



Attachment #1 – Lewiston Police Reconstruction

Report

Lewiston, ME

HWY17SH008

(20 pages)

COLLISION RECONSTRUCTION

PROGRESS REPORT

STATE OF MAINE

Maine State Police
Approved

HR No. HR2016-196

Case No. 16LEW-962-AC

Reconstructionist:	Rank Ofc	FName [REDACTED]	MI [REDACTED]	LName [REDACTED] November 30, 2016	Troop / Dept: Lewiston Police Department
Primary Investigator:	Rank Det	FName [REDACTED]	MI [REDACTED]	[REDACTED]	Troop / Dept: Lewiston Police Department

Assistant Senior Crash
Reconstruction
Specialist

SYNOPSIS:

Vehicle 1 ([REDACTED] ng) was traveling northeast bound on Main St. Pedestrian [REDACTED] proceeded to cross Main St in the crosswalk (west to east). Based on weather and lighting conditions she could not see the pedestrian. Vehicle 1 struck the pedestrian. The pedestrian became stuck in the undercarriage of Vehicle 1. Vehicle 1 pulled over to the side of the road. The pedestrian was found to be still lodged underneath vehicle 1. Emergency crews responded, however the pedestrian succumbed to the injuries he received in the collision.

PERSONS INVOLVED:

Operator of Vehicle 1:

[REDACTED] of [REDACTED]
[REDACTED] [REDACTED] [REDACTED] has a total of 0 convictions, 0 withdrawals, and 2 incidents.

Pedestrian:

[REDACTED] of [REDACTED] Lewiston, ME 04210.

INJURIES:

Operator of Vehicle 1:

[REDACTED] did not incur any physical injuries in this crash.

Pedestrian:

[REDACTED] incurred blunt force trauma to the head according the Medical Examiner's Office. Please refer to the Medical Examiner's Report.

VEHICLE INFORMATION AND DAMAGE:

Vehicle One:

Red 2009 Ford F-150 with registration ME/PC [REDACTED]. VIN# 1FTPW14V79FA [REDACTED] This vehicle is registered to [REDACTED]. The registration on this vehicle was current at the time of

the crash. The registration was due to expire on 09/30/2017. The vehicle also possessed a valid Maine Inspection Certificate that was due to expire in September of 2017.

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November 30, 2016

Noted Damage:

Overall Damage to [REDACTED]'s vehicle was minimal as a result of this crash. Damage was located on the grill by the center of the vehicle which extended towards the passenger side area. Denting was also observed above the grill which too extended towards the passenger side. No airbag deployment. See attached pictures.

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Tire Information:

Goodyear Wrangler AT/S LT275/65R18 M+S

Tire	Air Pressure (psi)	Tread Depth (32's of an inch)
LF	36 psi	13/32
RF	38 psi	12/32
RR	35 psi	12/32
LR	36 psi	13/32

TRAFFIC AND HIGHWAY CONDITIONS:

This crash occurred on Main St by Frye St. In the area of the crash, Main St predominately runs northeast and southwest. In the area of the crash there are 2 lanes of travel; one lane is allotted for northeast bound traffic and one lane is allotted for southwest bound traffic. Both lanes are separated by a double yellow centerline. Also

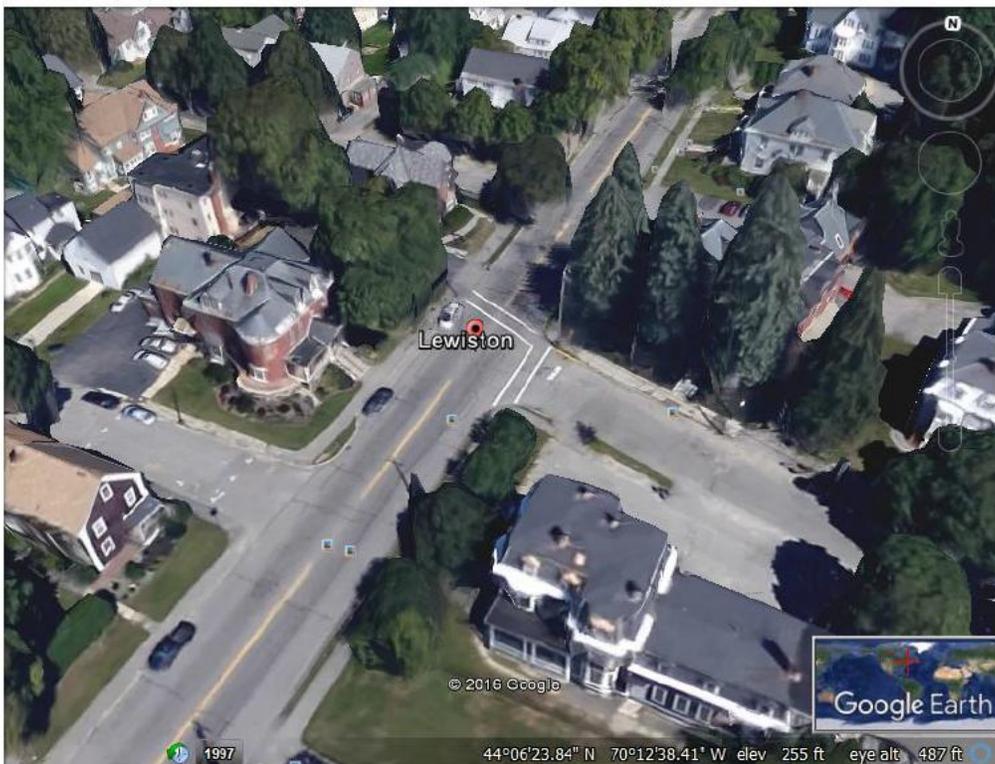
present at this location is a marked crosswalk that starts on the northwest side of Main St and goes to the southeast side of Main St

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January 30, 2016
[Redacted]

Main St is comprised of asphalt and is in good condition. All roadway lines and markings are visible. Note: There is also a pedestrian crosswalk sign by the crosswalk. The posted speed limit in the area of the crash is 25 MPH. The roadway was wet at the time of the crash.

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Special

This crash occurred at approximately 0710 hours on a Thursday morning. This area of Main St usually has moderate to heavy amounts of traffic during this time.



WEATHER CONDITIONS:

At the time of the crash, there had been rain prior to and during. Rain appeared to be light at the time of the crash. The sky was completely cloudy. It was approximately 45 degrees Fahrenheit.

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LIGHT CONDITIONS:

At the time of the crash, lighting conditions were poor. Street lights were illuminated and vehicles had to utilize their headlights. Due to the ongoing rain the roadway was wet. Significant glare from vehicles traveling in the opposite direction (towards you) would have also hindered visibility.

DETAILS OF INVESTIGATION:

On 11/03/16 at approximately 0718 hours, I received a call from Lieutenant [REDACTED] [REDACTED] (Lewiston Police Department). Lt [REDACTED] advised me that there was a vehicle vs. pedestrian crash on Main St by Frye St. Lt [REDACTED] requested that I respond and reconstruct the crash. While enroute to the crash from Vassalboro, I was advised that it was a fatal crash (pedestrian died on scene).

I arrived on scene at approximately 0830 hours. Upon arrival I met with Chief [REDACTED], Lt [REDACTED], Sgt [REDACTED], Det [REDACTED], Ofc [REDACTED], and Ofc [REDACTED]. Other Lewiston Police Officers were also present safeguarding the crash scene. I observed the area had been taped off (Police Crime Scene tape) to the public and that a detour had been set up on Main St to prevent traffic from the area of the crash. I was advised that when officers arrived on scene, the roadway had been shut down to vehicular traffic to further secure the crash scene. I was advised that the pedestrian had been identified as [REDACTED]. The operator of the vehicle was identified as [REDACTED]. I was told that [REDACTED] was not on scene but was having her blood drawn by Officer Magan Brown.

In talking with Ofc [REDACTED], I learned that the victim was still underneath the vehicle that [REDACTED] was operating. He ([REDACTED]) was pronounced deceased on

scene by responding emergency personnel. I also learned that neither the body nor vehicle was moved after the crash. Also that no one had tampered with the vehicle following the crash. Note: A sheet was placed over the hood of the vehicle and pedestrian shortly after [REDACTED] had been pronounced deceased.

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In speaking with responding officers I learned that [REDACTED] had been traveling outbound on Main St and that [REDACTED] was on his way to school. [REDACTED] had attempted to cross Main St when he was struck by [REDACTED] vehicle.

At this point I took additional photographs of the crash scene. I observed that in the northeast bound lane just beyond the crosswalk was a pair of sneakers in the middle of the roadway. See attached picture.



As I walked further northeast bound on Main St. I came across a piece of the vehicle's grill and a book bag. Around the book bag I observed school books and papers.



I also observed what appeared to be a tiremark that led up the front passenger's side tire. See attached picture.



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This photograph was taken looking southwest bound of the tiremark.



Note: This tiremark was made in conjunction of rubbing materials and the body of [REDACTED] as it came to a stop. This is not a normal braking mark you would see from the tire alone.

[REDACTED] t [REDACTED]
[REDACTED]
[REDACTED] shirt with small white stripes, green camouflage pants, blue/white sneakers, and had a dark green book bag.

After going through the crash scene and taking additional photographs, Ofc [REDACTED] and I performed a Forensic Mapping (HM2016-116) of the scene to aid in my reconstruction analysis.

It should also be noted that the windshield wipers were showed to be engaged still, however, were not operating due to the vehicle being turned off.

Maine State Police
Appraisal Group

Vehicle ID

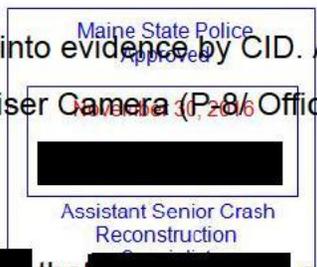
I spoke with Det [REDACTED] who was still on scene, Det [REDACTED] was assigned as one of the primary investigators to this crash. Det [REDACTED] informed me that an area business (The Appraisal Group/ 466 Main St) had a security camera that captured the crash. I accompanied De [REDACTED] inside and met with [REDACTED]. I was able to view the video of the crash.

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Reconstruction
Specialist

The video showed [REDACTED] walking northeast bound on the sidewalk. [REDACTED] positions himself in the crosswalk (western side) on the side of the road. He appears to wait until traffic continues by. When there is a lull in traffic he proceeds to walk across Main St still in the crosswalk. As he passes the centerline he stops briefly and appears to look right to see [REDACTED]'s vehicle heading towards him. [REDACTED] attempts to get out of the way by running east bound. [REDACTED] was not able to get out of the way of [REDACTED] Vehicle. [REDACTED] is struck just beyond the crosswalk. See attached picture from security camera. This appears to be just before impact.



This security footage was taken into evidence by CID. A copy of said security video along with photographs and Cruiser Camera (P-8) Officer [REDACTED] video has also been provided to me.



I was advised by Det [REDACTED] that [REDACTED] gave consent for an EDR (Event Data Recorder) Download and Vehicle Autopsy on her vehicle (Ford F-150). On 11/07/16 at approximately 0900 hours, Specialist [REDACTED] (MSP), Ofc [REDACTED] and I met at Lindy's Garage in Greene. Spc [REDACTED] attempted to download the EDR from [REDACTED]'s vehicle. I was advised that no data was captured from this event. Spc [REDACTED] has written a report (EDR Case# 16-065) reference his attempt to download the EDR, see his report for further.

Note: When power was placed to the vehicle, the wipers came right on.

On 11/08/16, Ofc [REDACTED] conducted a Vehicle Autopsy on [REDACTED] Vehicle at Lindy's Garage. He informed me that nothing mechanically contributed to this crash. He has written a report (HA2016-024) reference his findings; please refer to Ofc [REDACTED] report.

I have been advised that [REDACTED] consented to having her phone forensically analyzed to see if she was on it prior to or during the crash. Sgt [REDACTED] (ASO) conducted this aspect of the investigation. I was informed that [REDACTED] was not on the phone or using it immediately prior too or during the crash. Please refer to his report (16ASO-876-OF) for further.

[REDACTED] showed no signs of being impaired following the crash. A blood draw was performed on her. Her results showed that she was not under the influence of alcohol during or following the crash.

Please refer to the whole Investigative Report (16LEW-4834-OF/16LEW-4835-OF) for further.

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RECONSTRUCTION ANALYSIS:

In reconstructing this crash, I will be using the aid of [REDACTED] and I Forensic Mapping (HM2016-116). I will also be using the aid the Security Video that has been provided to me. This will be a time-distance analysis.

In the surveillance video, I am able to observe [REDACTED] vehicle as she approached from the right side in the camera view. The vehicle goes between two fixed objects (two trees). See attached still image from the security video.



Note: The still image does not display the time bar like the video shows. It should be noted that I observed the time on the video to be 7:07:54.759 seconds.

In the next still image you are able to view [REDACTED] vehicle just prior to impact. The truck is at the end of the crosswalk. See attached still image.



Note: The time bar on the security video indicates 7:07:55.859.

The time that it took the vehicle to travel on Main St (between two trees) up to right before impact (edge of crosswalk) took (1.1) seconds.

$(7:07:55.859) - (7:07:54.759) = (1.1) \text{ seconds.}$

On 11/12/16, Ofc [REDACTED] and I met with [REDACTED] at The Appraisal Group (466 Main St). He was able to show me a live feed of the security camera that caught the crash (camera had not been moved or tampered with). I was able to place Ofc [REDACTED] on Main St between two fixed points (trees). I had her 2 feet off of the centerline (east). I had her spray paint a mark on the asphalt in the same area as I observed [REDACTED] vehicle in between the trees. I next had her spray paint the edge of the crosswalk just prior to where [REDACTED] was impacted. These measurements were based on what I observed from the left side of the vehicle.

Ofc [REDACTED] and I then measured the distance between the known points. I measured a distance of 57.91 feet.

Based on time (1.1) seconds and the distance (57.91) feet, [REDACTED] was traveling (35.96) mph.

$$S = \frac{D}{1.466 \times t} \quad S = \frac{57.91}{1.466 \times 1.10}$$

$$S = \frac{57.91}{1.61} \quad S = 35.96$$

S = The Speed in MPH.
 D = The Distance in Feet
 1.466... = A Constant
 t = The Time in Seconds.

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 Reconstruction
 Specialist [REDACTED]

However, I am going to be conservative to [REDACTED] vehicle by subtracting 3 feet from the measured distance. This gives a distance of (54.91) feet. Based on the shorter distance and the time of (1.1) seconds, this gives a speed of (34.1) mph.

$$S = \frac{D}{1.466 \times t} \quad S = \frac{54.91}{1.466 \times 1.10}$$

$$S = \frac{54.91}{1.61} \quad S = 34.10$$

S = The Speed in MPH.
 D = The Distance in Feet
 1.466... = A Constant
 t = The Time in Seconds.

Again using the aid of the security video I am able to see when [REDACTED] begins to walk across Main St in the crosswalk. He begins walking at a 07:07:49.427. See attached still image.



██████████ reaches the area of the centerline at 07:07:53.994. See attached still image.

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07:07:53.994 - 07:07:49.427 = 4.567 seconds. Again this represents the time he started from edge of the sidewalk walked to the centerline.

In watching the video, I observe that C ██████████ steps off of the sidewalk and into the crosswalk while he waits for the lull in traffic. I went back to the scene and measured the distance that ██████████ t walked to the area of the centerline. I measured a distance of 19 feet.

Using the distance of 19 feet and the time (4.567 seconds) it took ██████████ to walk that distance, I calculate that ██████████ was traveling (4.16) feet per second (fps).

$$V = \frac{D}{t}$$
$$V = \frac{19.00}{4.56}$$
$$V = 4.16$$

V = The Velocity in FPS.
D = The Distance in Feet.
t = The Time in Seconds.

██████████ vehicle impacts ██████████ at 07:07:55.892. See attached still image.



Using the impact time and the time that [REDACTED] began walking across Main St it took (6.465) seconds.

07:07:55.892 (Impact Time) – 07:07:49.427 ([REDACTED] began walking Time) = 6.465 seconds

Scenario

The conservative reconstructed speed that [REDACTED] was traveling at the time of impact was (34.1) mph or (49.99) fps, would this crash have happened if [REDACTED] was traveling the posted speed limit of 25 mph?

$(34.1 \times 1.466) = 49.99$ feet per second (fps)

It appears that [REDACTED] was waiting for a lull in traffic to cross Main St in the crosswalk. It took 6.46 seconds to walk from the side of the road until impact with [REDACTED] vehicle. If [REDACTED] had been traveling at a constant speed, then [REDACTED] would have been (322.93) feet from impact. That also represents the distance that [REDACTED] would have seen her at when he began to walk across Main St.

$6.46 \text{ secs} \times 49.99 \text{ fps} = 322.93 \text{ feet.}$

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Ofc Wade and I measured the damage on the front of [REDACTED] vehicle (passenger side to driver's side). The damage did not go past 41 inches (3.41 feet). See attached picture.

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Note: The brunt of the damage was more in the area of 18 inches to 38 inches. However I will be using 41 inches (3.41 feet). This is being conservative to [REDACTED]

Now if [REDACTED] had been traveling at 25 mph or 36.65 fps, it would have taken her (8.81) seconds to travel 322.93 feet (to where [REDACTED] was struck).

$$25 \text{ mph} \times 1.466 = 36.65 \text{ fps}$$

$$322.93 \text{ feet} / 36.65 \text{ fps} = 8.81 \text{ seconds.}$$

This would have given [REDACTED] an extra 2.35 seconds of walking.

$$8.81 \text{ secs} - 6.46 \text{ secs} = 2.35 \text{ seconds.}$$

I calculated from earlier that [REDACTED] speed while walking across Main St was 4.16 fps. I am rounding down to 4 fps during this scenario. This would have [REDACTED] walking slightly slower.

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[REDACTED]
Assistant Senior Crash
Reconstruction
Specialist

Note: This scenario has [REDACTED] traveling a constant 36.65 fps and [REDACTED] walking at a constant 4 fps. If [REDACTED] saw [REDACTED] at 322.93 feet and began walking across Main St in the crosswalk, then he would have walked an additional 9.4 feet. [REDACTED] only needed to walk an additional 3.41 feet to be clear of being impacted by Young's vehicle. [REDACTED] would have been 5.99 feet beyond the area of impact if [REDACTED] had been traveling 25 mph/ 36.65 fps.

$2.35 \text{ seconds} \times 4 \text{ fps} = 9.4 \text{ feet.}$

$9.4 \text{ additional feet} - 3.41 \text{ feet (needed to clear impact)} = 5.99 \text{ feet (beyond impact with [REDACTED] vehicle).}$

Based on this scenario, this crash would have not happened had [REDACTED] been traveling the posted speed limit of 25 mph.

CONCLUSIONS AND OPINION OF INVESTIGATOR:

As a result of this investigation, I found that there were multiple factors that contributed to the crash. The following facts, evidence, and statements lead me to this conclusion.

1. By her own admission she could not see the pedestrian ([REDACTED]) in the crosswalk. Upon reviewing Ofc [REDACTED] cruiser camera video which was taken while he responded to the crash scene a few minutes later, it showed that there was light rain. That in conjunction with the low-light conditions made visibility very poor. It should be noted that headlights on vehicles coming towards you (southwest bound lane) and the street lights (illuminated) caused a significant glare on the wet pavement. In watching the Security Video of the crash, as soon as the crash happened, a vehicle (minivan) headed southwest

bound pulls over. Based on the timing of this I believe that the headlights diminished [REDACTED] visibility to see the pedestrian as he crossed west to east (left to right) in front of [REDACTED] vehicle. Even if [REDACTED] had been wearing brighter colored clothes I do not think Young could have seen the pedestrian based on the glare from the other vehicle's oncoming headlights. Weather and lighting conditions both were a contributing factor in this crash.

2. The reconstructed speed that [REDACTED] was traveling at was (34.1) mph. The posted speed limit for that section of Main St is 25 mph. The reconstructed speed places [REDACTED] traveling (9.1) mph over the speed limit.
3. I ran a scenario in which I placed [REDACTED] traveling the posted speed limit of 25 mph. Based on this scenario, if [REDACTED] had been traveling the posted speed limit this crash would not have happened. [REDACTED] would have been 5.99 feet beyond the path of [REDACTED]

[REDACTED] statements conclude that [REDACTED] was traveling at an imprudent speed given the conditions at the time of the crash. Again I believe that there is no way that she saw [REDACTED] crossing in the crosswalk (west to east) with the amount of glare on the wet roadway and headlights coming from the opposite direction on Main St. However if she had observed the posted speed limit for this section of Main St then the crash would not have happened.

ENCLOSURES:

1. Photographs area available through the Lewiston Police Department upon request.
2. Crash Report (16LEW-962-AC) and Investigative Reports (16LEW-4834-OF/16LEW-4835-OF) are available through Lewiston Police Department upon request.
3. Androscoggin Sheriff's Office Investigative Report (16ASO-876-OF) is available through Androscoggin Sheriff's Office upon request.
4. Forensic Mapping (HM2016-116), Vehicle Autopsy (HA2016-024), and EDR Download (EDR Case# 16-065) are available through the Maine State Police Traffic Safety Unit.

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November 30, 2016

[REDACTED]

Assistant Senior Crash
Reconstruction
Specialist [REDACTED]