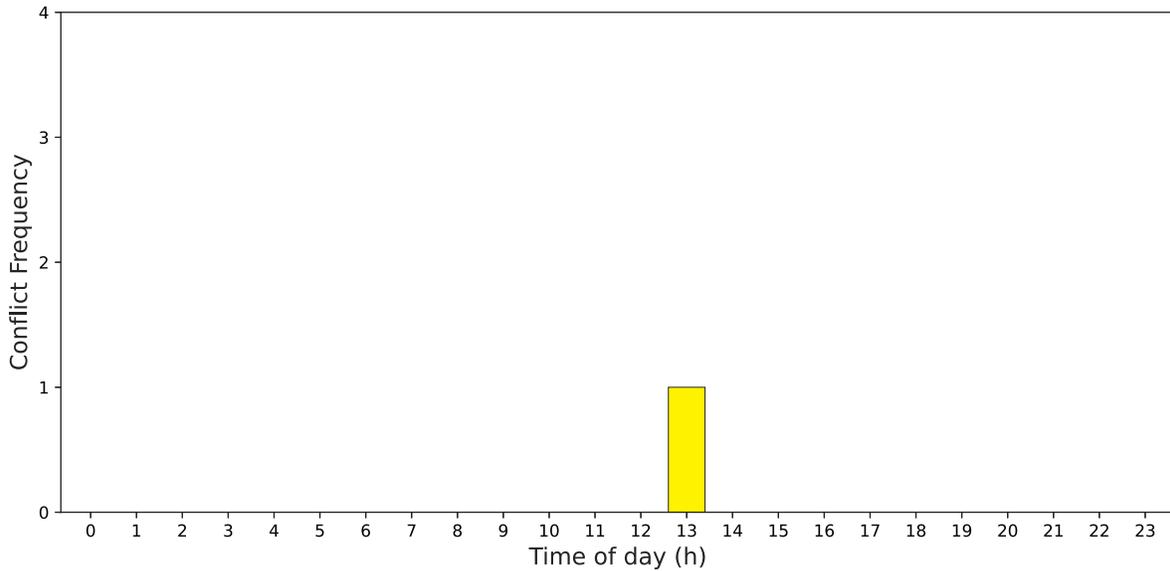




### East-Right Vehicle vs Pedestrian on South Side (East-Right Hook)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25

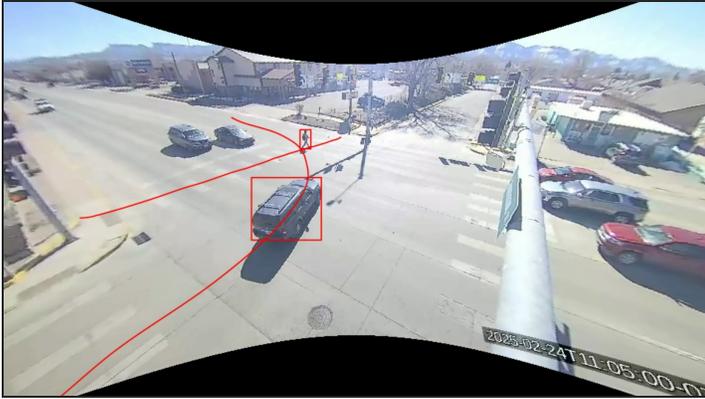
	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	1	0
	Annual Estimate	0	0	61	0
	Conflict Rate (%)	0.0	0.0	0.31	0.0
	Relative Risk	NA	NA	0.13	0.1



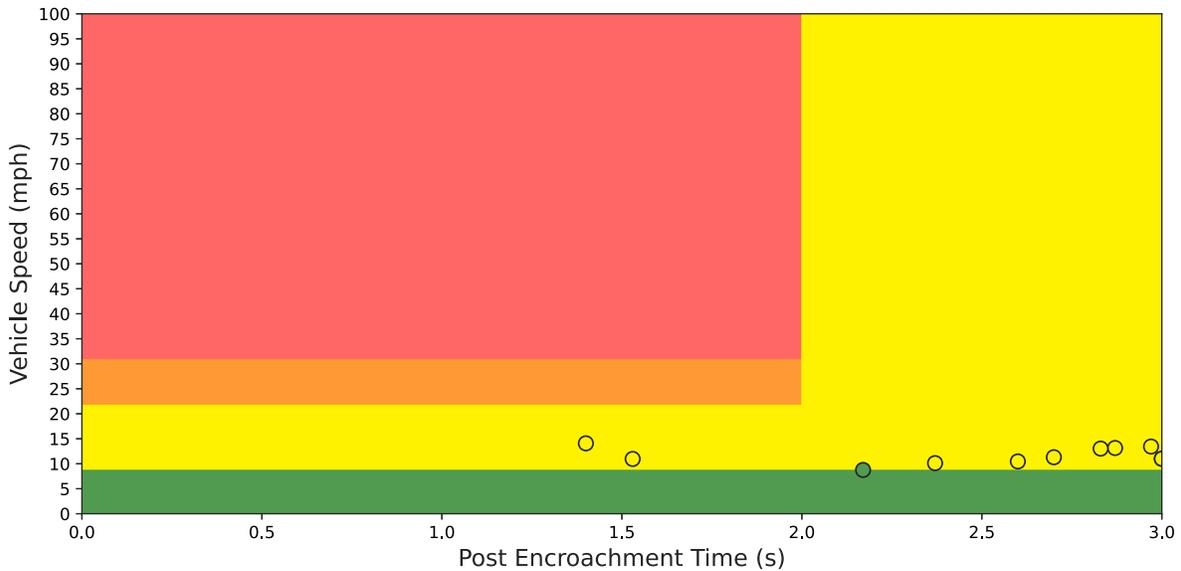
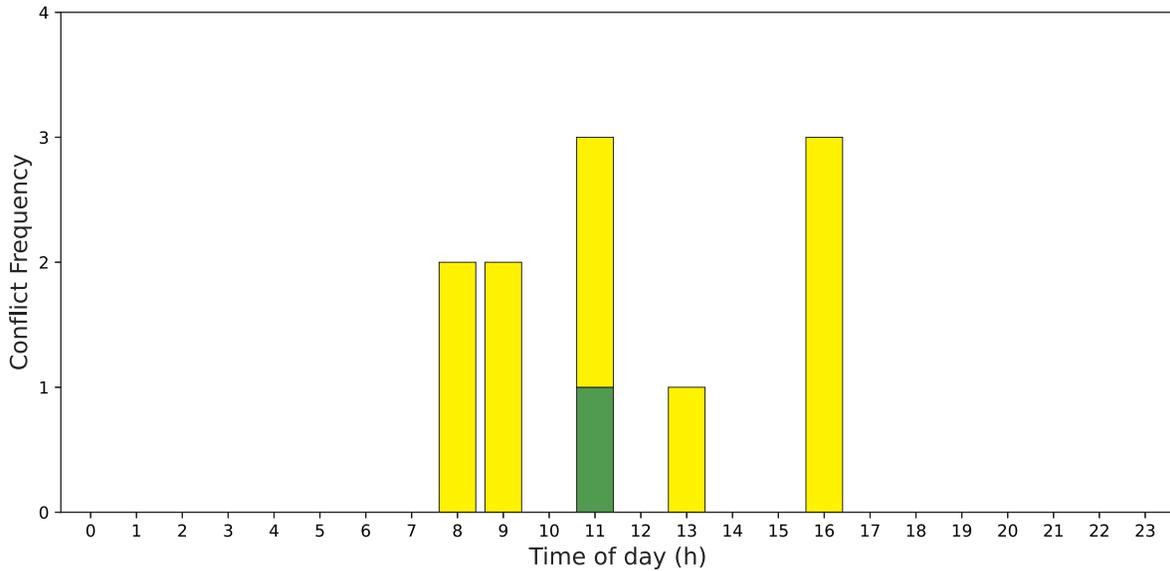


## South-Left Vehicle vs Pedestrian on East Side (South-Left Hook)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



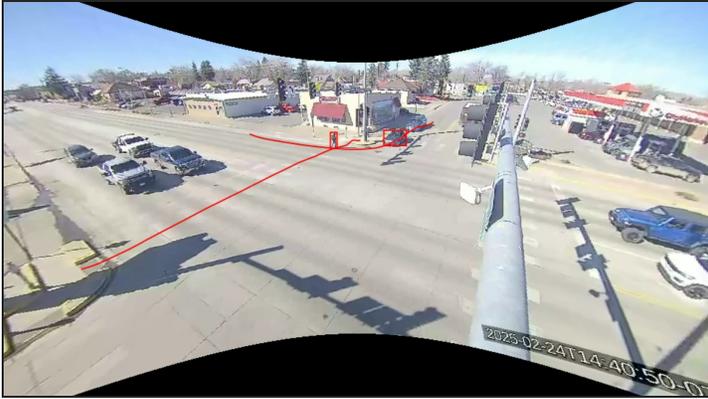
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	10	1
Annual Estimate	0	0	608	61
Conflict Rate (%)	0.0	0.0	2.78	0.28
Relative Risk	NA	NA	1.36	1.42



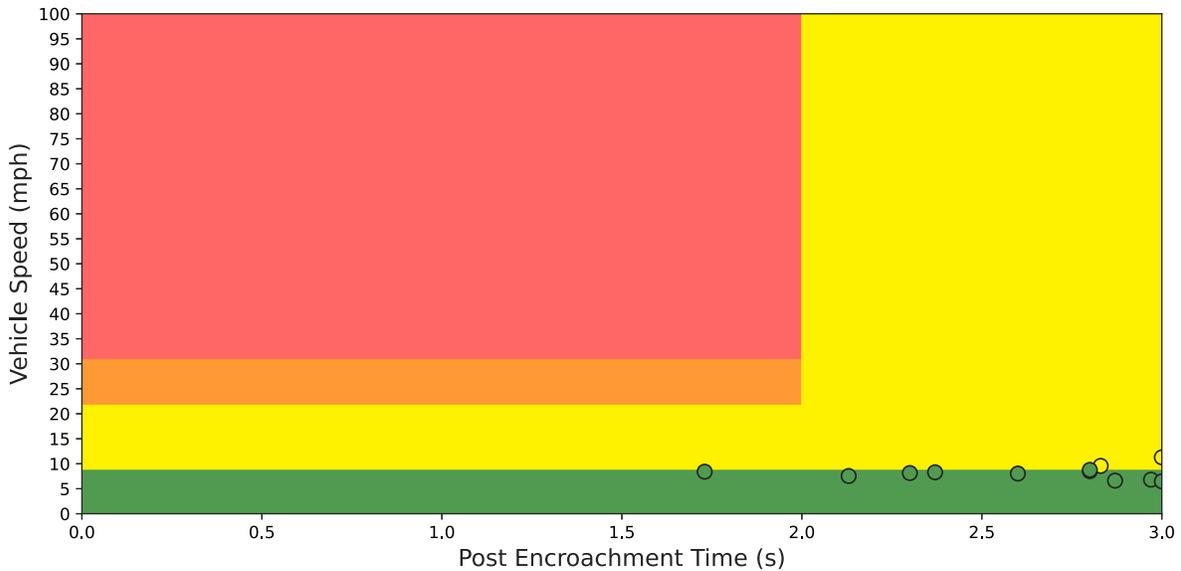
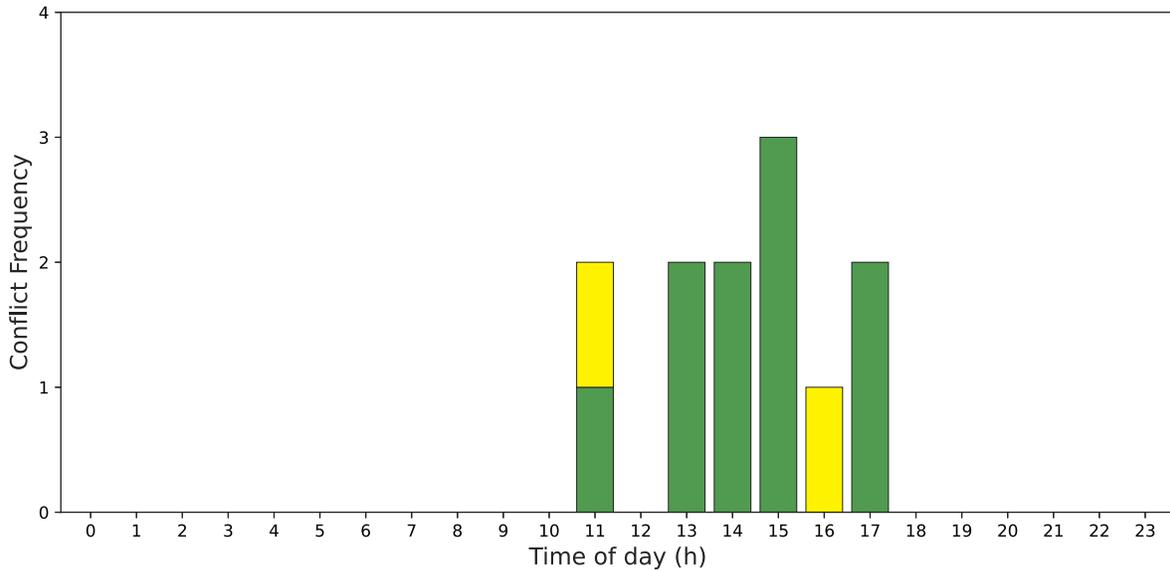


## South-Right Vehicle vs Pedestrian on West Side (South-Right Hook)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	2	10
Annual Estimate	0	0	122	608
Conflict Rate (%)	0.0	0.0	0.48	2.42
Relative Risk	NA	NA	0.21	0.93

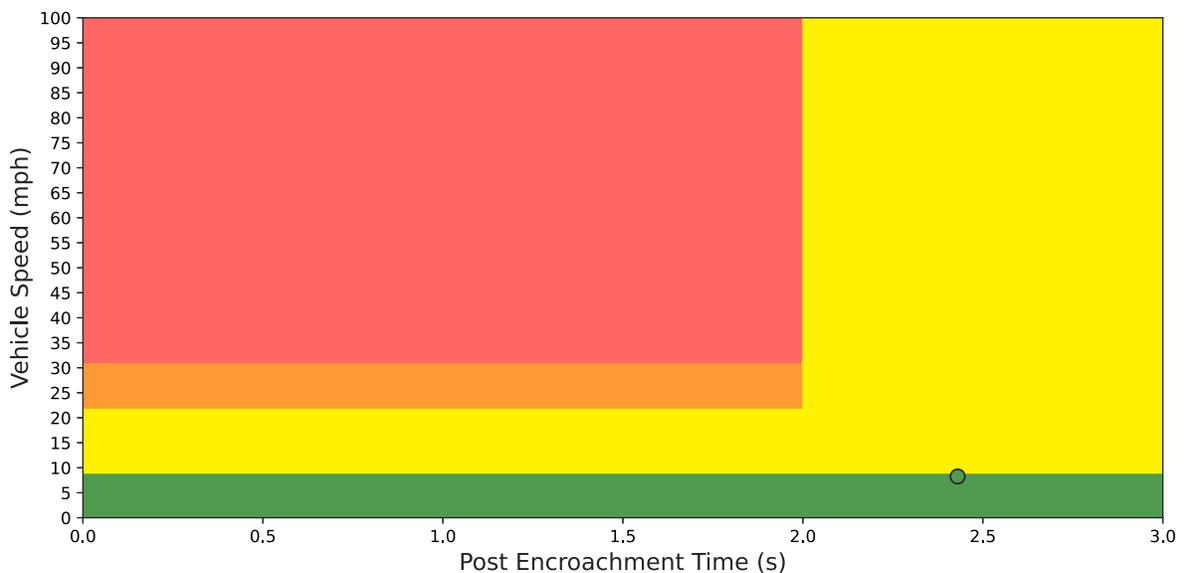
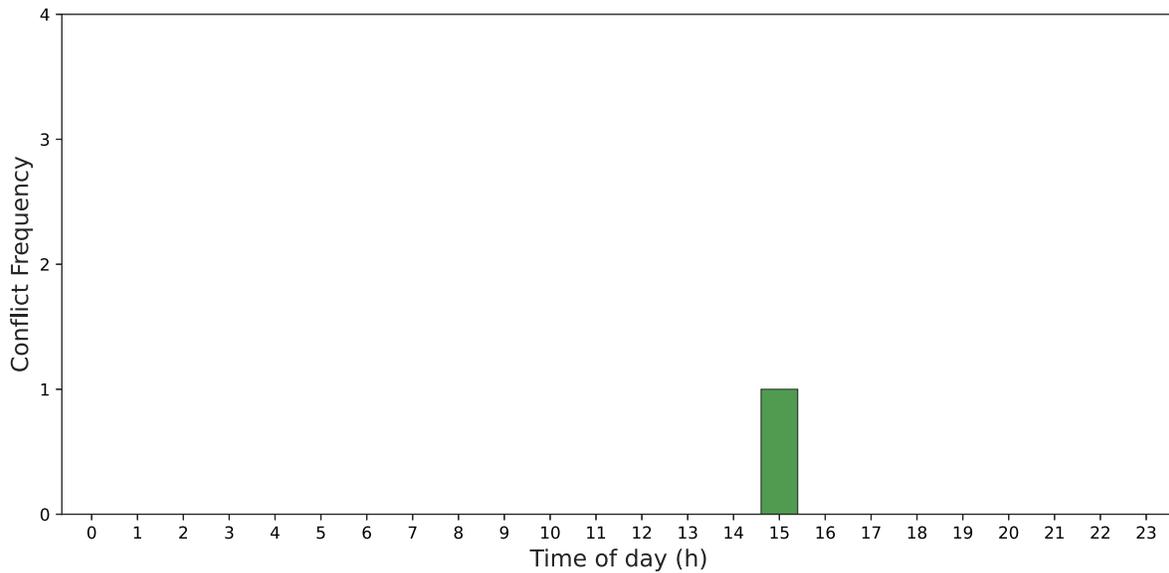




## South-T/L/R Vehicle vs Pedestrian on North Side (South-T/L/R near-side)

@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25

	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	0	1
	Annual Estimate	0	0	0	61
	Conflict Rate (%)	0.0	0.0	0.0	0.35
	Relative Risk	NA	NA	NA	NA

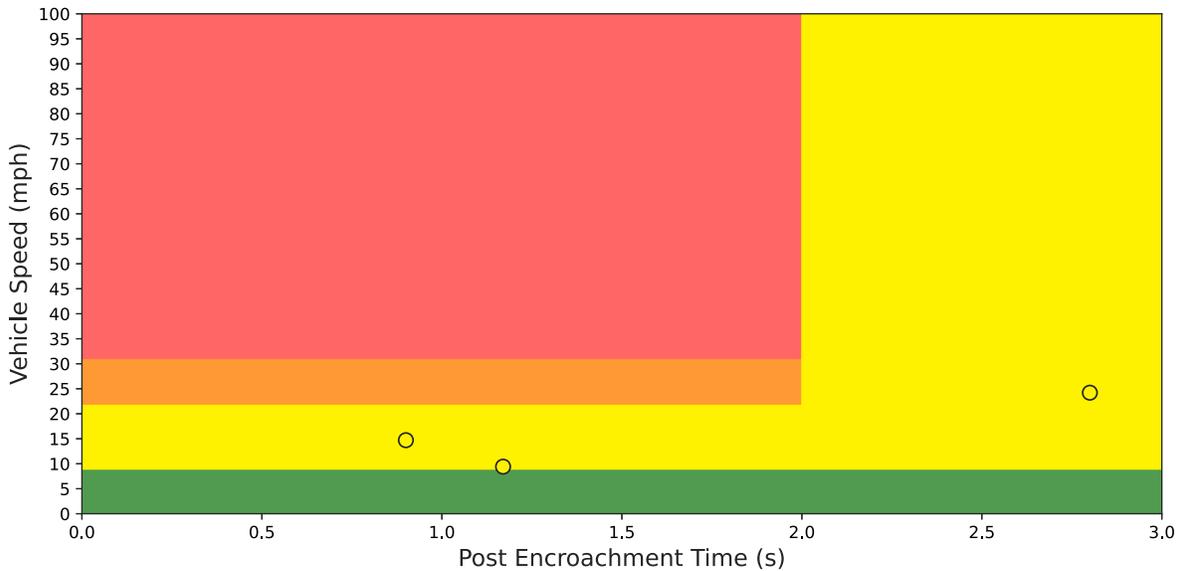
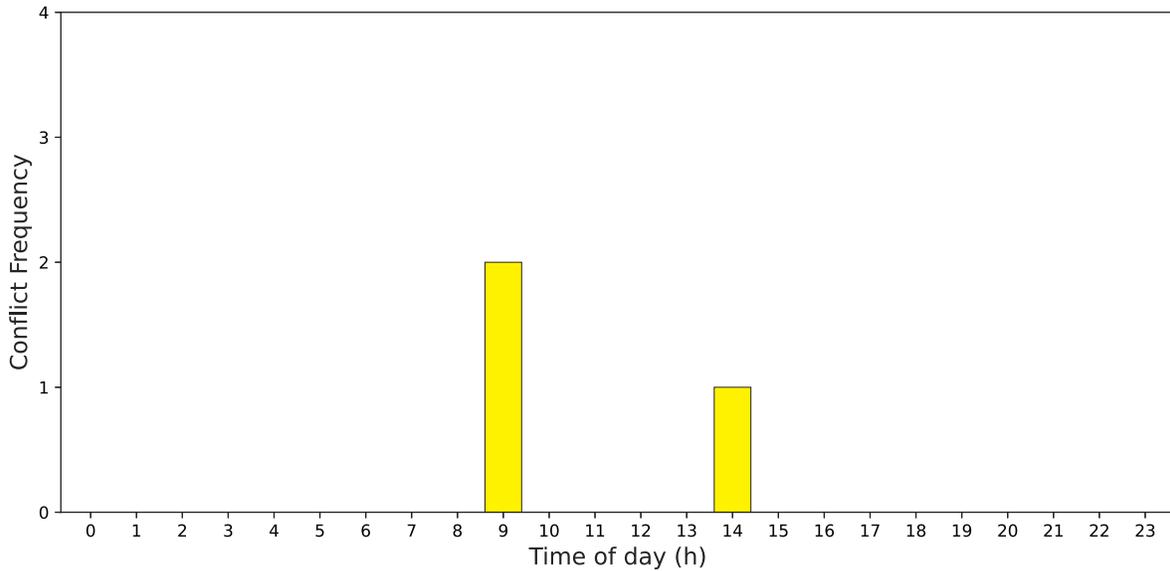




### West-Through Vehicle vs Pedestrian on West Side (West-through far-side) @ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25



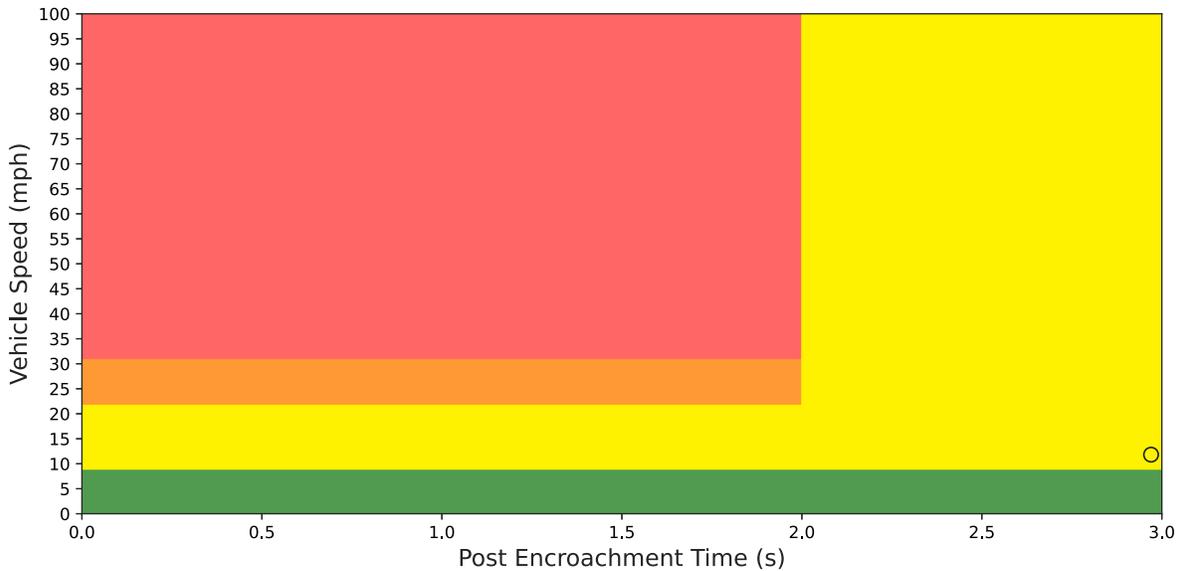
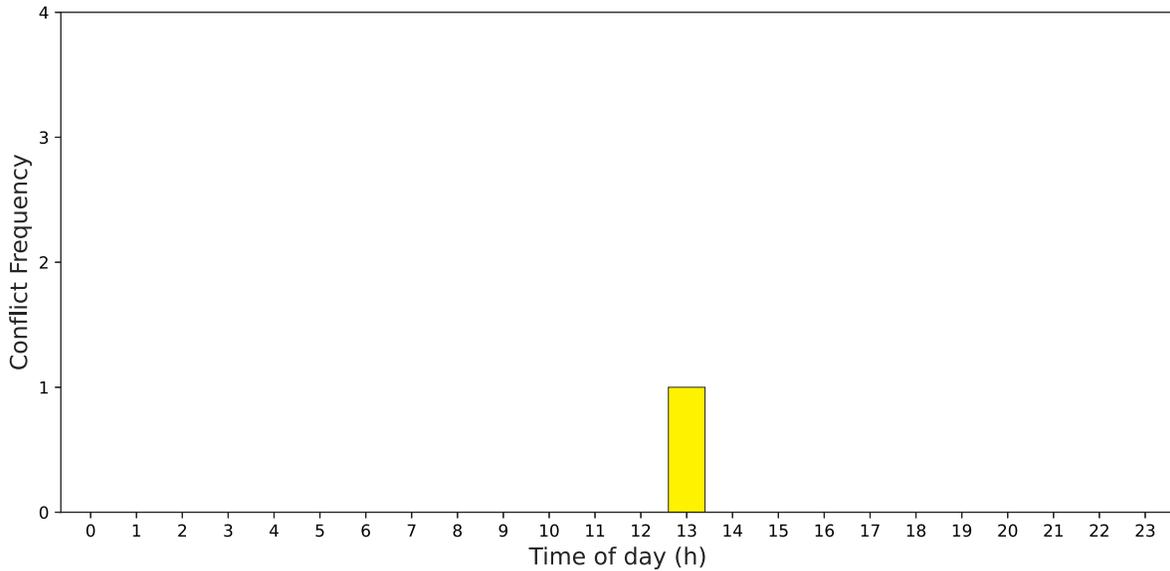
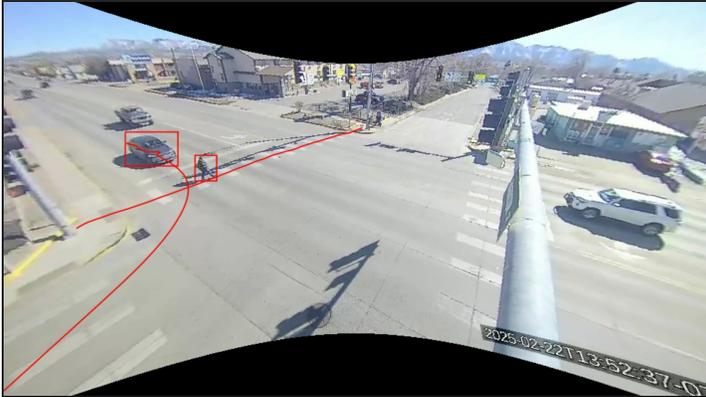
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	3	0
Annual Estimate	0	0	182	0
Conflict Rate (%)	0.0	0.0	0.72	0.0
Relative Risk	NA	NA	NA	NA





**West-T/L/R Vehicle vs Pedestrian on East Side (West-T/L/R near-side)**  
@ Harrison Street & U.S. Highway 160, 2025-Feb-20 to 2025-Feb-25

Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	0.0	0.0	0.28	0.0
Relative Risk	NA	NA	NA	NA





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Market Street & U.S. Highway 160  
Cortez, Colorado  
Risk Diagnostic Report

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## General Information

### Report Details

<b>Site</b>	Market Street & U.S. Highway 160, Cortez, Colorado
<b>Video Period</b>	2025-Feb-8 to 2025-Feb-13
<b>Video Length</b>	60 hours
<b>Report Notes</b>	Conflict data is provided for Feb. 08-13 @ 07:30-17:30 each day. Conflict analysis may have been affected due to Camera Stability and Position.

### Report Organization

<b>General Information</b>	Provides key details about the report
<b>Results Summary</b>	Provides data at the intersection level
<b>Results Detail Pages</b>	Provides data for individual configurations

### Indicator Definitions

<b>Safe Systems Post Encroachment Time (PETss)</b>	PET is the time elapsed between one vehicle leaving a conflict area and a conflicting vehicle arriving at it. Risk level is based on PET together with the bullet vehicle impact speed. Risk thresholds reference the probability of severe injury (MAIS 3+) for left-turning vehicle vs oncoming vehicle collisions [1]. This indicator is used to measure risk to vehicle occupants.
<b>Vulnerable Road User Safe Systems Risk Indicator (VRUss)</b>	VRUss is a categorical risk indicator that uses an adapted version of Post Encroachment Time (PET) and the vehicle impact speed to determine the nearness and probability of a severe injury collision (MAIS 3+) using biomechanical injury thresholds for vehicle-pedestrian collisions [1]. This indicator is used to measure risk to VRUs.

[1] Jurewicz, C., Sobhani, A., Woolley, J., Dutschke, J., Corben, B., 2016. Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design. Transportation Research Procedia 14, 4247–4256. <https://doi.org/10.1016/j.tpro.2016.05.396>



### Overview of Conflict Types

Vehicle vs Pedestrian/Cyclist			
Indicator Used	VRUss		
Left-hook	Right-hook	Through/Right/Left (near-side)	Through (far-side)
pedestrian/cyclist vs left turning vehicle exiting intersection	pedestrian/cyclist vs right turning vehicle exiting intersection	pedestrian/cyclist vs vehicle entering intersection	pedestrian/cyclist vs through vehicle exiting intersection

Vehicle vs Vehicle		
Indicator Used	PETss	
Left Turning vs Oncoming	Through vs Through	Left Turning vs Through from Left

These are generic conflict type diagrams and do not depict the specific site

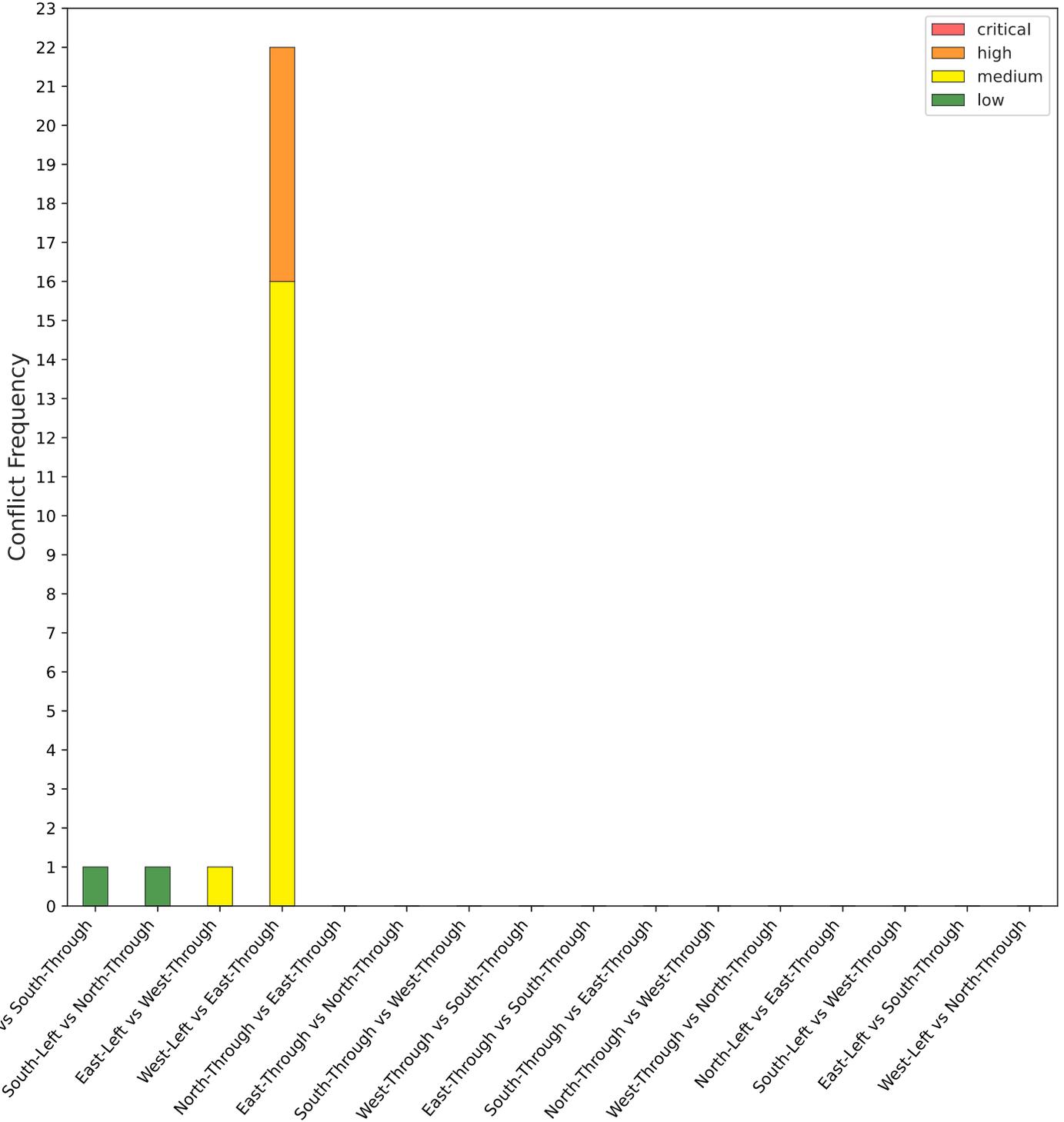


**Definition of Metrics Used in Detail Pages**

Metric	Definition of Metric
Measured Frequency	Number of conflicts measured in the respective risk category.
Annual Estimate	Simple extrapolation of measured frequency to an annual basis. The purpose of this metric is to provide an annualized context.
Conflict Rate	<p>Calculated as:</p> $\frac{\text{number of conflicts in a respective risk level}}{\text{frequency of estimated limiting movement}}$ <p>eg. if there is one North-left vs South-through high risk event and there are 1000 North-left vehicles, the high risk conflict rate for this configuration is 0.1%.</p>
Relative Risk	<p>Calculated as:</p> $\frac{\text{conflict rate at or above a specific risk level}}{\text{benchmark average conflict rate at or above that risk level}}$ <p>A Relative Risk of 1 means the conflict rate of road users at or above that risk level is the same as the benchmark average whereas a Relative Risk of 0.75 means the conflict rate is 0.75x the benchmark etc. Benchmark thresholds are developed locally for network screening applications and based on relevant sites from other jurisdictions otherwise. The purpose of this metric is to demonstrate which interactions have elevated risk and which do not.</p>



## Results Summary – Safe Systems Post Encroachment Time





## Results Summary – Safe Systems Post Encroachment Time

### Right-Angle (Left-Turning Vehicle vs Oncoming Vehicle)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs South-Through	1	0	0	0
South-Left vs North-Through	1	0	0	0
East-Left vs West-Through	0	1	0	0
West-Left vs East-Through	0	16	6	0

### Right-Angle (Through Vehicle vs Through Vehicle)

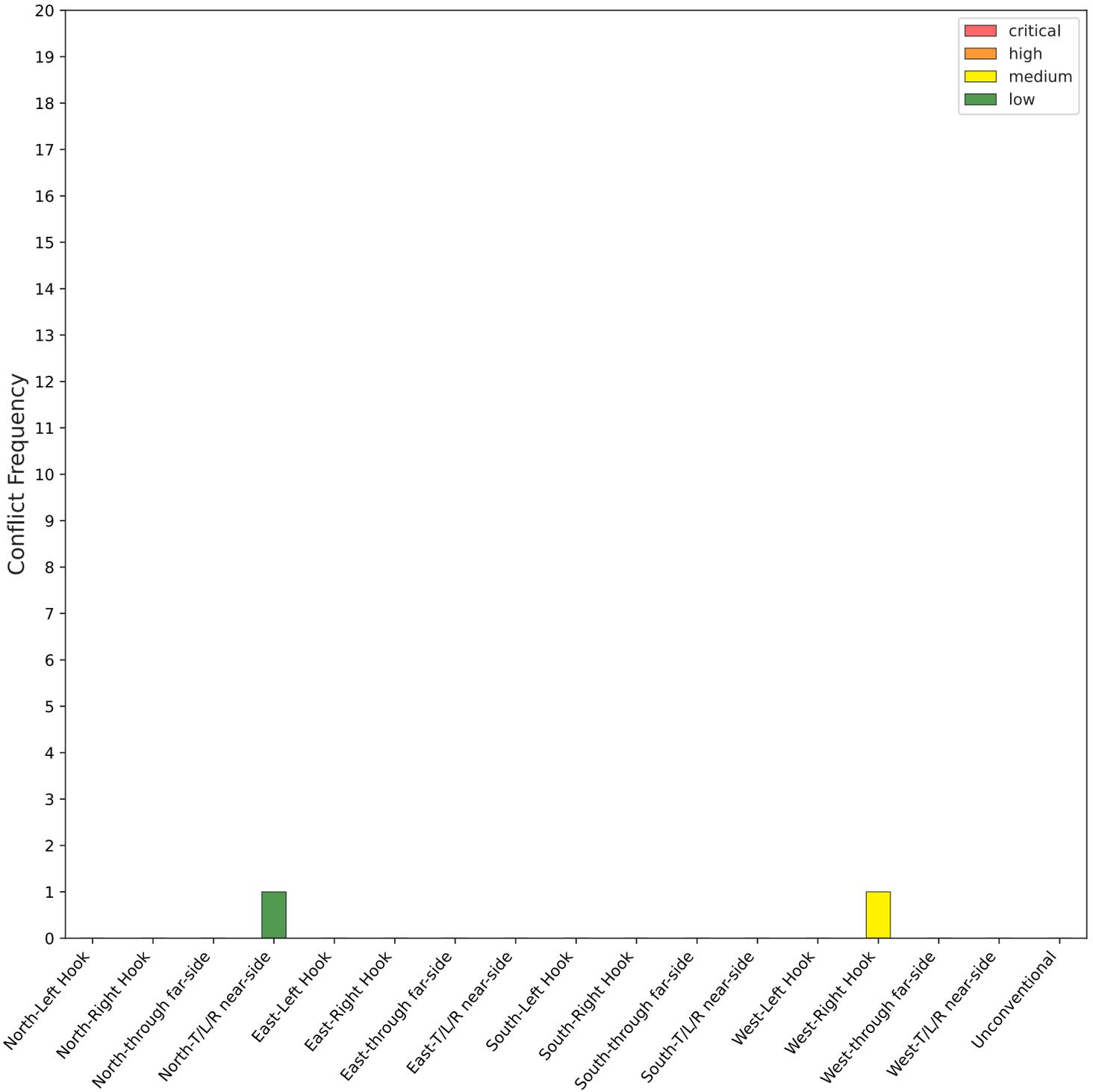
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Through vs East-Through	0	0	0	0
East-Through vs North-Through	0	0	0	0
South-Through vs West-Through	0	0	0	0
West-Through vs South-Through	0	0	0	0
East-Through vs South-Through	0	0	0	0
South-Through vs East-Through	0	0	0	0
North-Through vs West-Through	0	0	0	0
West-Through vs North-Through	0	0	0	0

### Right-Angle (Left-Turning Vehicle vs Through Vehicle from Left)

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left vs East-Through	0	0	0	0
South-Left vs West-Through	0	0	0	0
East-Left vs South-Through	0	0	0	0
West-Left vs North-Through	0	0	0	0



## Results Summary – Cyclist Safe Systems Risk Indicator





## Results Summary – Cyclist Safe Systems Risk Indicator

### Cyclist vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	0	0	0	0
North-Right Hook	0	0	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	1	0	0	0

### Cyclist vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	0	0	0	0

### Cyclist vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	0	0	0
South-Right Hook	0	0	0	0
South-through far-side	0	0	0	0
South-T/L/R near-side	0	0	0	0

### Cyclist vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	0	0	0	0
West-Right Hook	0	1	0	0
West-through far-side	0	0	0	0
West-T/L/R near-side	0	0	0	0

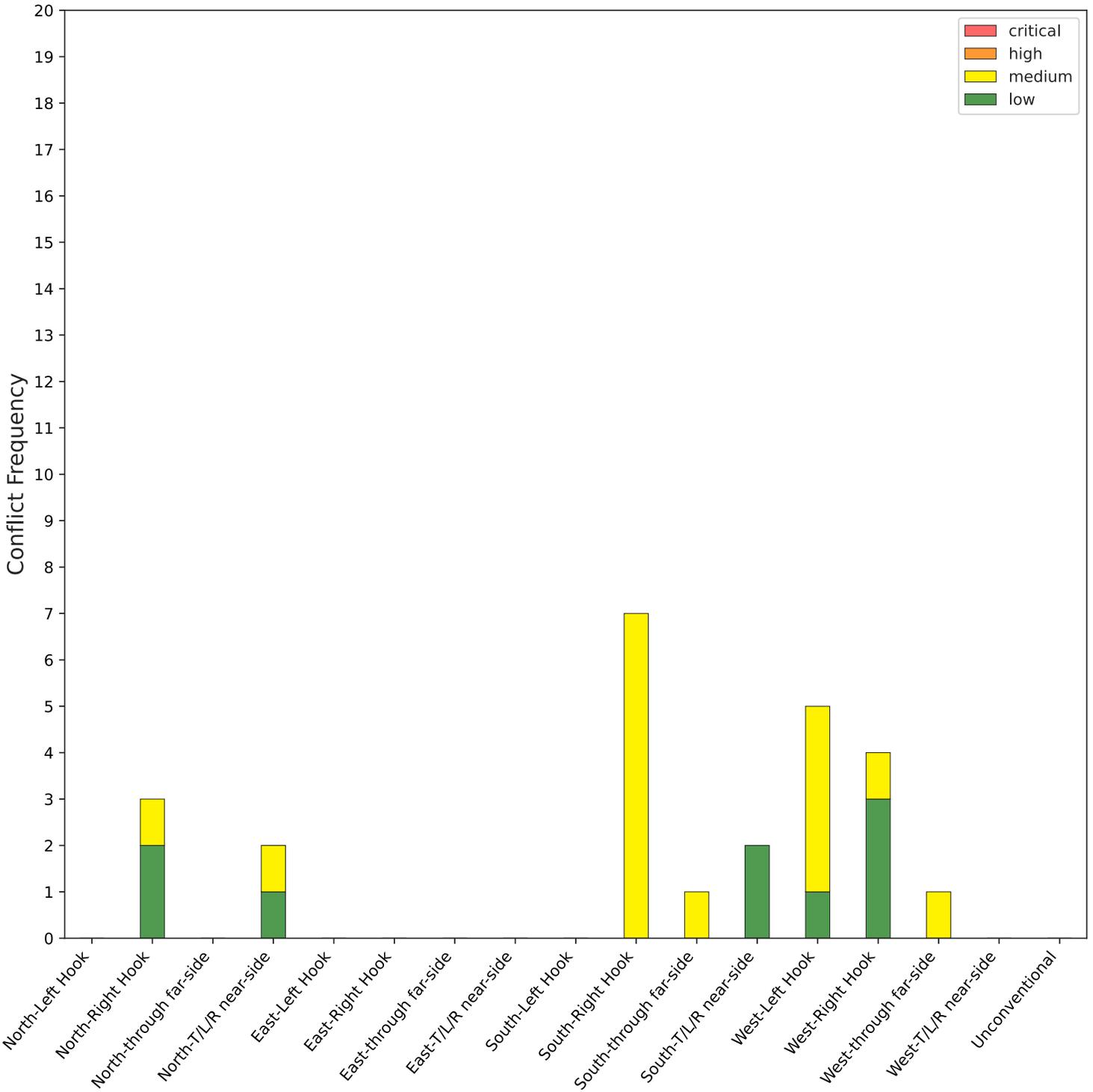
### Unconventional Cyclist Movement vs Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	NM	NM	NM	NM

NM = Not Measured



## Results Summary – Pedestrian Safe Systems Risk Indicator





## Results Summary – Pedestrian Safe Systems Risk Indicator

### Pedestrian vs Northbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
North-Left Hook	0	0	0	0
North-Right Hook	2	1	0	0
North-through far-side	0	0	0	0
North-T/L/R near-side	1	1	0	0

### Pedestrian vs Eastbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
East-Left Hook	0	0	0	0
East-Right Hook	0	0	0	0
East-through far-side	0	0	0	0
East-T/L/R near-side	0	0	0	0

### Pedestrian vs Southbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
South-Left Hook	0	0	0	0
South-Right Hook	0	7	0	0
South-through far-side	0	1	0	0
South-T/L/R near-side	2	0	0	0

### Pedestrian vs Westbound Vehicle Conflicts

Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
West-Left Hook	1	4	0	0
West-Right Hook	3	1	0	0
West-through far-side	0	1	0	0
West-T/L/R near-side	0	0	0	0

### Unconventional Pedestrian Movement vs Vehicle Conflicts

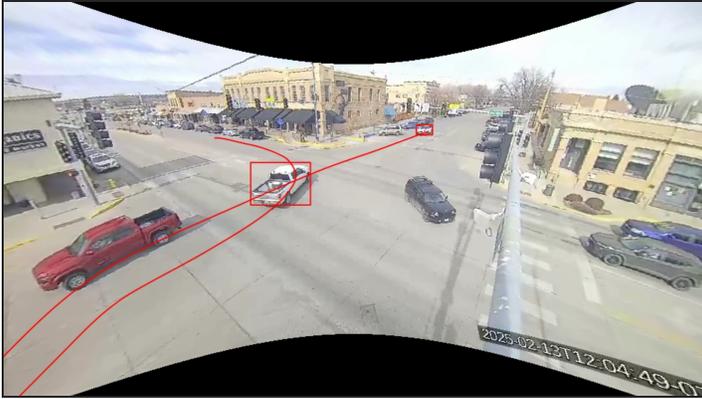
Configuration	Low Risk	Medium Risk	High Risk	Critical Risk
Unconventional	NM	NM	NM	NM

NM = Not Measured

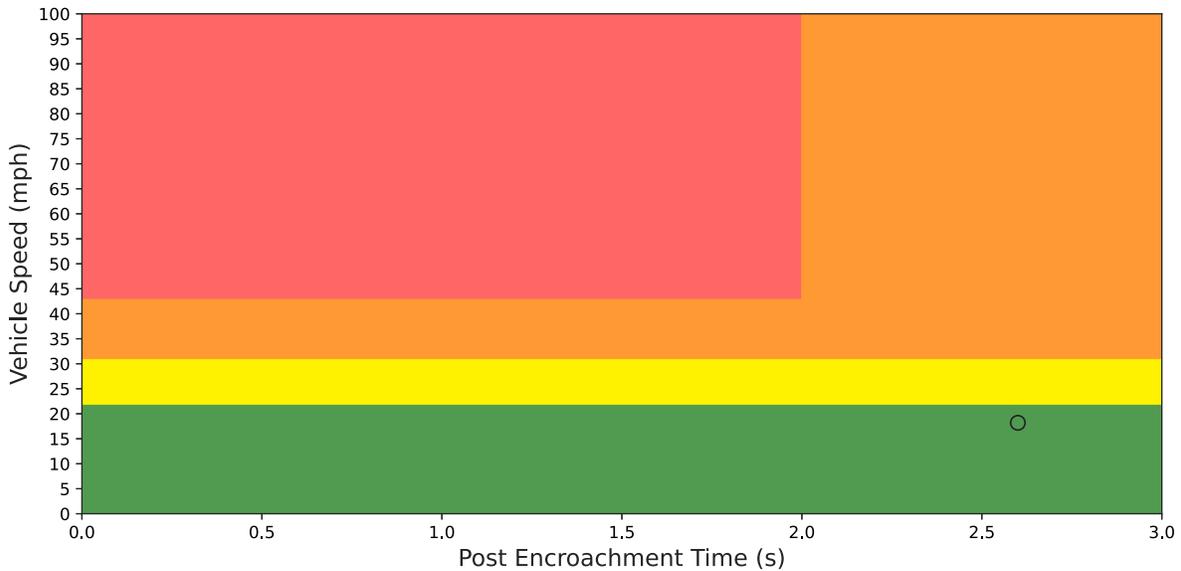
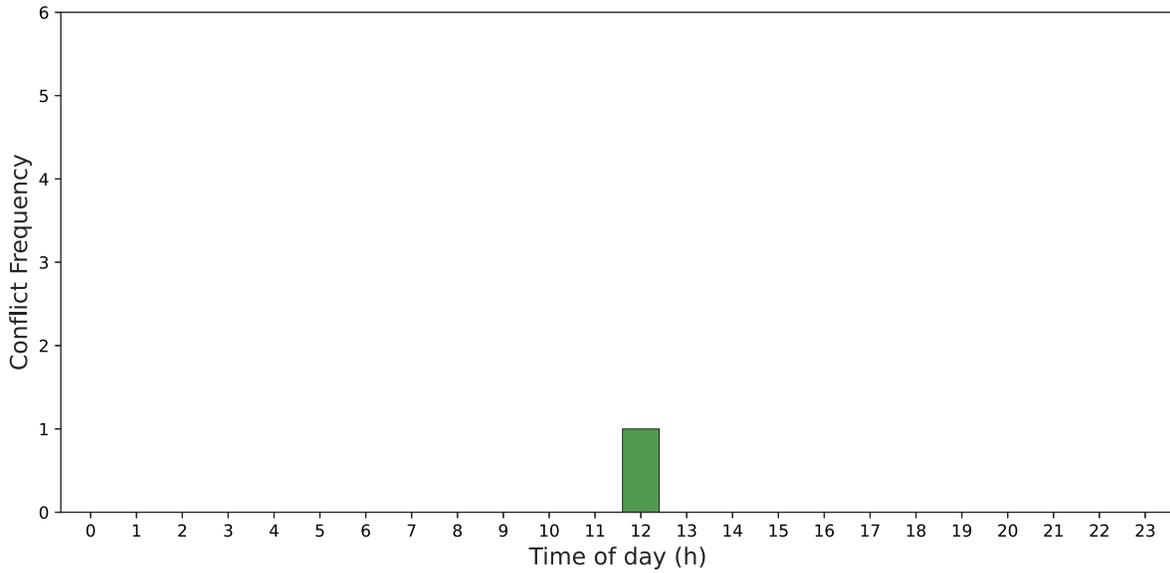


## North-Left Vehicle vs South-Through Vehicle

@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



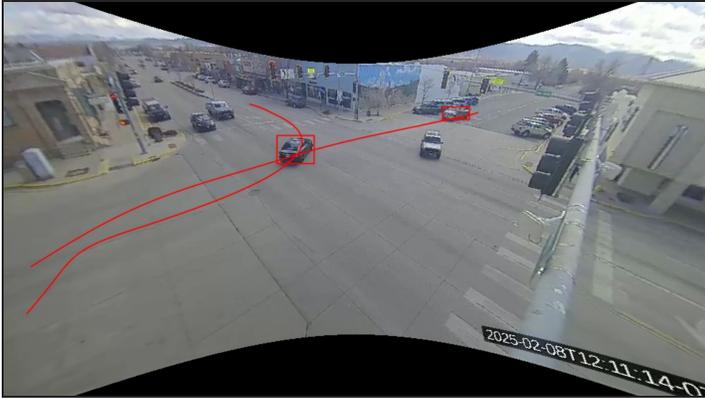
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	0.1
Relative Risk	NA	0.0	0.0	0.05



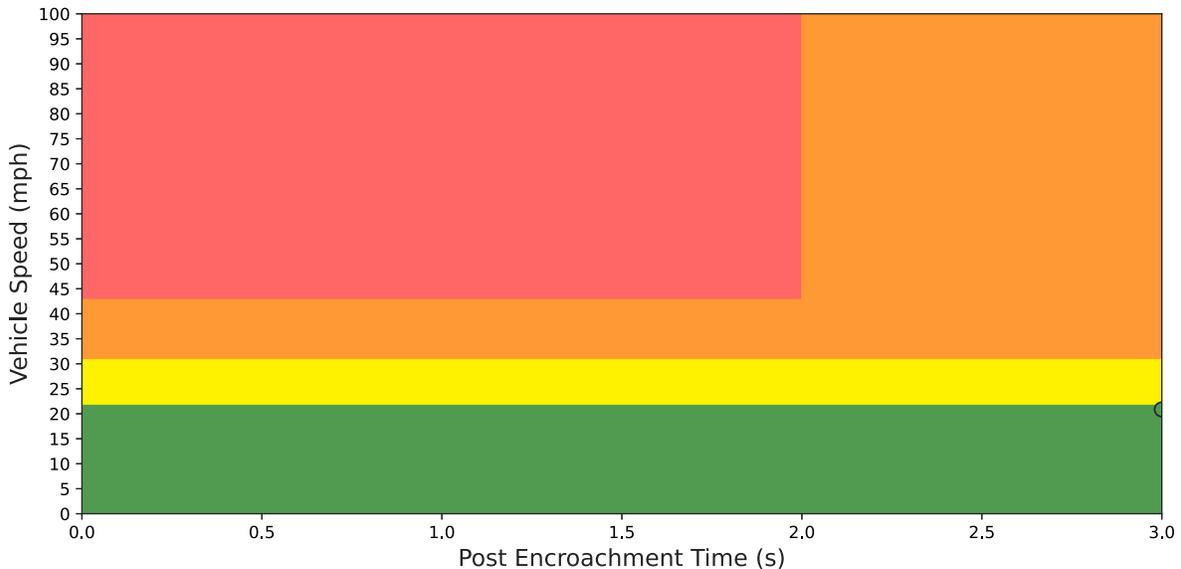
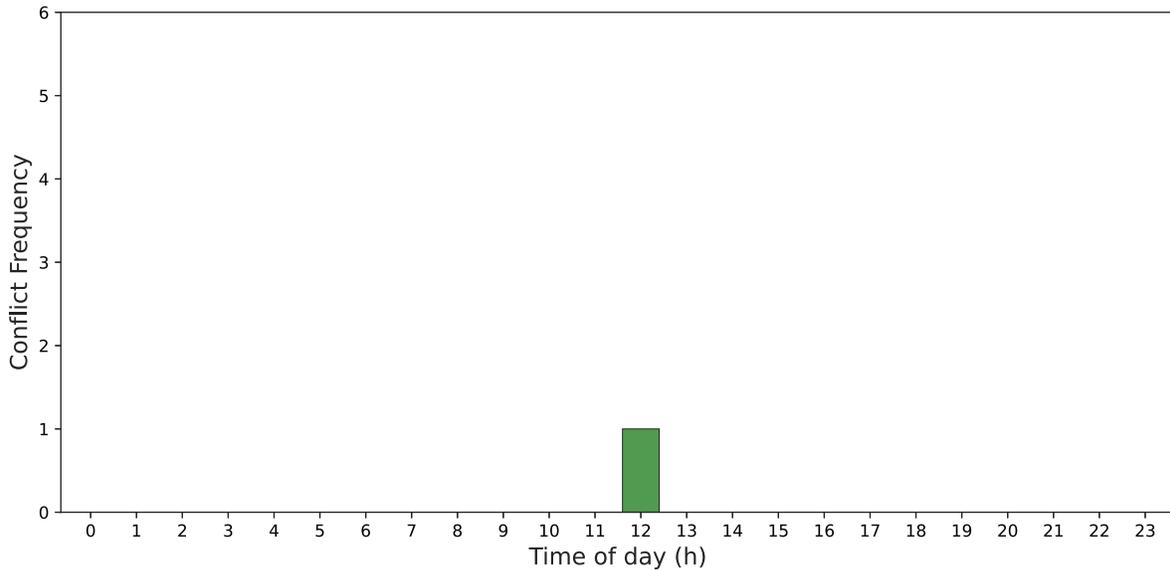


### South-Left Vehicle vs North-Through Vehicle

@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



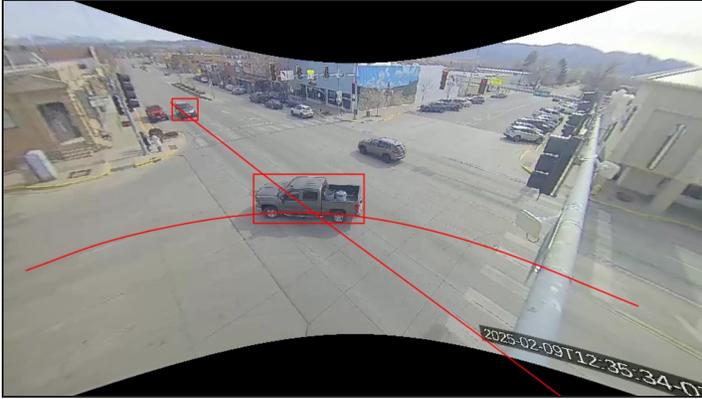
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	0.08
Relative Risk	NA	0.0	0.0	0.04



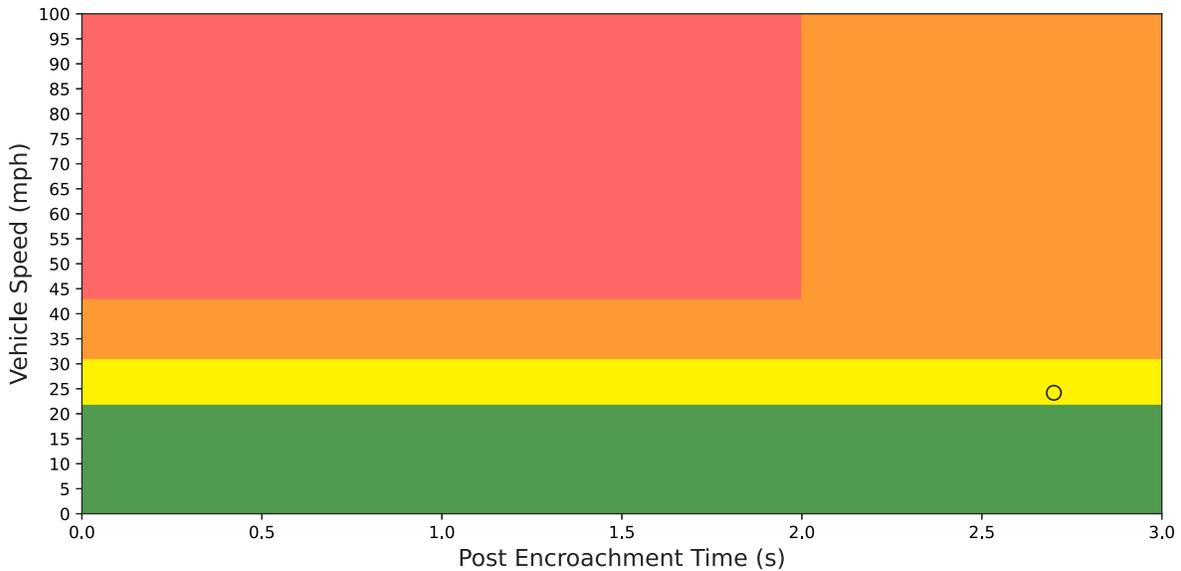
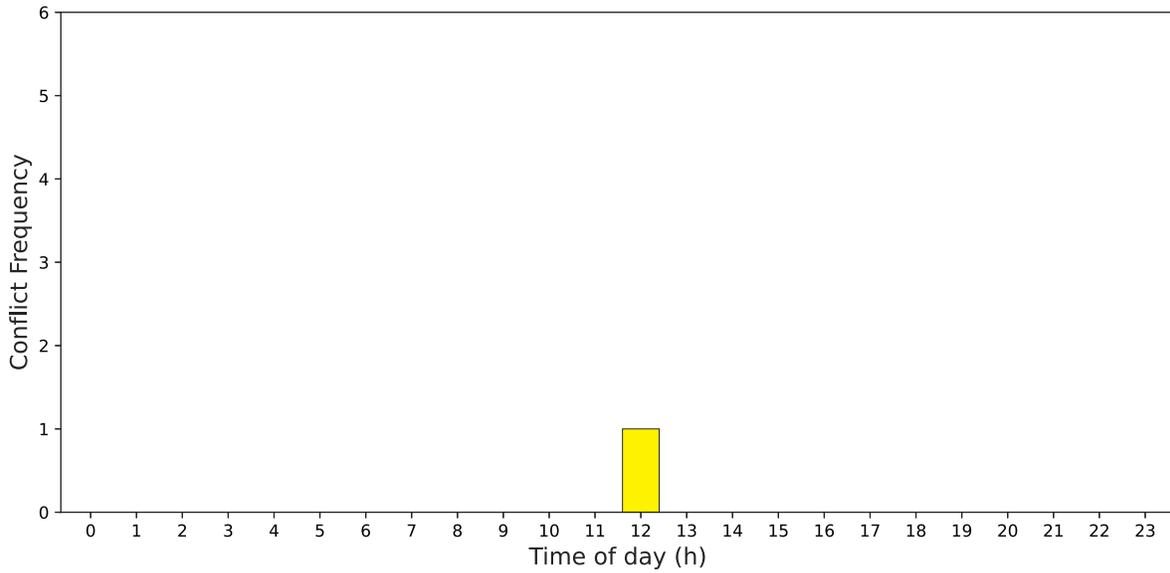


### East-Left Vehicle vs West-Through Vehicle

@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



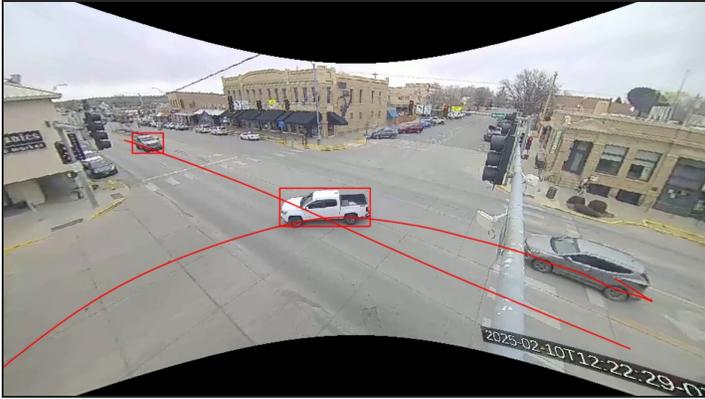
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	0.0	0.0	0.18	0.0
Relative Risk	NA	0.0	0.12	0.1



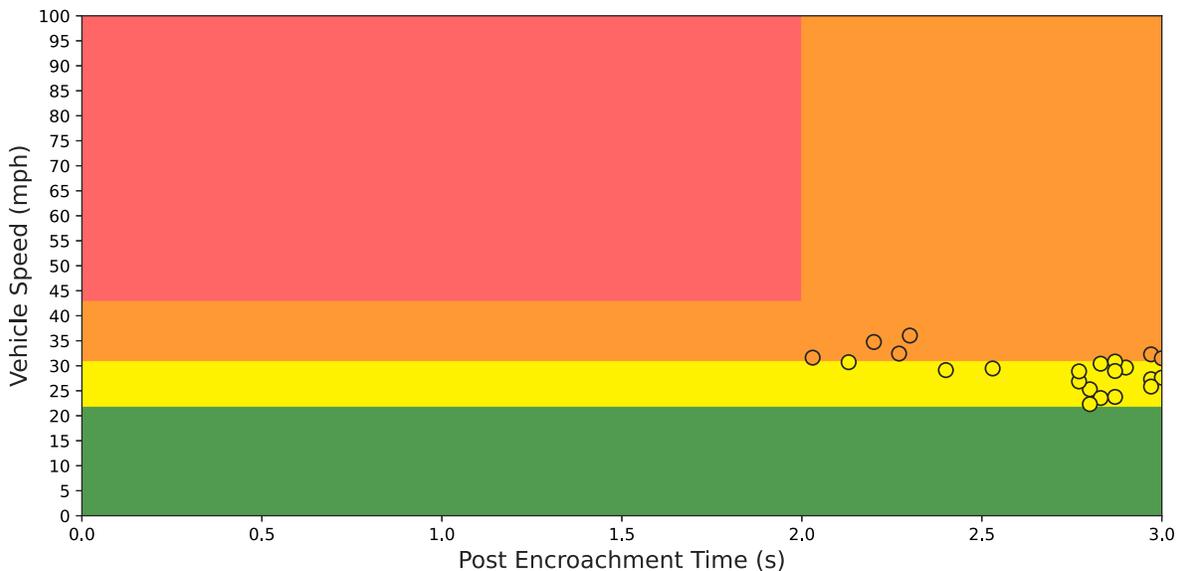
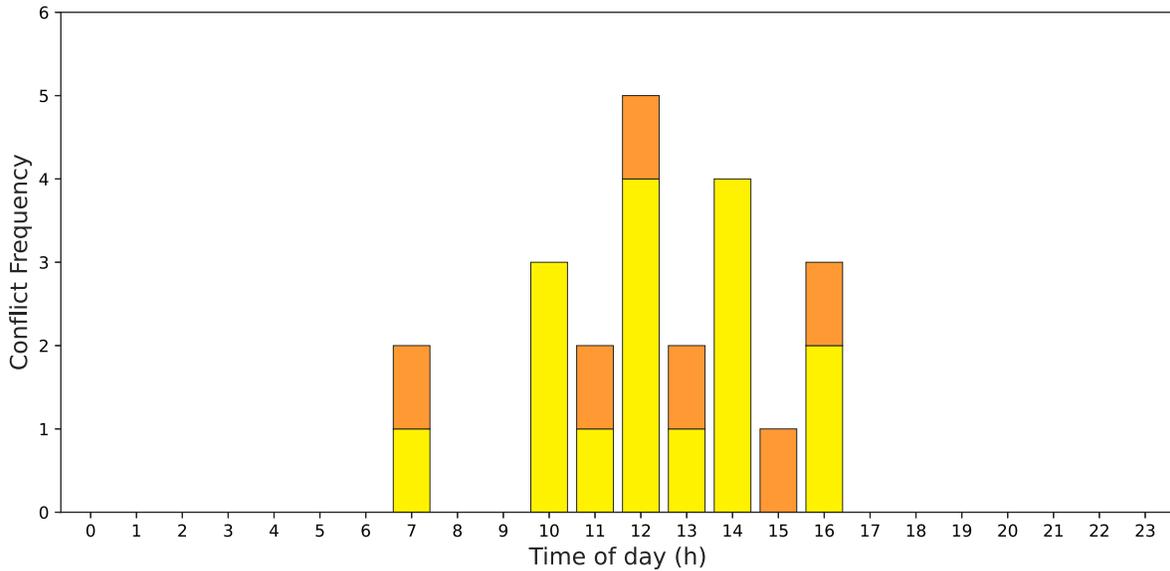


## West-Left Vehicle vs East-Through Vehicle

@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13

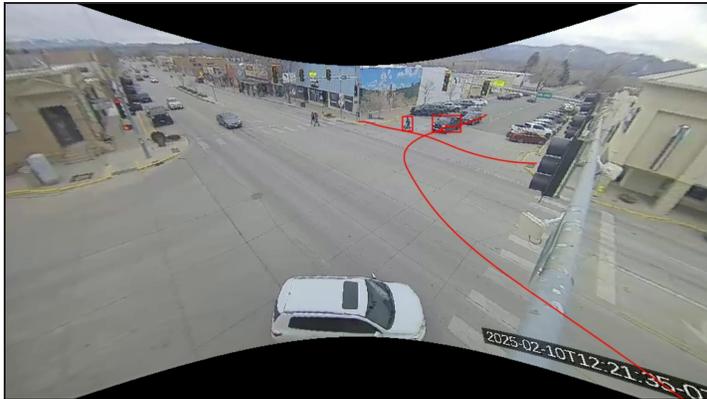


Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	6	16	0
Annual Estimate	0	365	973	0
Conflict Rate (%)	0.0	0.41	1.09	0.0
Relative Risk	NA	0.43	0.99	0.78

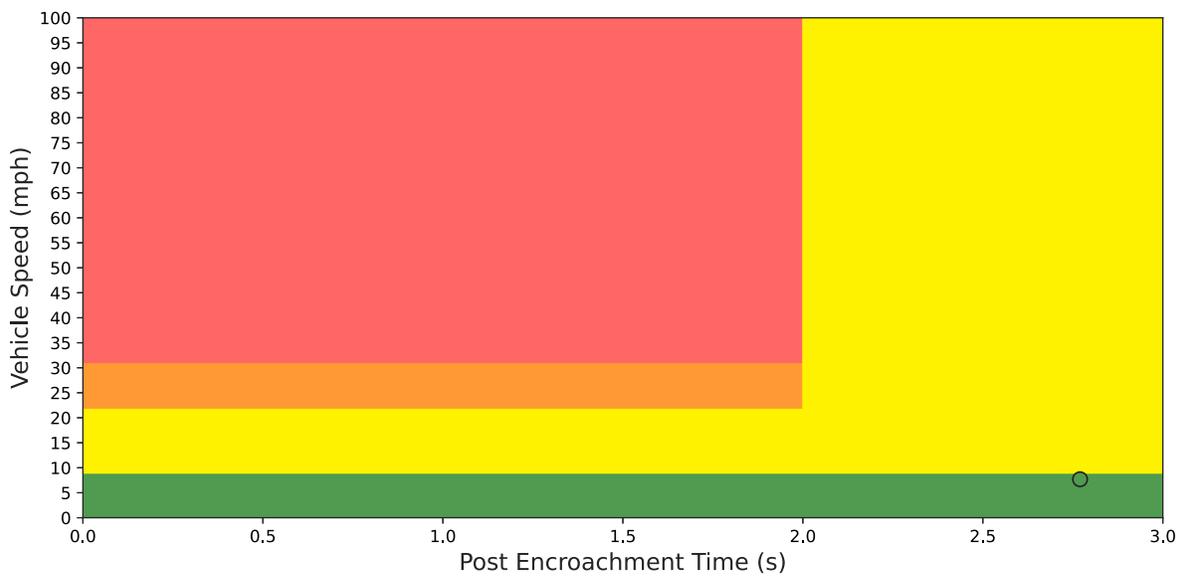
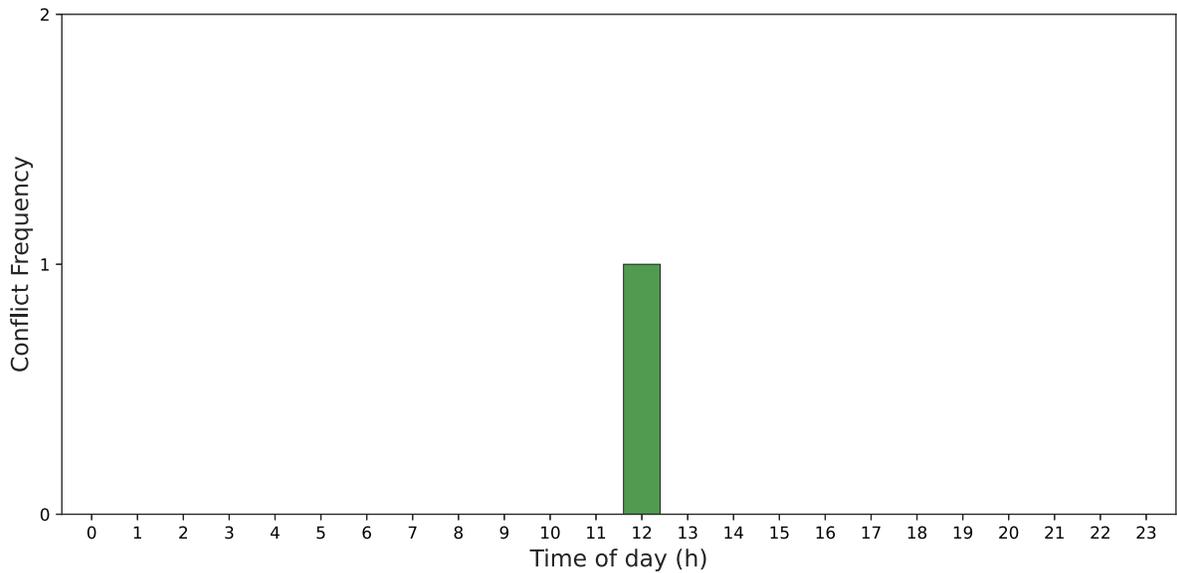




**North-T/L/R Vehicle vs Cyclist on South Side (North-T/L/R near-side)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



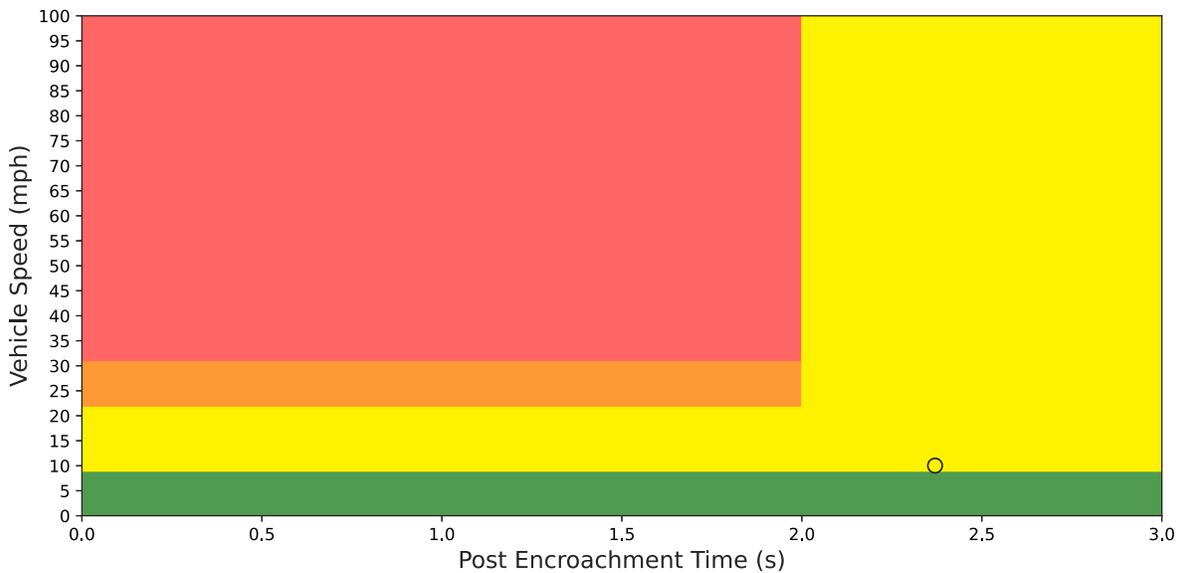
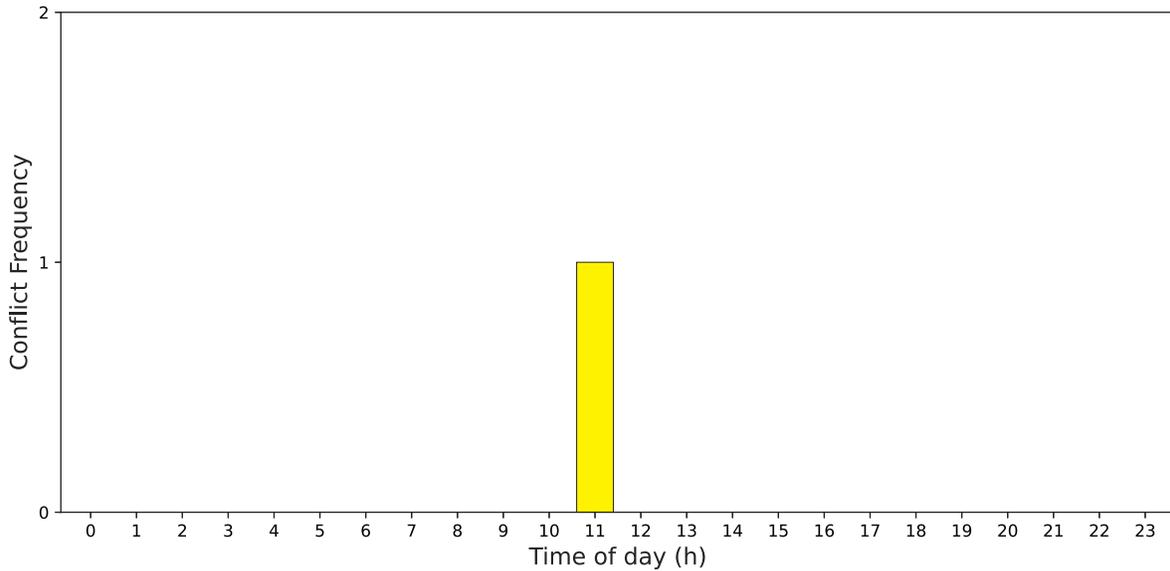
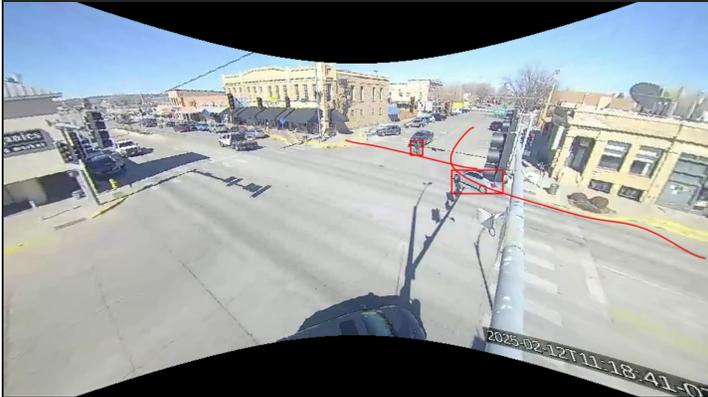
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	1
Annual Estimate	0	0	0	61
Conflict Rate (%)	0.0	0.0	0.0	4.17
Relative Risk	NA	NA	NA	NA





## West-Right Vehicle vs Cyclist on North Side (West-Right Hook) @ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13

Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	NA	NA	NA	NA
Relative Risk	NA	NA	NA	NA

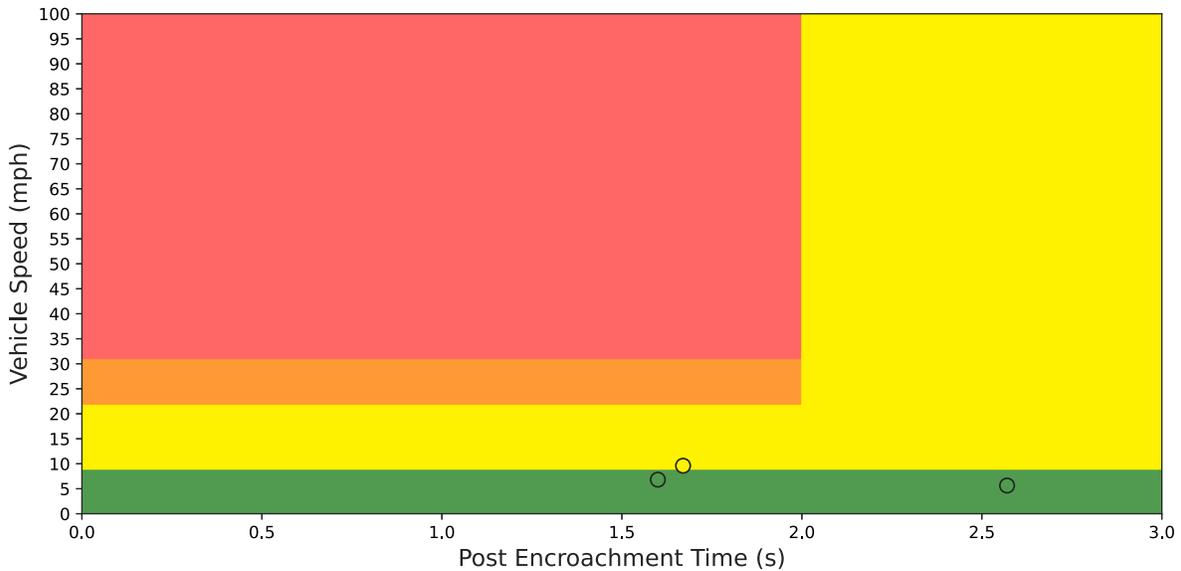
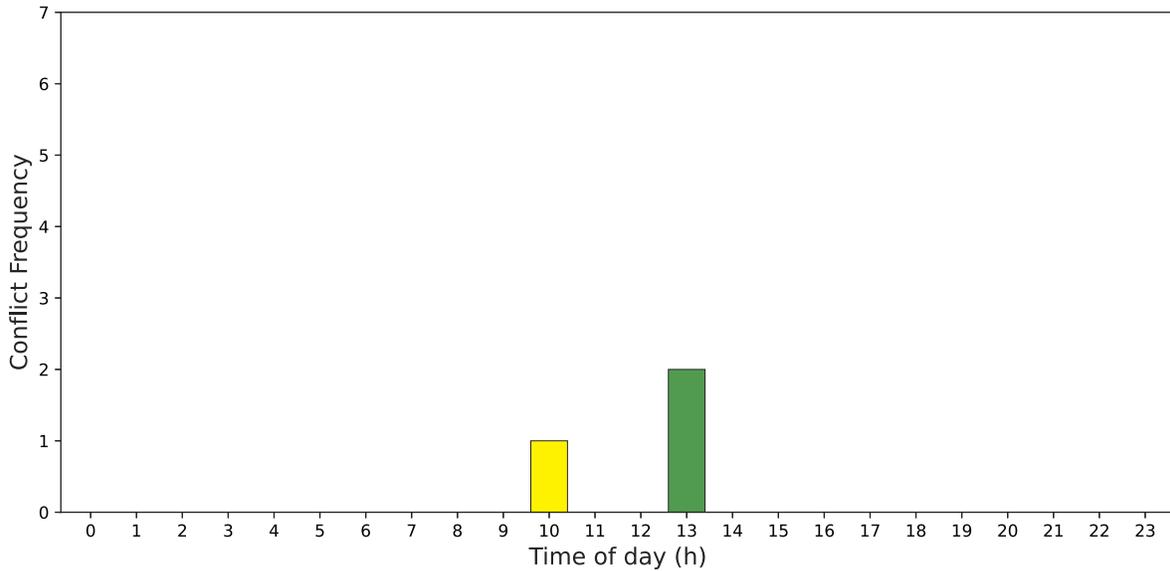




### North-Right Vehicle vs Pedestrian on East Side (North-Right Hook) @ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	2
Annual Estimate	0	0	61	122
Conflict Rate (%)	0.0	0.0	1.04	2.08
Relative Risk	NA	NA	0.44	1.0

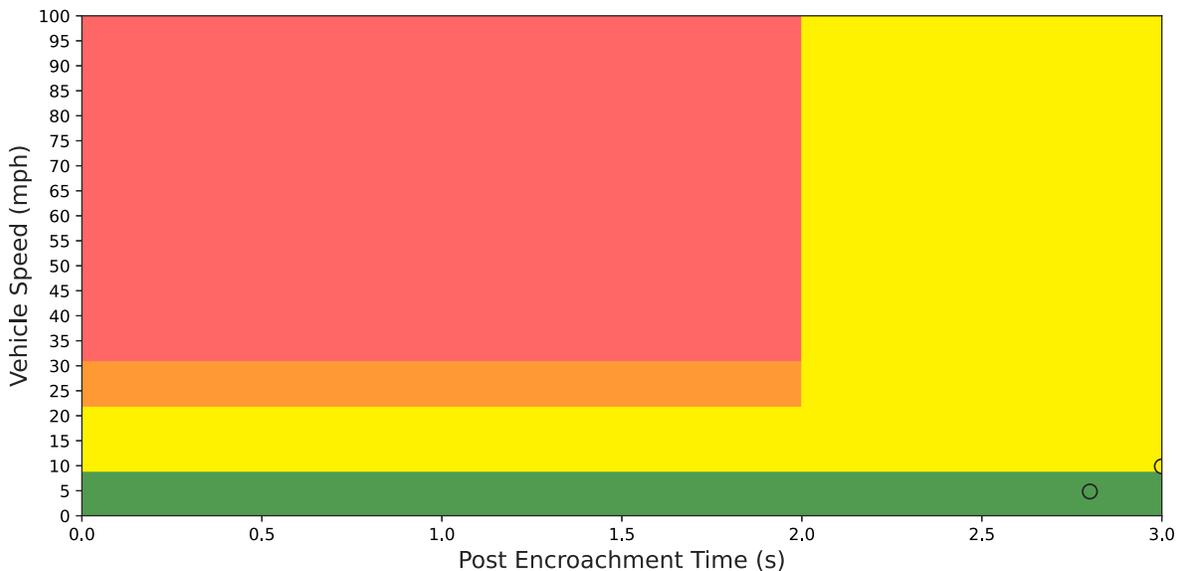
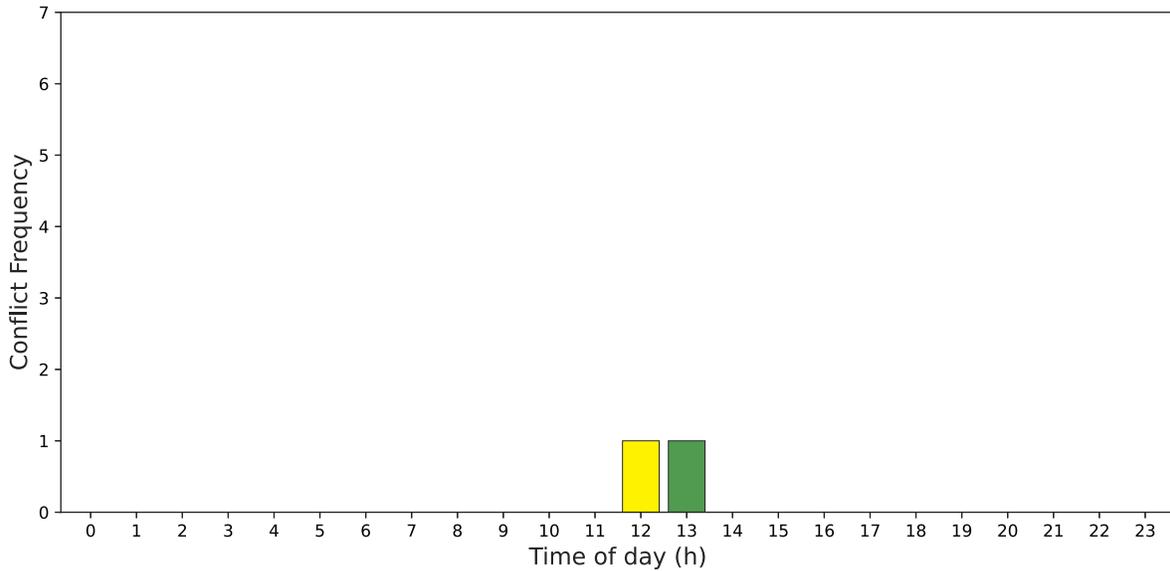




**North-T/L/R Vehicle vs Pedestrian on South Side (North-T/L/R near-side)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



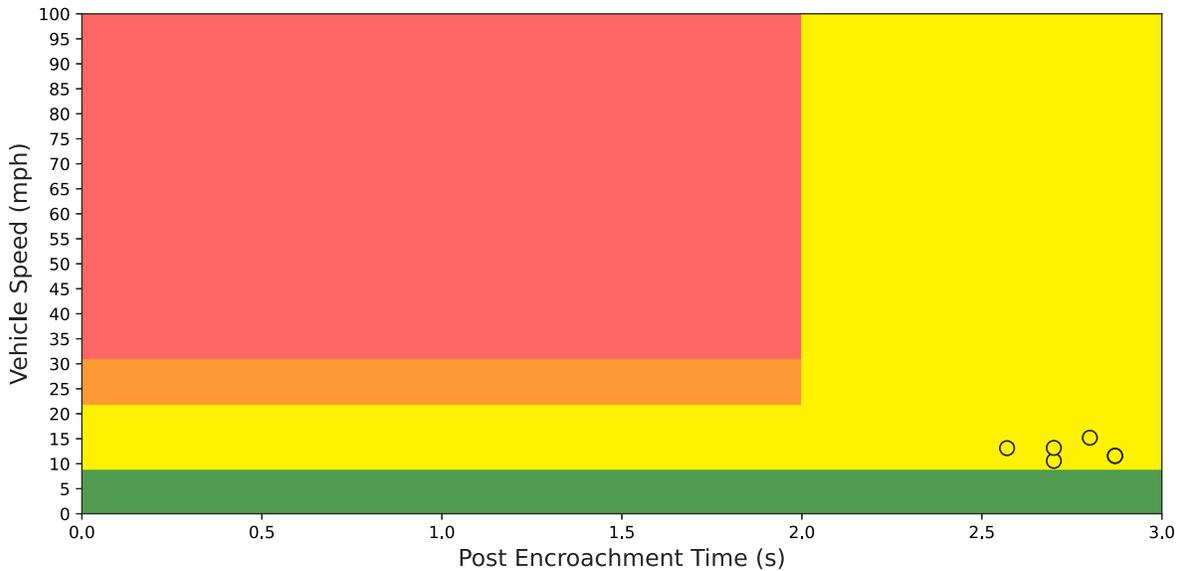
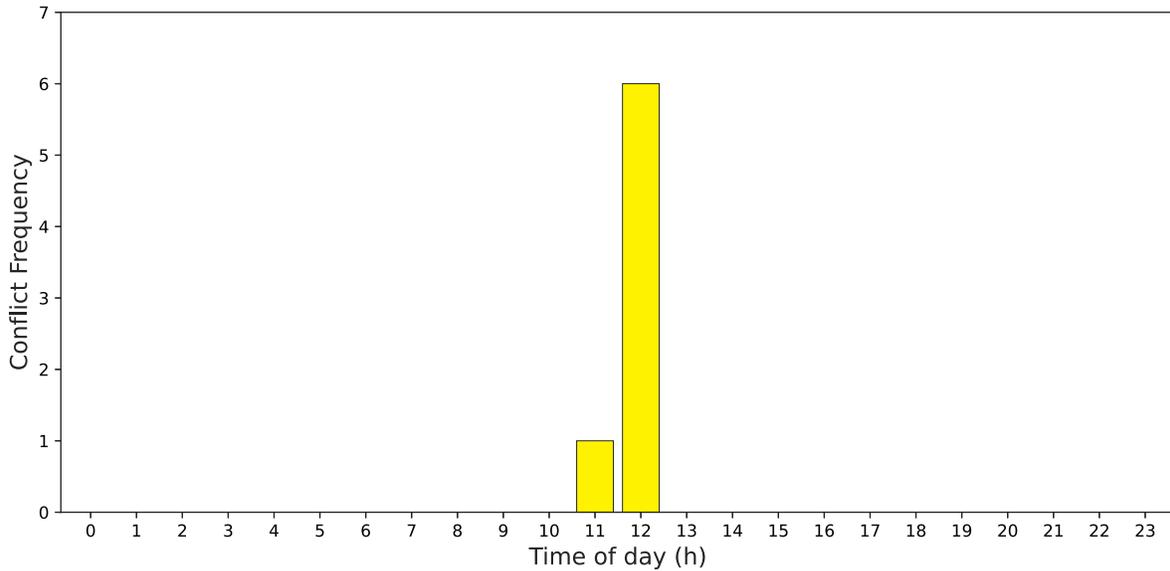
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	1
Annual Estimate	0	0	61	61
Conflict Rate (%)	0.0	0.0	0.07	0.07
Relative Risk	NA	NA	NA	NA





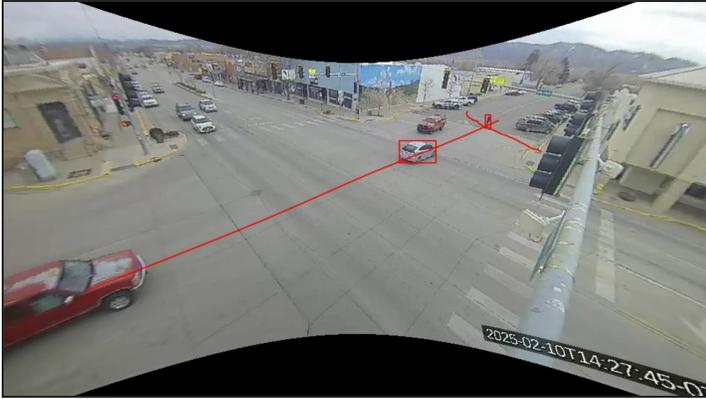
**South-Right Vehicle vs Pedestrian on West Side (South-Right Hook)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13

	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	7	0
	Annual Estimate	0	0	426	0
	Conflict Rate (%)	0.0	0.0	3.07	0.0
	Relative Risk	NA	NA	1.31	0.98

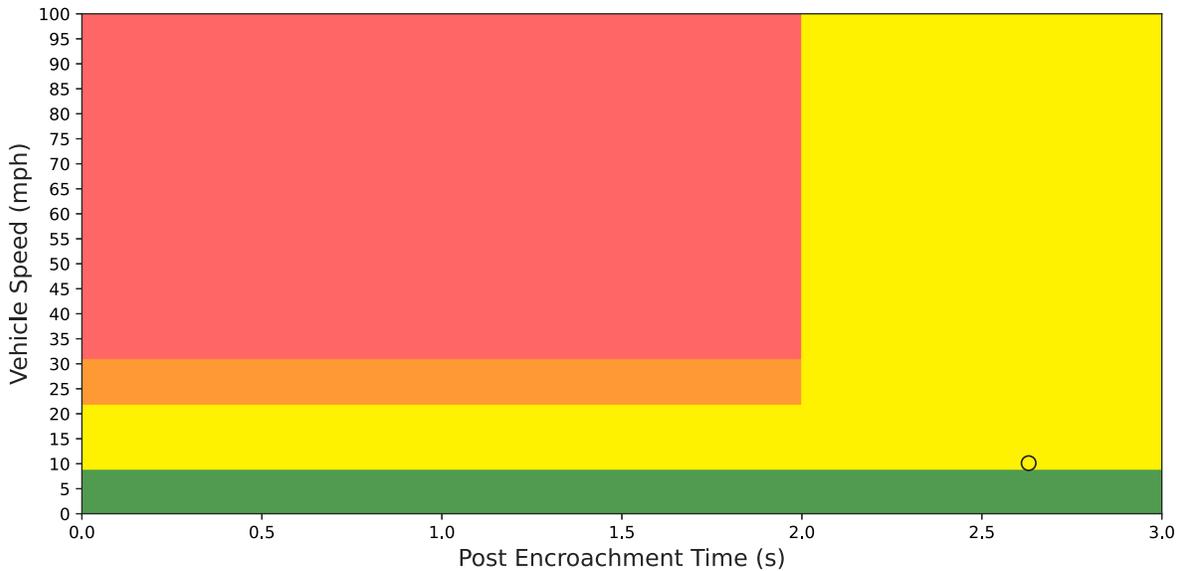
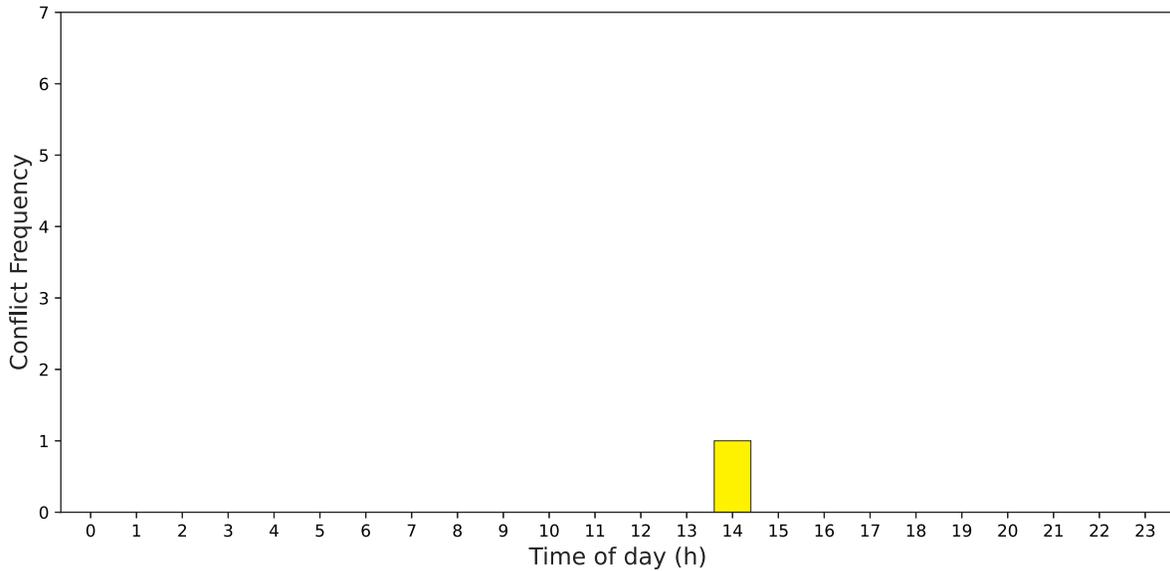




**South-Through Vehicle vs Pedestrian on South Side (South-through far-side)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



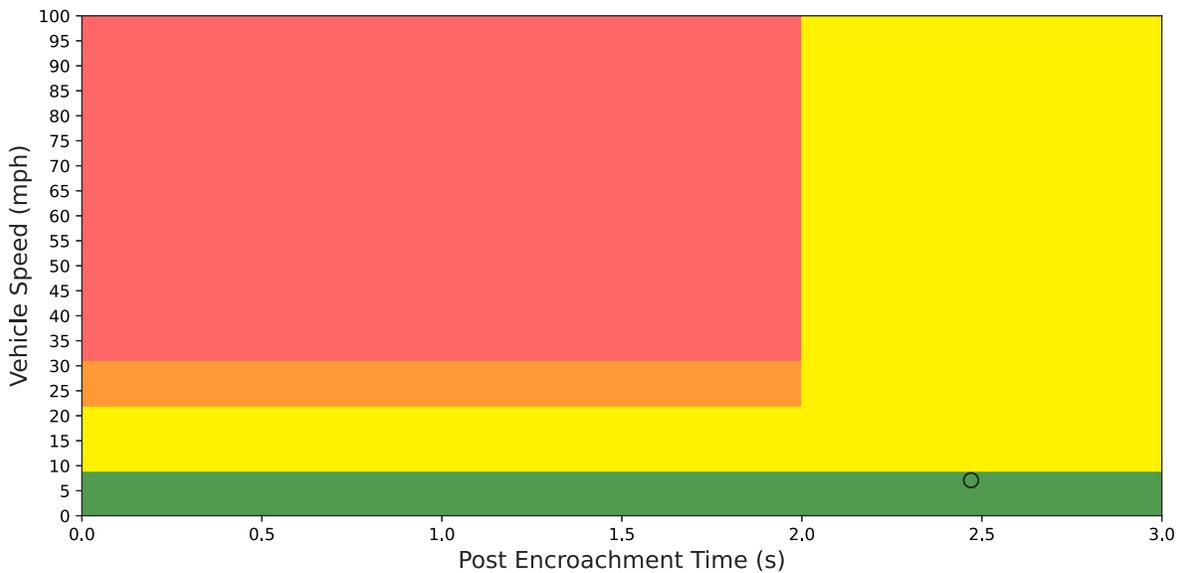
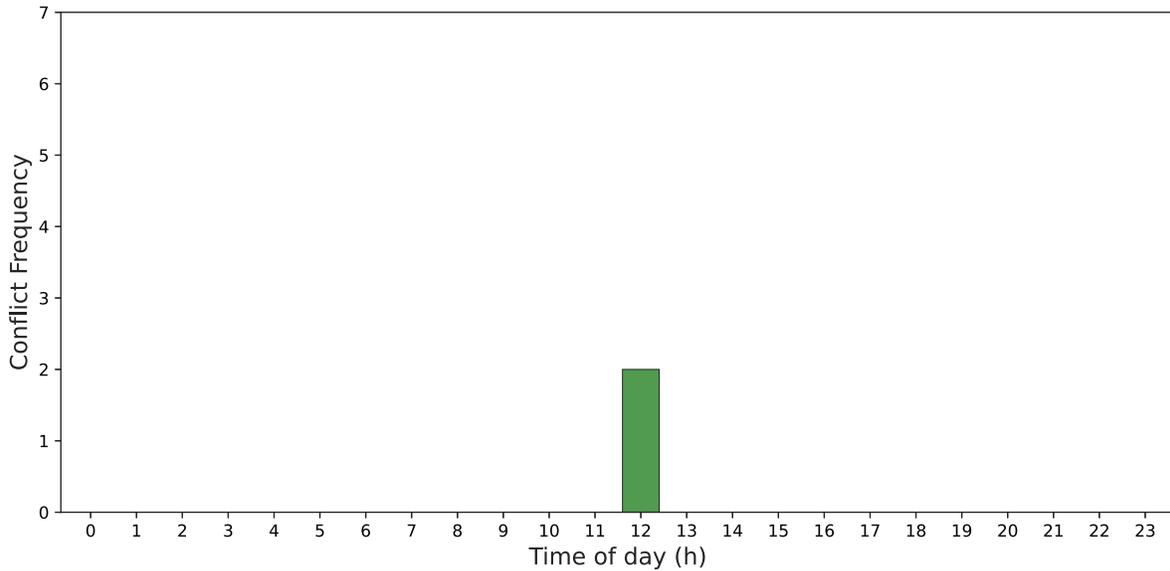
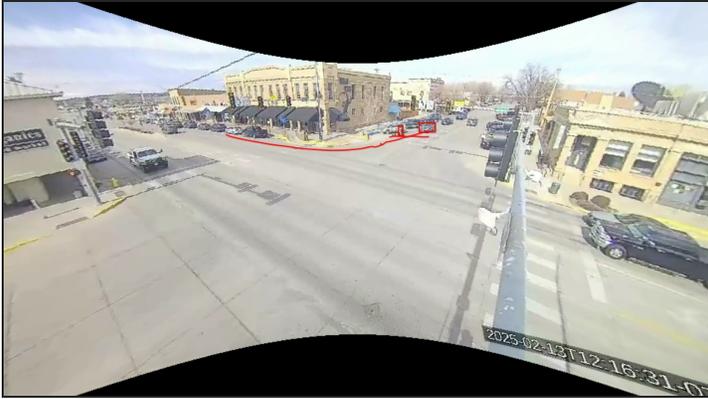
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	1	0
Annual Estimate	0	0	61	0
Conflict Rate (%)	0.0	0.0	0.07	0.0
Relative Risk	NA	NA	NA	NA





**South-T/L/R Vehicle vs Pedestrian on North Side (South-T/L/R near-side)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13

Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	0	2
Annual Estimate	0	0	0	122
Conflict Rate (%)	0.0	0.0	0.0	0.37
Relative Risk	NA	NA	NA	NA

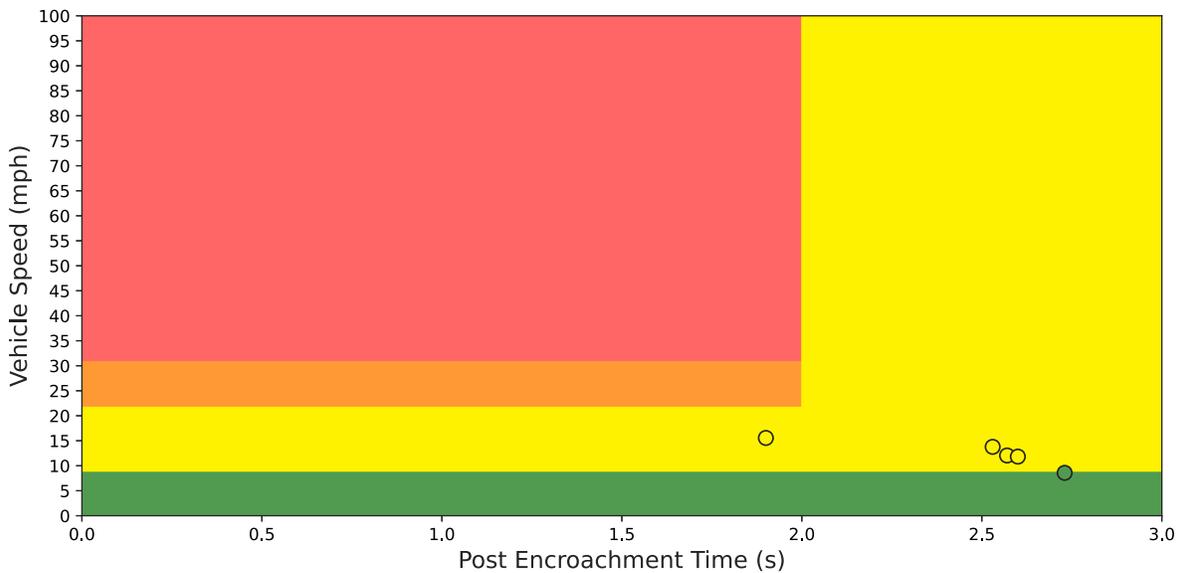
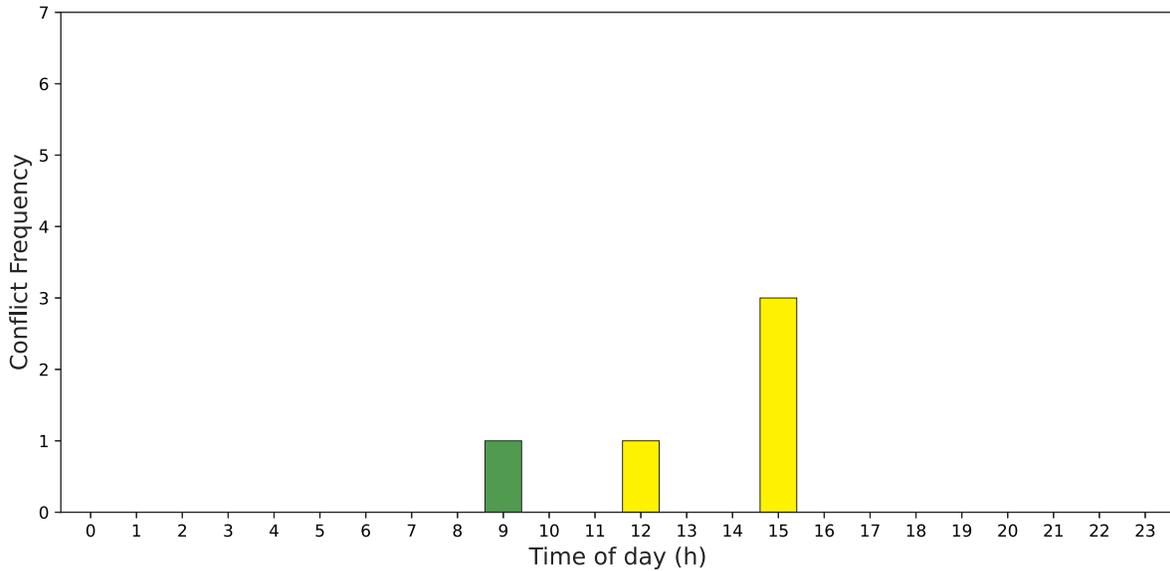




### West-Left Vehicle vs Pedestrian on South Side (West-Left Hook) @ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13



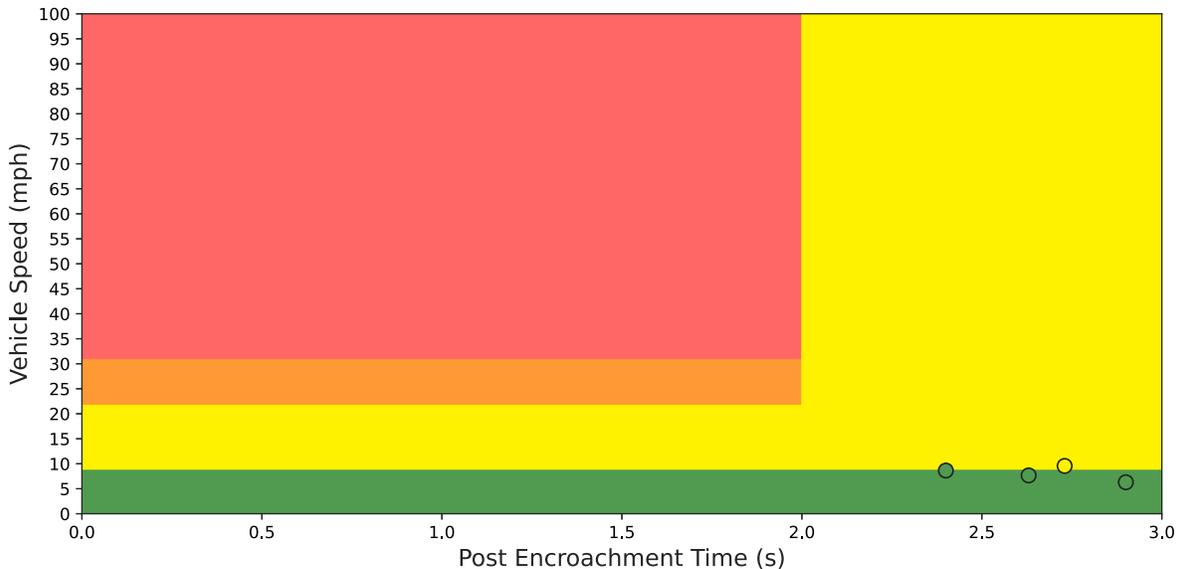
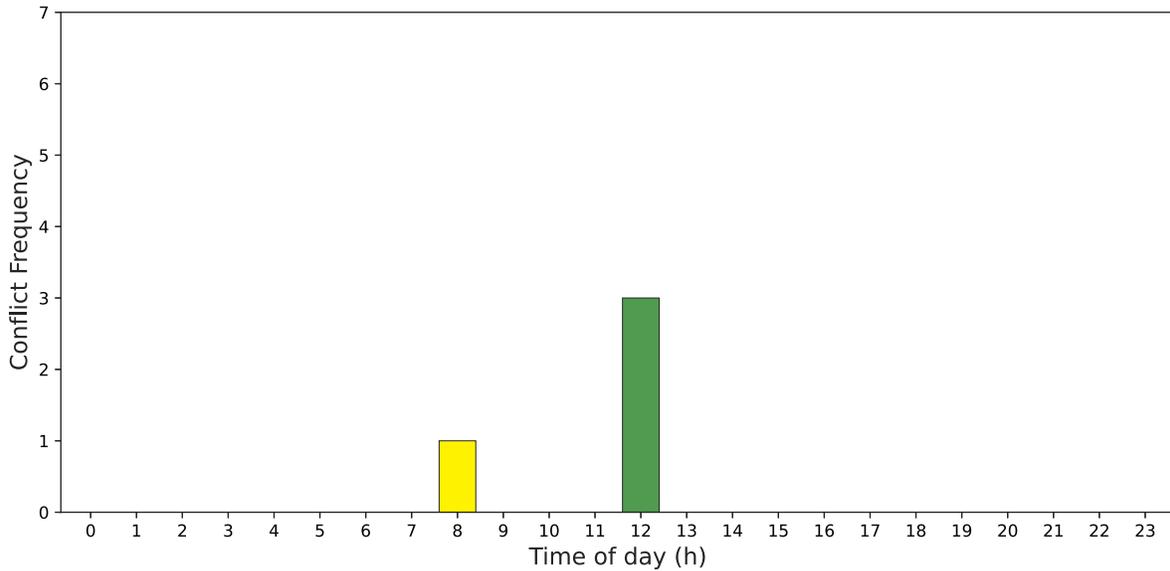
Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
Measured Frequency	0	0	4	1
Annual Estimate	0	0	243	61
Conflict Rate (%)	0.0	0.0	0.28	0.07
Relative Risk	NA	NA	0.14	0.16





**West-Right Vehicle vs Pedestrian on North Side (West-Right Hook)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13

	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	1	3
	Annual Estimate	0	0	61	182
	Conflict Rate (%)	0.0	0.0	0.19	0.56
	Relative Risk	NA	NA	0.08	0.24





**West-Through Vehicle vs Pedestrian on West Side (West-through far-side)**  
@ Market Street & U.S. Highway 160, 2025-Feb-8 to 2025-Feb-13

	Risk Level	Critical Risk	High Risk	Medium Risk	Low Risk
	Measured Frequency	0	0	1	0
	Annual Estimate	0	0	61	0
	Conflict Rate (%)	0.0	0.0	0.44	0.0
	Relative Risk	NA	NA	NA	NA

