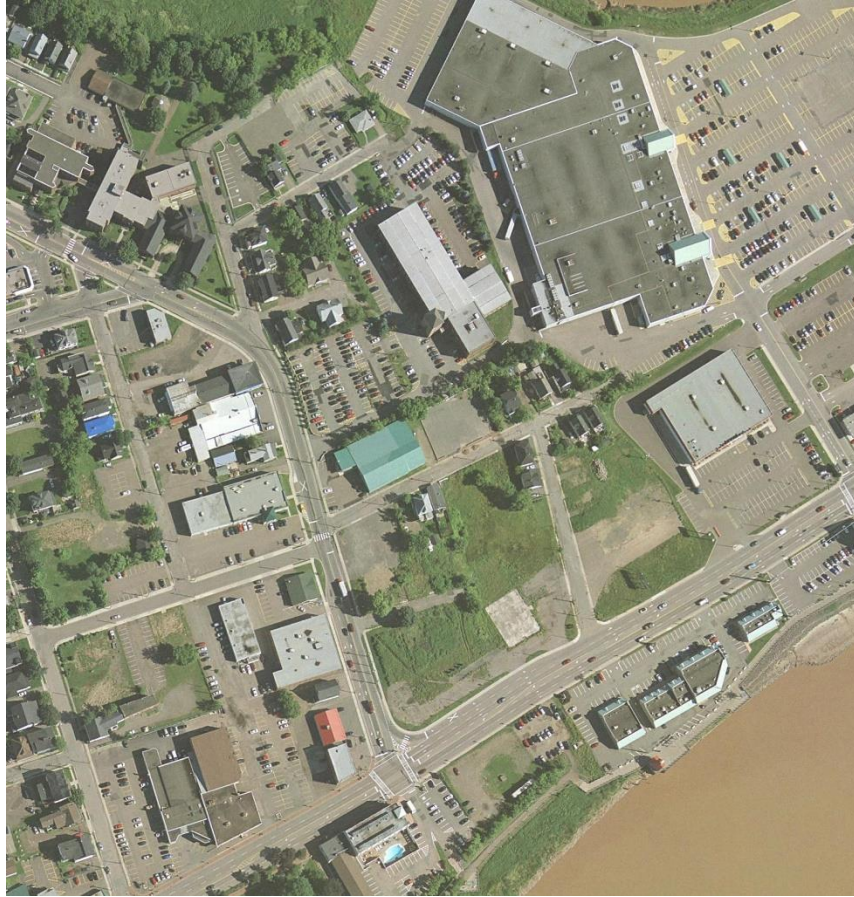


Street Intersections

Intersections are the most complicated and dangerous components to mitigate in street design, due to vehicle to vehicle, and vehicle with pedestrian interactions as well as the many distractions and obstructions associated with a street intersection.

This intersection is no exception.



AERIAL PHOTO OF THE INTERSECTION

Traffic Leaving Inn



TRAFFIC CONJESTION



NO 2 SEC SPACE BETWEEN VEHICLES

TRAFFIC CONJESTION



TRAFFIC ON MAIN OBSTRUCTS VIEW OF
SIDEWALK FROM KING STREET

TRAFFIC IN INTERSECTION ON AMBER LIGHT



PHOTO -5



- CONE OF VISION REDUCED DUE TO OBSTRUCTION

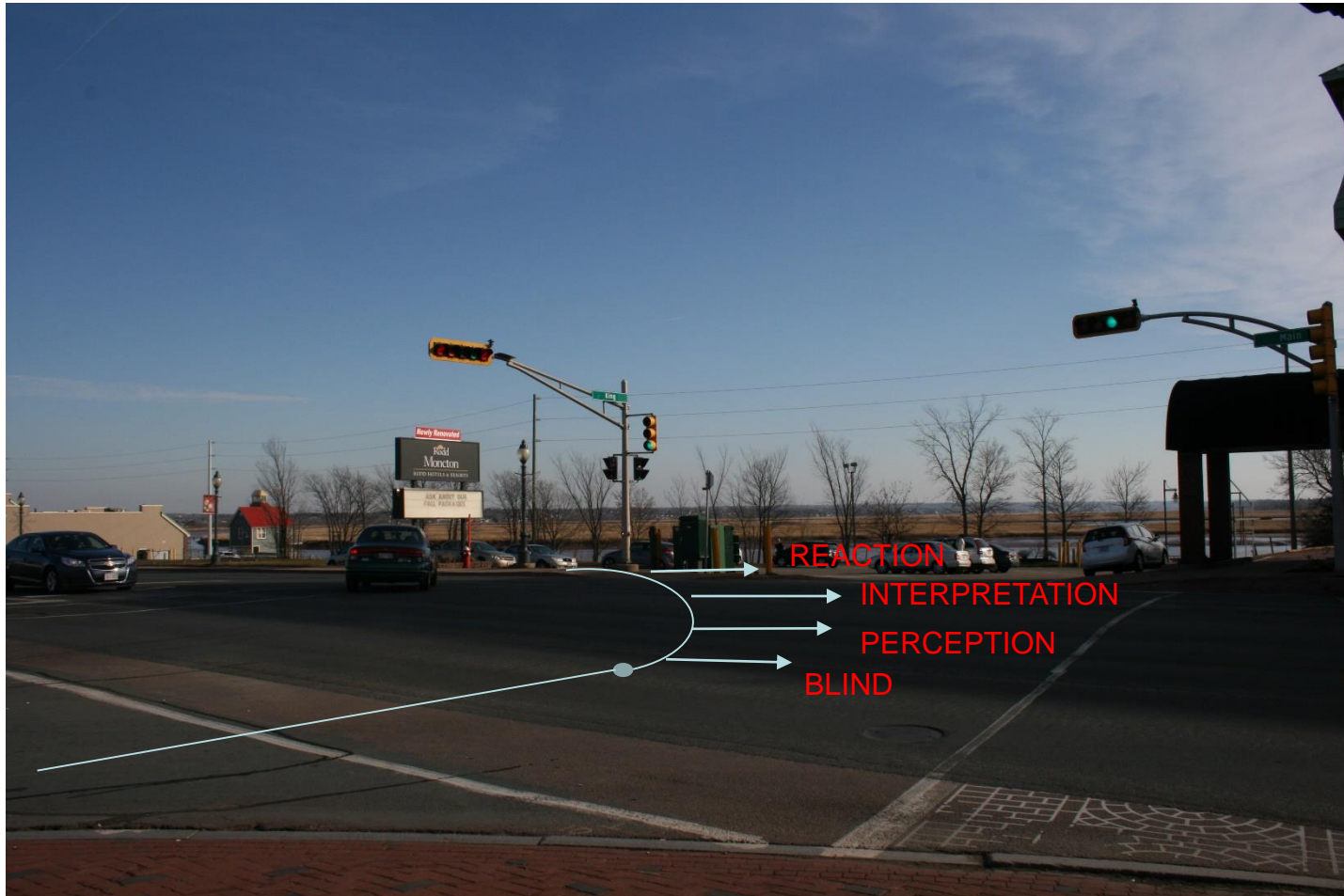


CONE OF VISION REDUCED DUE TO DRIVER'S HUMAN NATURE TO FOCUS ON TRAFFIC LIGHT

Location of Shadow at 1200 h



Location of Shadow at 1255h



Location of Shadow at 1315h

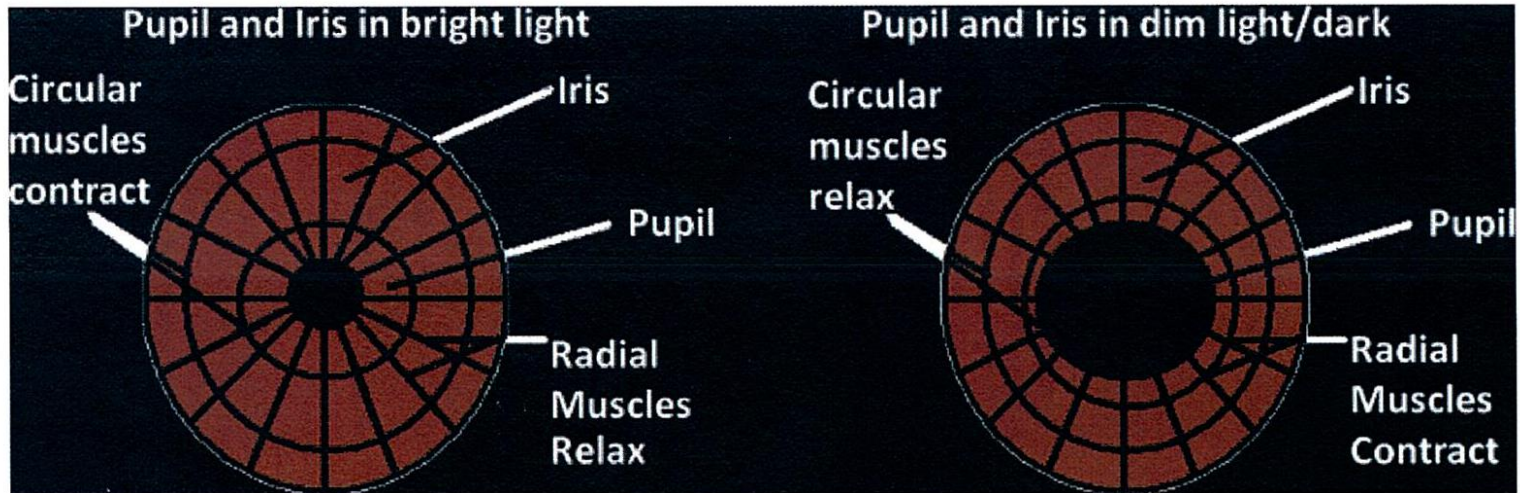


ILLUSTRATION OF VISIBILITY NOV 21



- SIMULATED BRIGHTNESS REDUCTION BY A FACTOR OF $\sim 1/28$: for a minimum of $\frac{1}{2}$ second

ILLUSTRATION REDUCED VISIBILITY



- SIMULATED ILLUSTRATION OF THE ONE HALF SECOND REDUCED LIGHT INTENSITY; AS YOUR EYESIGHT CANNOT ADJUST AS QUICK AS THE SUN LIGHT INTENSITY CHANGES. IT TAKES ABOUT 1/2 SECOND FOR THE PUPILS TO ADAPT

Video: driver enters shadow at crucial point



CONSCIOUS AWARENESS

DUE TO THE FACT THAT THIS REDUCED VISIBILITY OCCURS FOR ONLY FOR A $\frac{1}{2}$ SECOND THE CONSCIOUS MIND WILL NOT BE AWARE OF THIS PHENOMENON AS IT TAKES GREATER THAN $\frac{1}{2}$ second OF EXPOSURE FOR THE CONSCIOUS MIND TO BECOME AWARE

LIST OF UNIQUE CIRCUMSTANCES AND CONTRIBUTIONG FACTORS

1. SHADOW IN INTERSECTION
2. BRIGHT SUNLIGHT NO CLOUDS
3. CROSSWALK OCCUPIED
4. AMBIENT SUNLIGHT DIFFERENTIAL
FACTOR OF 1//28
5. CONE OF VISION IN TRAFFIC 10
DEGREES
6. LOCATION OF TRAFFIC LIGHT
7. OBSTRUCTIONS TO CONE OF VISION
8. DISTRACTIONS TRAFFIC FROM INN ETC

PROBABILITY OF OCCURANCE

The phenomenon when the sun position occurs to physically produce this shadow is only for 15 minutes 20 times a year. This also is true only when it not cloudy and the skies are clear; to such degree that the light intensity differential has a factor greater than 25.

This becomes problematic only when the crosswalk is occupied which is infrequent

The probability for all of these conditions to occur in this intersection at the the same time has the earmarks of being “An Act of God”

AERIAL PHOTO OF INN'S ROOF



- DIFFERENT ROOF HEIGHTS AFFECT WHERE SHADOW FALLS ON THE STREET

PHOTO-13 WALK LIGHT



- VEHICLE ENTERING INTERSECTION ON
 - AMBER LIGHT

PHOTO-14 WALK LIGHT



- VEHICLE IN INTERSECTION ON AMBER LIGHT

PHOTO-15 WALK LIGHT



- VEHICLE RUNNING AMBER LIGHT
- VEHICLE RUNNING AMBER LIGHT BLOCKS THE VIEW OF THE CROSS WALK FROM DRIVER OF VEHICLE ON KING ST.

FEB 19 2007 IED IN WAZIR AFGHANISTAN
a ½ second does make a difference



WAYNE BROWNE IN VEHICLE
NO ONE WAS INJURED