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6 KING COUNTY DEPARTMENT OF EXECUTIVE SERVICES
7 INQUEST PROGRAM

8 INQUEST INTO THE DEATH OF:

Inquest No.: 17IQ427069

9 ALBERT WAYNE FREDERICKS, JR.,

10 Deceased.

**DECLARATION OF KAREN COBB
RE INVOLVED OFFICERS' MOTION
TO EXCLUDE THE FAMILY'S
POWERPOINT "TIMELINE" AS A
DEMONSTRATIVE EXHIBIT**

11
12
13 I, Karen Cobb, declare as follows:

14 1. I am over the age of 18, make this declaration upon personal knowledge and am
15 competent to testify.

16 2. Attached as **Exhibit A** is a true and correct copy of William Neale's report,
17 obtained in the course of our representation in this matter and maintained in the ordinary course of
18 business.

19 DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE
20 OF WASHINGTON THAT THE FOREGOING IS TRUE AND CORRECT.

21 DATED this 23rd day of January, 2023, at Seattle, Washington.

22 FREY BUCK, P.S.

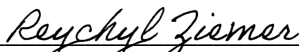
23 By: /s/ Karen L. Cobb

Certificate of Service

I certify that on the 23rd day of January, 2023, I caused a true and correct copy of this document to be served on the following in the manner indicated below:

Claire Thornton, Attorney	<input checked="" type="checkbox"/> Via Email claire.thornton@kingcounty.gov
Dee Sylve Inquest Program Manager DES-Dept. of Executive Services 401 5th Ave., Suite 131 Seattle, WA 98104 Mailstop: CNK-DES-135	<input checked="" type="checkbox"/> Via Email Dee.Sylve@kingcounty.gov
Rebecca Boatright Executive Director of Legal Affairs, SPD Seattle City Attorney's Office 701 5th Ave Ste 2050 Seattle, WA 98104-7095	<input checked="" type="checkbox"/> Via Email Rebecca.Boatright@seattle.gov
Ghazal Sharifi, WSBA# 47750 Rebecca Widen, WSBA #57339 Alison Markette, WSBA# 46477 Seattle City Attorney's Office 701 Fifth Avenue, Suite 2050 Seattle, WA 98104	<input checked="" type="checkbox"/> Via Email Ghazal.Sharifi@seattle.gov Rebecca.Widen@seattle.gov Alison.Markette@seattle.gov
Cherie Getchell Deputy Police Counsel, SPD	<input checked="" type="checkbox"/> Via Email Cherie.Getchell2@seattle.gov
Susan Sobel, WSBA# 52579 Mahalia Kahsay, WSBA# 55594 Associated Counsel for the Accused Division King County Department of Public Defense 710 Second Avenue, Suite 1000 Seattle, WA 98104	<input checked="" type="checkbox"/> Via Email Susan.Sobel@kingcounty.gov mkahsay@kingcounty.gov n-mcardengreen@kingcounty.gov

DATED January 23rd, 2023, at Seattle, Washington.



Reychyl Ziemer, Paralegal

Exhibit A



6070 Greenwood Plaza Blvd #200
Denver, CO 80111 |
303-733-1888
jsheld.com

December 14th, 2022

Ms. Karen Cobb
Frey Buck, P.A.
1200 Fifth Avenue, Suite #1900
Seattle, Washington 98101

RE: Inquest into the Death of Albert Fredericks

Dear Ms. Cobb,

As requested, JS Held reviewed provided materials included a Microsoft PowerPoint presentation and two synchronized videos prepared by Mr. Joshua Cohen. The PowerPoint file is titled "*04_Fredericks Timeline.pptx*". The first synchronized videos is titled "01_Fredericks_Sync_Long.mp4" and the second video file is titled "01_Fredericks_Sync_Short.mp4." A complete list of the materials that were provided and reviewed by JS Held are listed in *Appendix A*. It is my understanding that the synchronized video files and the PowerPoint presentation that Mr. Cohen prepared will be presented without any foundation or basis for their production. Mr. Cohen's Curriculum Vitae, which articulates his background and expertise, states the Mr. Cohen has:

- "*15 years of practical experience working in the transportation, energy, and construction industries*"
- "*brings a wealth of technical knowledge to every project*"
- "*has provided sworn testimony for 19 cases as an expert*"
- "*consider[s] a variety of tools before selecting a strategy that best supports the case*"

In other words, despite the apparent expertise Mr. Cohen has in analyzing videos and producing demonstratives for litigation, this particular demonstrative, for some reason, allegedly does not require any. I have reviewed the synchronized video files, and the PowerPoint files, in the same manner I would analyze and review any experts work product: with the intention of reviewing the scientific methodologies applied in producing the work, and articulating any errors, inaccuracies, or foundational issues with the work that would otherwise go unnoticed by a viewer who does not have the same expertise in video analysis work. The remainder of the report describes the process and procedures I used in evaluating Mr. Cohen's work product, and the opinions or conclusions to which this investigation led.

Background:

I currently hold the position of Vice President and Director of Visualization at JS Held, a Forensic Engineering and Visualization firm. I have held this position since July 2021, and prior to that, from 2005 to 2021, I held the same position at Kineticorp, LLC, also a Forensic Engineering and Visualization firm in Denver, Colorado. My responsibilities as Vice President and Director of Visualization include training and teaching JS Held staff, managing staff operations, technology, and projects, and developing and directing the technology related to accident reconstruction, forensics, photogrammetry, video analysis, computer modeling, visualization, and simulation. I also work as an expert consultant in accident reconstruction specializing in accident reconstruction, lighting and visibility, photogrammetry and video analysis, and computer visualization. I am an accredited Traffic Accident Reconstructionist through the Accreditation Commission for Traffic Accident Reconstruction (ACTAR #2571). Since 2000 my daily work has included reconstruction of accidents involving trucks, cars, motorcycles, and bicycles as well as incidents involving pedestrians, equipment, and machinery. I am a member of the Society of Automotive Engineers (SAE) and have published over 40 peer reviewed scientific articles on the topic of accident reconstruction, video analysis, photogrammetry, visualization, and lighting and visibility. I have presented these papers to the Safety and Testing and Human Factors and Lighting session at the Annual Congress. In addition, SAE has published the book I co-authored, "Motorcycle Accident Reconstruction," released in December of 2018. In May of 2020, this book received the IBPA Benjamin Franklin *Silver Medal* in the category of "Professional and Technical" published books. I have been invited to lecture on the topics of accident reconstruction, lighting and visibility, and computer visualization at the Art Institute of Colorado, Wayne State University, and California State University in Los Angeles. I received the 2006 Arch T. Cowell award for my research in video tracking and photogrammetry and received funding for research in this field from DriveCam – The Driver Science Company, Ford Motor Company, The Milwaukee Brewers, and The National Football League (NFL). I designed and teach the curriculum for the ACTAR accredited course "Photogrammetry and Analysis of Digital Media." A course that examines and teaches the principles, practices, and procedures of photogrammetry, photographic and video analysis, video tracking, lighting and visibility and procedures for obtaining calibrated video. I obtained my bachelor's and master's degree from Washington University in St. Louis where I studied photogrammetry, photography and videography, lighting and computer visualization and simulation. In addition, I was trained in accident reconstruction, lighting and visibility, and human factors at the Northwestern University Center for Public Safety and at the University of Michigan (Human Factors Engineering Short Course). A copy of curriculum vitae is attached as *Appendix B*.

Overview:

JS Held was asked to review Mr. Cohen's synchronized video files, as well as Mr. Cohen's PowerPoint file. Specifically, JS Held was asked to determine if the synchronization performed by Mr. Cohen was accurate and reliable. Also, JS Held was asked to determine if the PowerPoint demonstrative was a fair and accurate representation of the events depicted in the available Body Worn Video (BWV) files. The procedures used in evaluating Mr. Cohen's work utilized reliable methods that are widely accepted in the video analysis and visualization communities. The opinions arrived at through my review of the material were reached to a reasonable degree of scientific certainty.

Review of Mr. Cohen's Synchronized Video:

JS Held was provided video files, produced by Mr. Cohen, that purport to synchronize several BWV files that captured in part or in whole the sequence of events that is central to this inquest. *Table 1* summarizes the two provided video files that were analyzed.

Filename	Resolution	Frame Rate	Codec	Duration
02_Fredericks_Sync_Short.mp4	1280 x 720	29.97	H264	00:10:52
01_Fredericks_Sync_Long.mp4	1280 x 720	29.97	H264	1:31:33

Table 1 – Provided video files prepared by Mr. Cohen

The source BWV files that were utilized in the synchronization process are shown in *Table 2*.

Filename	Resolution	Frame Rate	Codec	Duration
2017-427069 - Involved Officer BWV - Hay, Garret #1 (00481851xC640E).MP4	1280 x 720	29.97	H264	00:10:56
2017-427069 - Involved Officer BWV - Jerome, Nathan #1 (00481853xC640E).MP4	1280 x 720	29.97	H264	00:10:45
2017-427069 - Involved Officer BWV - Oliverson, Timothy (00481860xC640E).MP4	1280 x 720	29.97	H264	01:30:00
2017-427069 - Involved Officer BWV - Rogers, Jacob #1 (00481861xC640E).MP4	1280 x 720	29.97	H264	01:26:16
2017-427069 - Involved Officer BWV - Swartz, Andrew #1 (00481859xC640E).MP4	1280 x 720	29.97	H264	00:11:56
2017-427069 - Significant Witness Officer BWV - Beard, Douglas (00481864xC640E).MP4	1280 x 720	29.97	H264	00:10:48

Table 2 – All available Body Worn Video (BWV) files

In review of Mr. Cohen’s synchronized video files, I did not find any significant errors. The process used by Mr. Cohen, and the foundation upon which Mr. Cohen relies on to specifically synchronize the files was not provided and could not be determined from his files. However, I was also able to produce my own synchronized video file using the source BWV files. The synchronization process that I utilized relied on analysis of the meta data which is summarized in *Table 2*, and by using sounds and events common between the videos, such as the sound of the handcuffs being placed on Fredericks and Fredericks being rolled on his side, where these events are observable in each video. I compared my synchronized files to Mr. Cohen’s using video analysis software¹, and while minor differences existed (approximately 0.2 sec difference) I do not think this difference matters.

Review of Mr. Cohen’s PowerPoint file:

The provided PowerPoint, created by Mr. Cohen, purports to summarize the sequence of events that surround an interaction between Seattle police and Mr. Albert Fredricks. The PowerPoint contains 23 slides, that utilize only portions of body worn footage that recorded the interaction between the officers and Mr. Fredricks. Portions of the body worn footage are isolated to detail 17 discrete events, accompanied by commentary and graphical analysis. *Table 3* lists the 17 discrete events chosen by Mr. Cohen, or under the direction of someone else, that purport to depict the sequence of events that are central to this inquest.

17 Discrete Events in the PowerPoint:

- Detained
- Takedown
- Calls for Ambulance
- Sits Up
- Tries to Stand
- Lying on Chest
- Pinned Legs and Arm
- Officer Hay Arrives
- Officer Swartz Arrives
- Officer Jerome Arrives
- Roll to Prone
- Handcuffs
- “Snoring”
- “Decides to take a nap now”
- “Lift to Gurney”
- “Would have been better...”
- “Leg Hanging from Gurney”

Table 3 – 17 Discrete Events in Cohen’s PowerPoint

For each of the 17 slides, there is a basic format that is followed. *Figure 1* is an analysis and summary of the graphical layout that was used by Mr. Cohen, or under someone else direction, to organize the content of each slide. The four sections of each slide are 1) Title Commentary, 2) Extracted Video analysis, 3) Pictorial Commentary, and 4) Timeline.

¹ Adobe Premiere 23.1 and Adobe After Effects 23.0

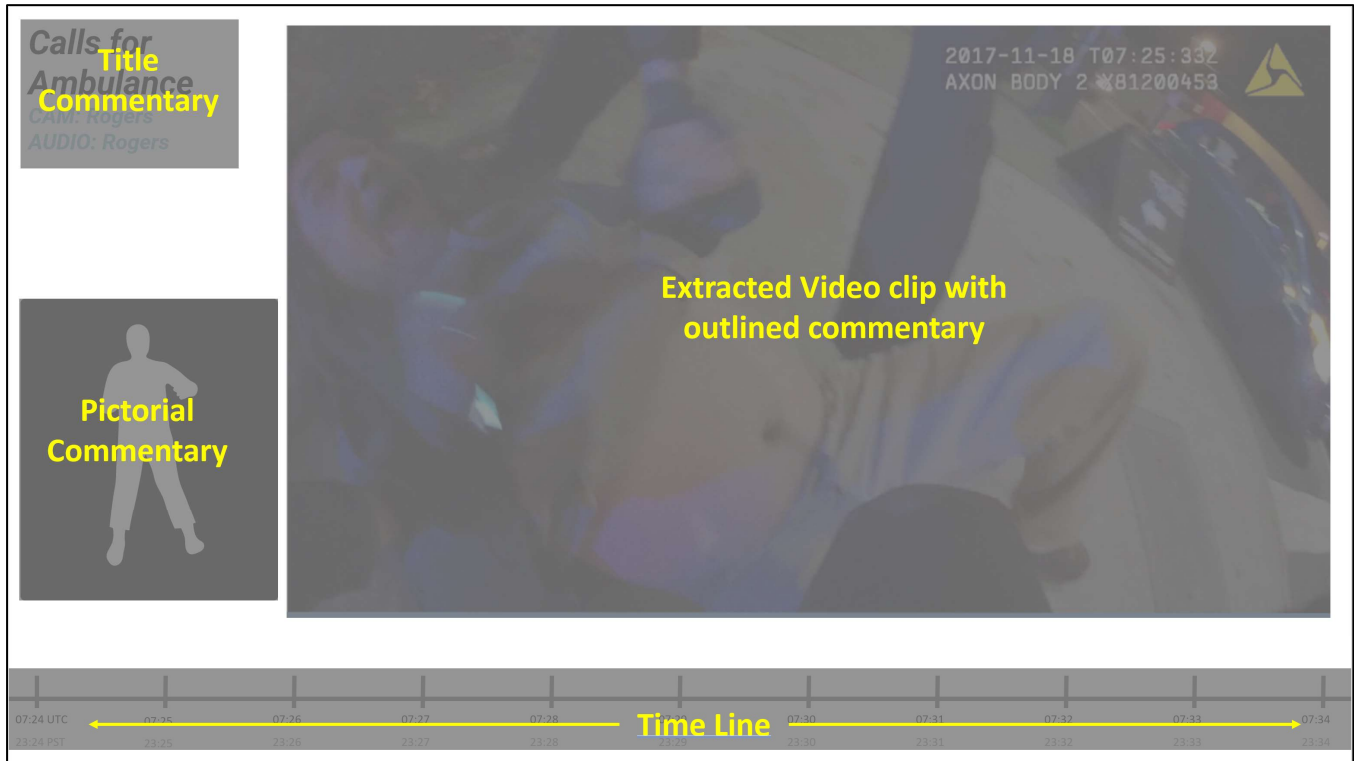


Figure 1 – Analysis of graphical layout used by Mr. Cohen, or under someone else's direction

Each of the 17 slides that purport to summarize the event, use graphical techniques to convey and direct an impression, intention, or understanding of the content on the slide. Each graphical tool is created, designed, and employed, slide by slide, by either Mr. Cohen himself, or under the direction of someone else. It is unclear where the design of the slides originated, or by whom. It is also unclear what the specific intentions are, or the efficacy that is expected by using this particular layout, versus other less leading alternatives. **Regardless of the intentions and purposes behind the design of each slide, the net result is that each slide contains errors, inaccuracies, or biases in multiple categories. Some slides also appear to contain expert opinion or expert video analysis, without any foundation, and with demonstrably inaccurate conclusions.**

Analysis of Discrete Sections:

Figure 2 is a matrix chart identifying the 17 discrete slides in the PowerPoint, along with categories in which each slide contains errors, inaccuracy, or misleading material. **The fact that each slide is an isolated and extracted section of the video alone renders each slide misleading, since no slide shows the entirety of the event.** Further, titling the slides renders every slide misleading or confusing, since adding a title establishes the framework or filter through which the viewer will interpret the content of the slide. Adding a title directs the viewer on how to interpret the content, rather than allowing a viewer to interpret the content on their own. With a title, the viewer already has an impression of the importance or significance of the content before seeing it. **Regardless of the intent, the title from each slide is from a singular viewpoint, prescribed and predetermined by either Mr. Cohen, or under the direction of someone else, and without any scientific merit.**

Slide Number	Slide	Title	Video Analysis	Context	Pictorial
1	Detained	X	X	X	-
2	Takedown	X	X	X	-
3	Calls for Ambulance	X	X	X	X
4	Sits Up			X	X
5	Tries to Stand			X	-
6	Lying on Chest	X	X	X	X
7	Pinned Legs and Arm	X	X	X	X
8	Officer Hay Arrives			X	-
9	Officer Swartz Arrives			X	-
10	Officer Jerome Arrives			X	-
11	Roll to Prone			X	X
12	Handcuffs			X	-
13	“Snoring”			X	-
14	“Decides to take a nap now”			X	-
15	“Lift to Gurney”			X	-
16	“Would have been better...”			X	-
17	“Leg Hanging from Gurney”			X	-

Figure 2 – Matrix Analysis of the 17 discrete slides in Mr. Cohen’s PowerPoint

The use of specific terms in the titles, such as “Takedown” and “Lying on Chest” and “Pinned Legs and Arm” suggest that some scientific analysis was performed to determine that these things occurred. The slides that contain pictorial images also suggest an analysis was used to determine position, distances, and spatial relationships between the officers and Mr. Fredericks, which are central issues to this inquest. **However, Mr. Cohen did not utilize scientific analyses or accepted methodologies to determine the position, orientation or spatial relationship between the officers and Mr. Fredericks, despite the titles and pictorial images of each slide suggesting otherwise.**

Video analysis, and specifically the measurement of time, distance, and spatial relationships between objects and people in the video is a well-known and published area of expertise. There are process and methodologies that are peer reviewed, created for the purpose of determining things, such as whether an officer was “Lying on Chest”, or if Mr. Fredericks had “Pinned Legs.” Mr. Cohen did not utilize these methods. On several slides, the conclusion arrived at by Mr. Cohen, or someone else, are demonstrably inaccurate and false. The following list are just some of the peer reviewed publications which Mr. Cohen could have used, that describe methodologies for analyzing video footage, and specifically the analysis of BWV. These publications, and the methodologies discussed in them, are well known to me, since all of them were developed by me and my colleagues at JS Held.

- o Neale, W., Arrington, D., Rundell, S., Jadischke, R., “Video Analysis of Head Acceleration Events.” Consensus Head Acceleration Measurement Practices (CHAMP) Conference, Children’s Hospital of Philadelphia, Philadelphia, PA. March 24-25, 2022
- o Terpstra, T., Neale, W., Owens, T., King, E. Beier, S., Voitel, T. “An Analysis of Body-Worn Camera Photogrammetry Using Depth Mapping”. Proceedings of the American Society of Forensic Sciences, 73rd Annual Scientific Meeting, Atlanta, GA. 2021. C21.
- o Terpstra, T., Neale, W., King, E., Hashemian, A., Hessel, D. “Determining Range of Certainty in Photogrammetry and Videogrammetry”. Proceedings of the American Society of Forensic Sciences, 73rd Annual Scientific Meeting, Atlanta, GA. 2021. C22.
- o Terpstra, T., Hashemian, A., Gillihan, R., King, E. Miller, S., Neale, W., “Accuracies in Single Image Camera Matching Photogrammetry,” SAE Technical Paper 2021-01-0888, 2021, doi:10.4271/2021-01-0888.
- o Bailey, A.M., Sherwood, C.P., Funk, J.R., Carter, N., Hessel, D., Beier, S., Neale, W. Characterization of Concussive Events in Professional American Football Using Videogrammetry. Ann Biomed Eng 48, 2678–2690 (2020). doi: 10.1007/s10439-020-02637-3

- Terpstra, T., Beier, S., **Neale, W.**, “The Application of Augmented Reality to Reverse Camera Projection,” SAE Technical Paper, 2019-01-0424, 2019, doi:10.4271/2019-01-0424
- Bailey, A., Funk, J., Lessley, D., Sherwood, C., Crandall, J., **Neale, W.**, Rose, N. Validation of a Videogrammetry Technique for Analysing American Football Helmet Kinematics. Sports Biomech 19. 678-700 (2018). doi: 10.1080/14763141.2018.1513059.
- **Neale, W.**, Terpstra, T., Hashemian, A., “Photogrammetry and Analysis of Digital Media” Published through SAE Technical Course Material, Troy Michigan. (2017).

Each of the 17 slides in the PowerPoint are reviewed and discussed in sequence in the following *Figures 4 to 19*. The analysis of the video follows the 4 categories in the matrix shown in *Figure 2*. The summary of the time segment for each slide is obtained from the time code of officer Oliverson’s BWV, since his video covers the entire duration of this event.

Slide #1 “Detained”:

Slide #1 in the PowerPoint is titled “Detained” and contains video from the BWV of officer Rogers only. The clipped time range of the video in this slide is from 07:24:38 to 07:24:51. There is no pictorial image for this slide. *Figure 3* depicts this slide.

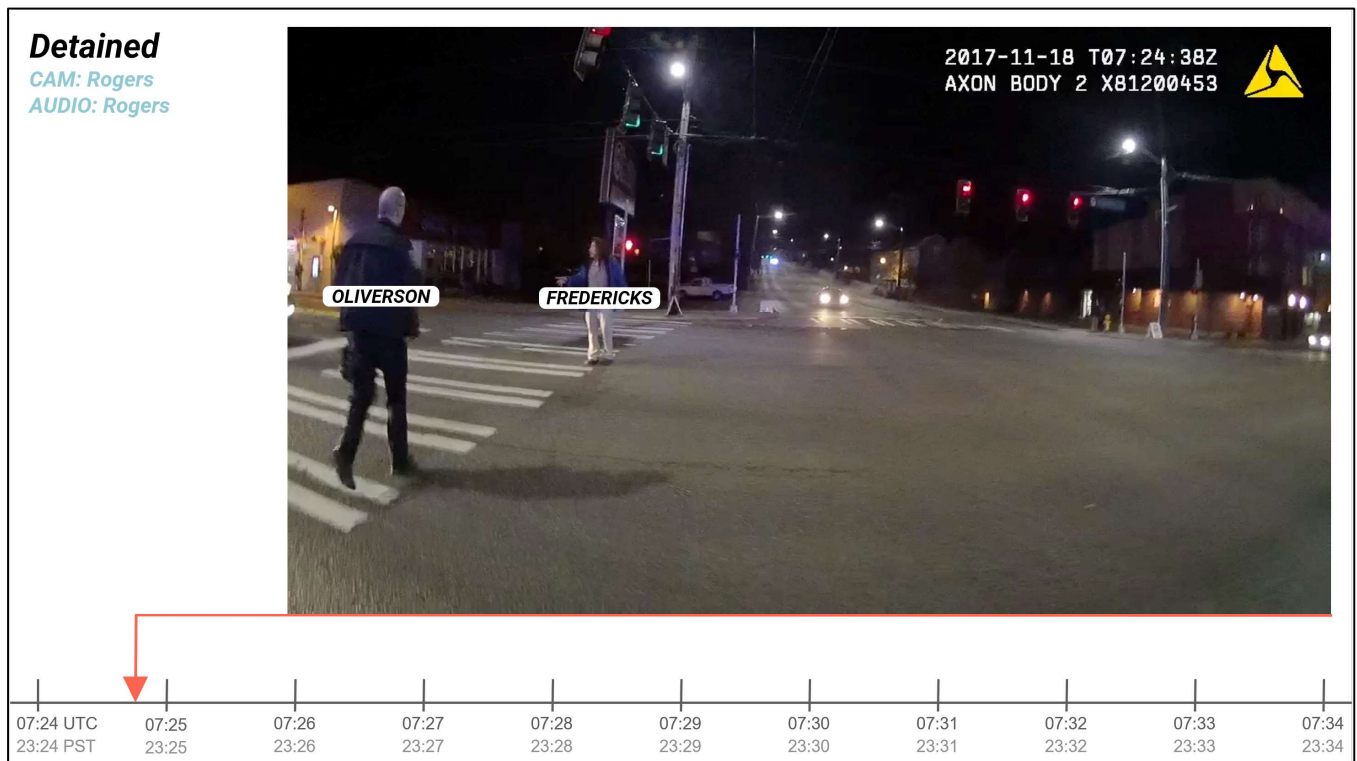


Figure 3 – Slide #1: “Detained”

Title Issues:

The meaning of “Detained” is “to force someone officially to stay in a place.”² Given the title, this slide purports to show the time when Mr. Fredericks is being officially taken into custody by the officers, which is inaccurate. The officers are not officially detaining Mr. Fredericks, and this is not the first encounter that evening between the officers and Mr. Fredericks.

² Cambridge dictionary: “detained”

Video Analysis Issues:

The starting frame of this video clip shows Mr. Fredericks occupying the crosswalk, a generally safe area that is routinely occupied by pedestrians crossing the street. However, Mr. Fredericks was not in the process of crossing the street in the crosswalk, as the image suggests. Immediately prior to this moment, Mr. Fredericks is in the middle of the intersection, which presents a significantly different situation for the officers and Mr. Fredericks due to the dangers of pedestrians in roadways. Choosing to start this slide with a frame depicting Mr. Fredericks in a safe, routinely occupied area rather than the location encountered by the police, in the middle of the roadway, is misleading, and biased.

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

There is no pictorial image for this slide.

Slide #2 “Takedown”:

Slide #2 in the PowerPoint is titled “Takedown” and contains video from the BWV of officer Rogers only. The clipped time range of the video in this slide is from 07:24:38 to 07:25:26. There is no pictorial image for this slide. *Figure 4* depicts this slide.

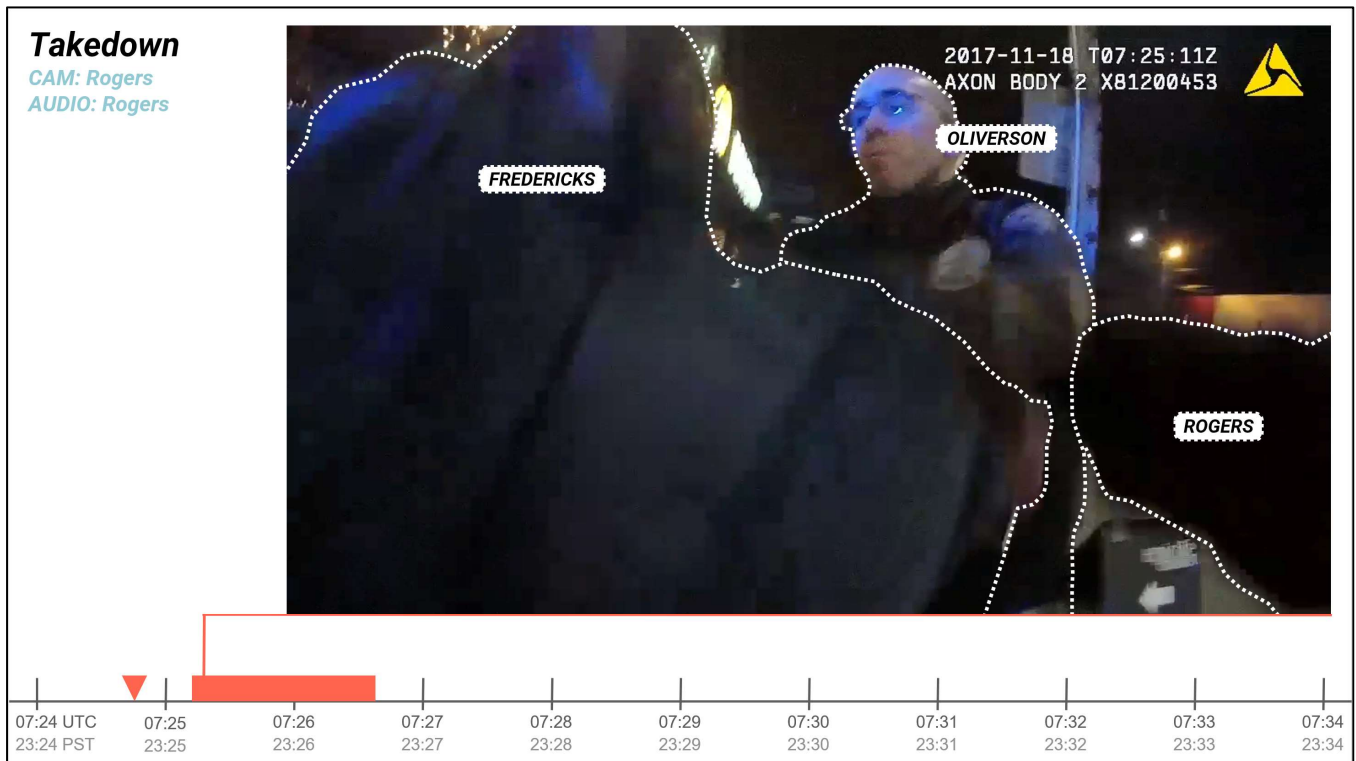


Figure 4 – Slide #2: “Takedown”

Title Issues:

The title “Takedown” suggests an aggressive maneuver, and it is unclear what the measurable metric is that constitutes a “Takedown” versus some other form of getting someone to the ground, such as assisted takedown. Hence, this title is misleading.

Video Analysis Issues:

To determine if the video shows a “Takedown” it is possible to analyze the time, speed, acceleration and force of the interaction between the police and Mr. Fredericks through video analysis techniques.³ However, Mr. Cohen did not perform any analysis to determine the what the forces were, if any, in this “Takedown” section. Ironically, in this same section of video, the officers are also seen patting and comforting Mr. Fredericks, which is omitted in this section, and would contradict the notion of an aggressive “Takedown.”

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

There is no pictorial image for this slide.

Slide #3 “Calls for Ambulance”:

Slide #3 in the PowerPoint is titled “Calls for Ambulance” and contains video from the BWV of officer Rogers only. The clipped time range of the video in this slide is from 07:25:33 to 07:25:38. There is pictorial commentary on this image. *Figure 5* depicts this slide.



Figure 5 – Slide #3: “Calls for Ambulance”

Title Issues:

The title “Calls for Ambulance” can be interpreted in several ways. It is not clear from the title who is calling for an ambulance, nor the reasons for the call, which may be relevant to understanding what is occurring.

³ See list of publication on video analysis on page 5-6

Video Analysis Issues:

The initial frame of this slide shows Mr. Fredericks is in distress. However, a moment earlier, the video shows Mr. Fredericks calm. Using an initial frame that shows Mr. Fredericks in distress, versus calm, is a purposeful choice, determined by Mr. Cohen or under someone else's direction, and is misleading.

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

The pictorial image on this slide shows Mr. Frederick's represented as a scaled figure, lying on his back and covered by officers represented as triangle. The use of triangles to represent the officer's position and orientation is inaccurate and misleading, and depicting their positions two dimensionally inaccurately flattens the distance between the officers and Mr. Frederick's. The triangles do not represent the correct proportions or scale of the officers which makes the triangles an unsuitable comparison with a scaled person that represents Mr. Fredericks. The position and orientation of the officers relative to Mr. Fredericks is a central issue in this inquest, and pictorial images that are not scaled correctly, oriented correctly, or placed relative to Mr. Fredericks correctly with be misleading and inaccurate. Peer reviewed and scientific methods exist for analyzing video to precisely locate the officers and Mr. Fredericks, though Mr. Cohen has not performed such an analysis.

Slide #4 "Sits Up":

Slide #4 in the PowerPoint is titled "Sits Up" and contains video from the BWV of officer Rogers only. The clipped time range of the video in this slide is from 07:26:07 to 07:26:11. There is pictorial commentary on this image. *Figure 6* depicts this slide.

The screenshot shows a PowerPoint slide titled "Sits Up" with the following details:

- Metadata:** CAM: Rogers, AUDIO: Rogers, 2017-11-18 T07:26:07Z, AXON BODY 2 X81200453
- Diagram:** A white silhouette of a person lying on their back, labeled "supine". Two blue triangles are positioned above the person, labeled "N" (North) and "S" (South).
- Video Player:** A video player showing a person lying on the ground being attended to by an officer. The video progress bar shows a red segment from 07:26:07 to 07:26:11.
- Timeline:** A horizontal timeline at the bottom of the slide with markers every minute from 07:24 UTC (23:24 PST) to 07:34 UTC (23:34 PST). A red triangle points to the 07:26:07 mark.

Figure 6 – Slide #4: "Sits Up"

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

The pictorial image on this slide shows Mr. Frederick's represented as a scaled figure, lying on his back and covered by officers represented as triangle. The use of triangles to represent the officer's position and orientation is inaccurate and misleading, and depicting their positions two dimensionally inaccurately flattens the distance between the officers and Mr. Frederick's. The triangles do not represent the correct proportions or scale of the officers which makes the triangles an unsuitable comparison with a scaled person that represents Mr. Fredericks. The position and orientation of the officers relative to Mr. Fredericks is a central issue in this inquest, and pictorial images that are not scaled correctly, oriented correctly, or placed relative to Mr. Fredericks correctly with be misleading and inaccurate. Peer reviewed and scientific methods exist for analyzing video to precisely locate the officers and Mr. Fredericks, though Mr. Cohen has not performed such an analysis.

Slide #5 "Tries to Stand"

Slide #5 in the PowerPoint is titled "Tries to Stand" and contains video from the BWV of officer Oliverson only. The clipped time range of the video in this slide is from 07:26:20 to 07:26:33. The is pictorial commentary on this image. *Figure 7* depicts this slide.

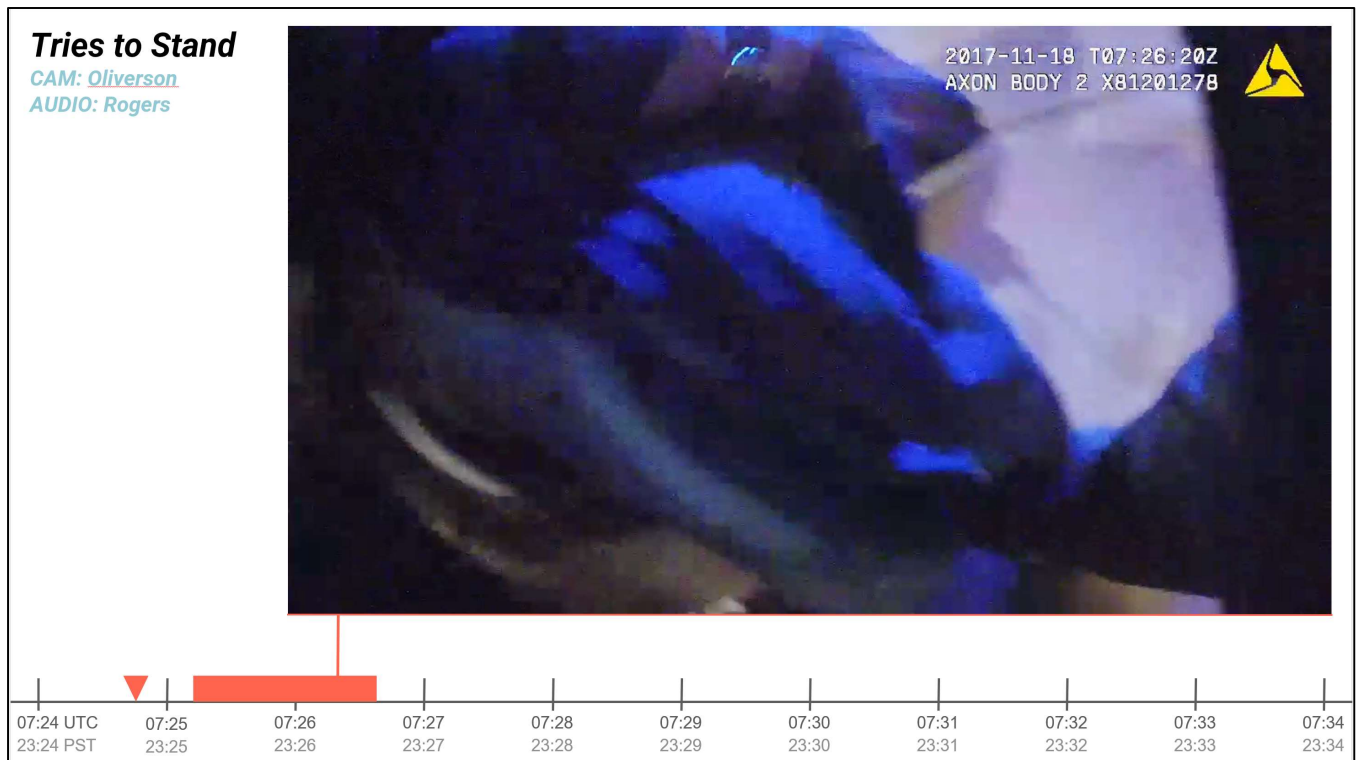


Figure 7 – Slide #5: "Tries to Stand"

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

The pictorial image on this slide shows Mr. Frederick's represented as a scaled figure, lying on his back and covered by officers represented as triangle. The use of triangles to represent the officer's position and orientation is inaccurate and misleading, and depicting their positions two dimensionally inaccurately flattens the distance between the officers and Mr. Frederick's. The triangles do not represent the correct proportions or scale of the officers which makes the triangles an unsuitable comparison with a scaled person that represents Mr. Fredericks. The position and orientation of the officers relative to Mr. Fredericks is a central issue in this inquest, and pictorial images that are not scaled correctly, oriented correctly, or placed relative to Mr. Fredericks correctly will be misleading and inaccurate. Peer reviewed and scientific methods exist for analyzing video to precisely locate the officers and Mr. Fredericks, though Mr. Cohen has not performed such an analysis.

Slide #6 "Lying on Chest"

Slide #6 in the PowerPoint is titled "Lying on Chest" and contains video from the BWV of officer Oliverson only. The clipped time range of the video in this slide is from 07:26:58 to 07:27:15. There is pictorial commentary on this image. *Figure 8* depicts this slide.

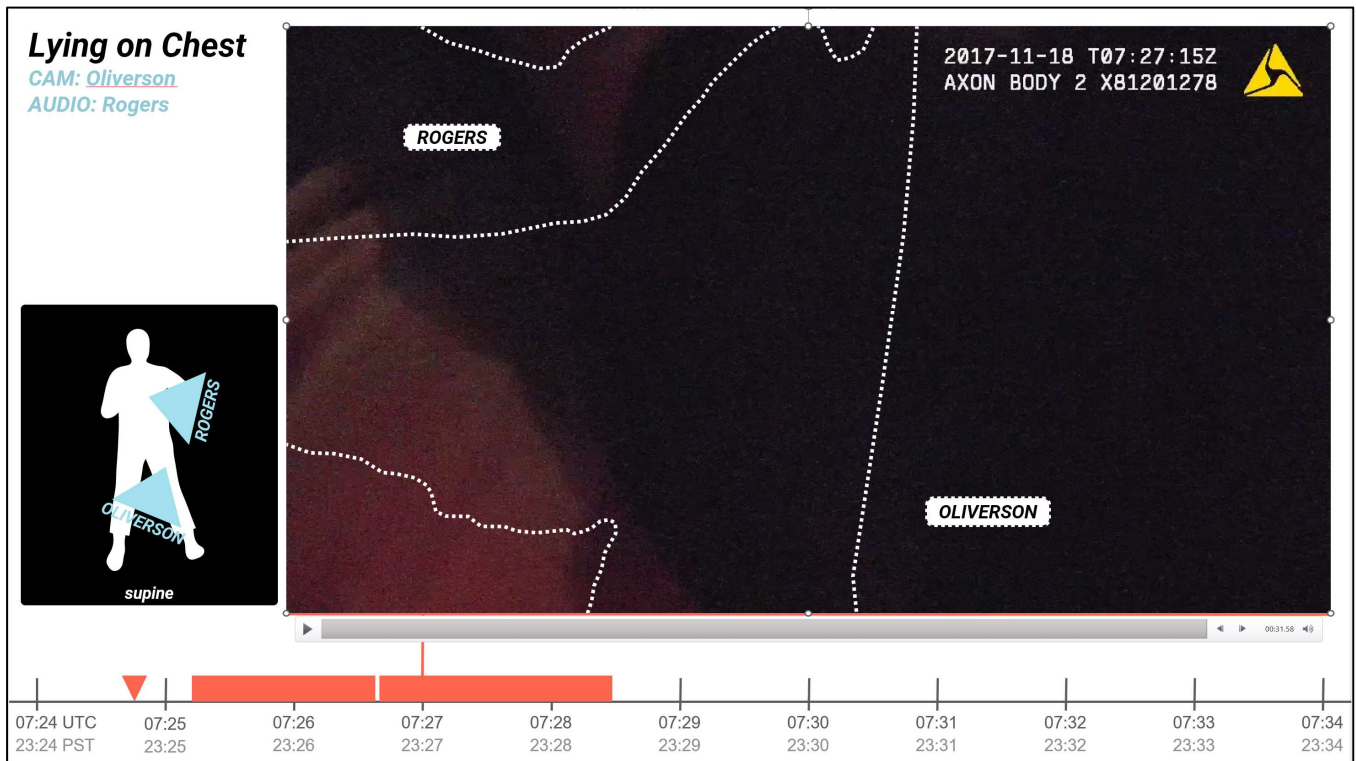


Figure 8 – Slide 6: "Lying on Chest"

Title Issues:

The title "Lying on Chest" is misleading and false, since it suggests that the officers are lying on Mr. Fredericks chest. This is demonstrably inaccurate, as analysis of the video will show.

Video Analysis Issues:

Analysis of the video, and the location of the Body Worn Camera (which is chest mounted), show that there is continual space between the officers and Mr. Fredericks's chest, and even movement and rolling by Mr. Fredericks which would not be possible if the officers were lying on Mr. Fredericks chest. *Figure 9* depicts the location of the Body Worn Video on the officer's chest, and review of the video shows that the chest of the officers is clear of Mr. Fredericks chest, thus it is not possible for the officers to be "Lying on Chest". Even the pictorial image does not show the officers "Lying on Chest".

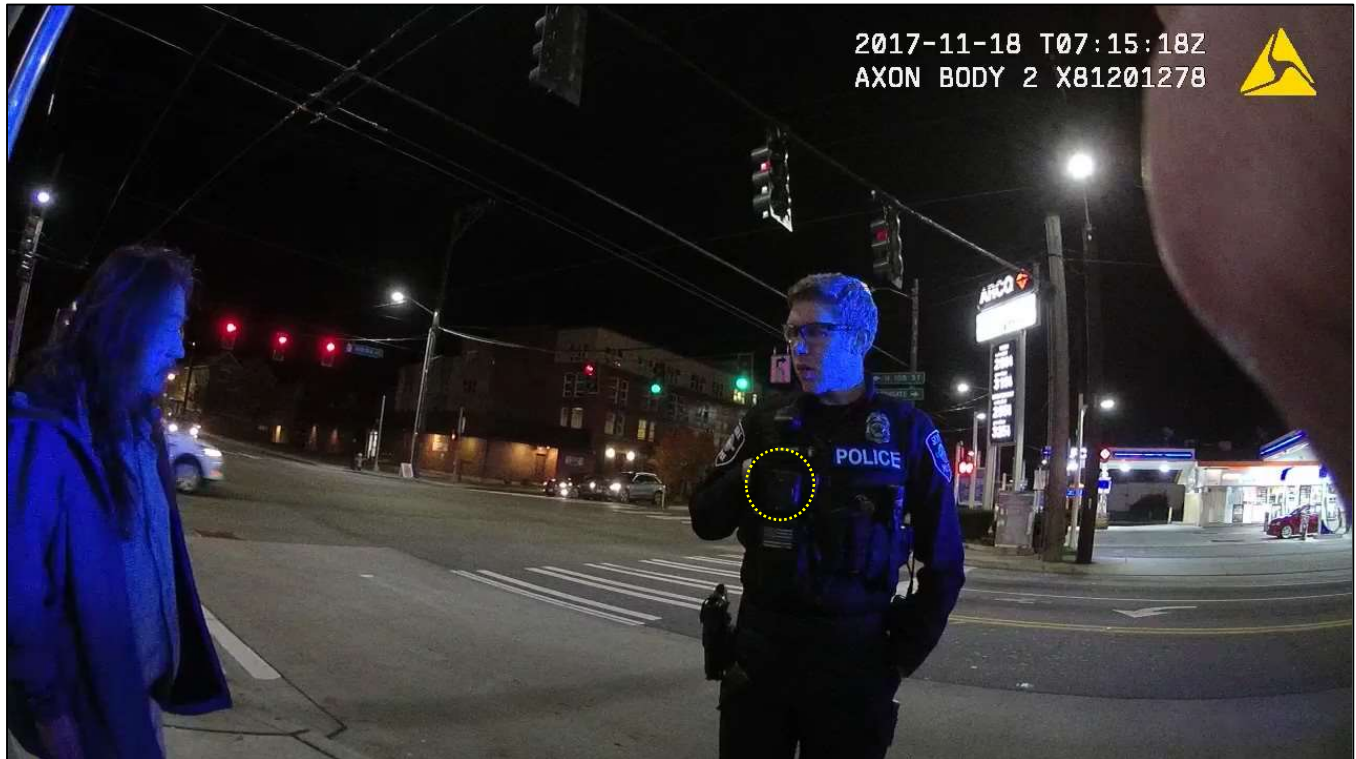


Figure 9 – Location of the Body Worn Camera centered on the chest of the officers

To determine whether the officers were lying on Mr. Fredericks chest, photogrammetric and video analysis methods could be employed, used to measure both distance, time and location of any contact, and even weight distribution and load, using widely accepted methods of accident reconstruction and photogrammetry analysis. These techniques were not used by Mr. Cohen to determine if the officers were lying on Mr. Fredericks chest, and the analysis, even from a cursory review, shows this to be false.

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

The pictorial image on this slide shows Mr. Frederick's represented as a scaled figure, lying on his back and covered by officers represented as triangle. The use of triangles to represent the officer's position and orientation is inaccurate and misleading, and depicting their positions two dimensionally inaccurately flattens the distance between the officers and Mr. Frederick's. The triangles do not represent the correct proportions or scale of the officers which makes the triangles an unsuitable comparison with a scaled person that represents Mr. Fredericks. The position and orientation of the officers relative to Mr. Fredericks is a central issue in this inquest, and pictorial images that are not scaled correctly, oriented correctly, or placed relative to Mr. Fredericks correctly with be misleading and inaccurate. Peer reviewed and scientific methods exist for analyzing video to precisely locate the officers and Mr. Fredericks, though Mr. Cohen has not performed such an analysis.

Slide #7 “Pinned Legs and Arm”

Slide #7 in the PowerPoint is titled “Pinned Legs and Arm” and contains video from the BWV of officer Rogers only. The clipped time range of the video in this slide is from 07:28:47 to 07:29:11. There is pictorial commentary on this image. *Figure 10* depicts this slide.

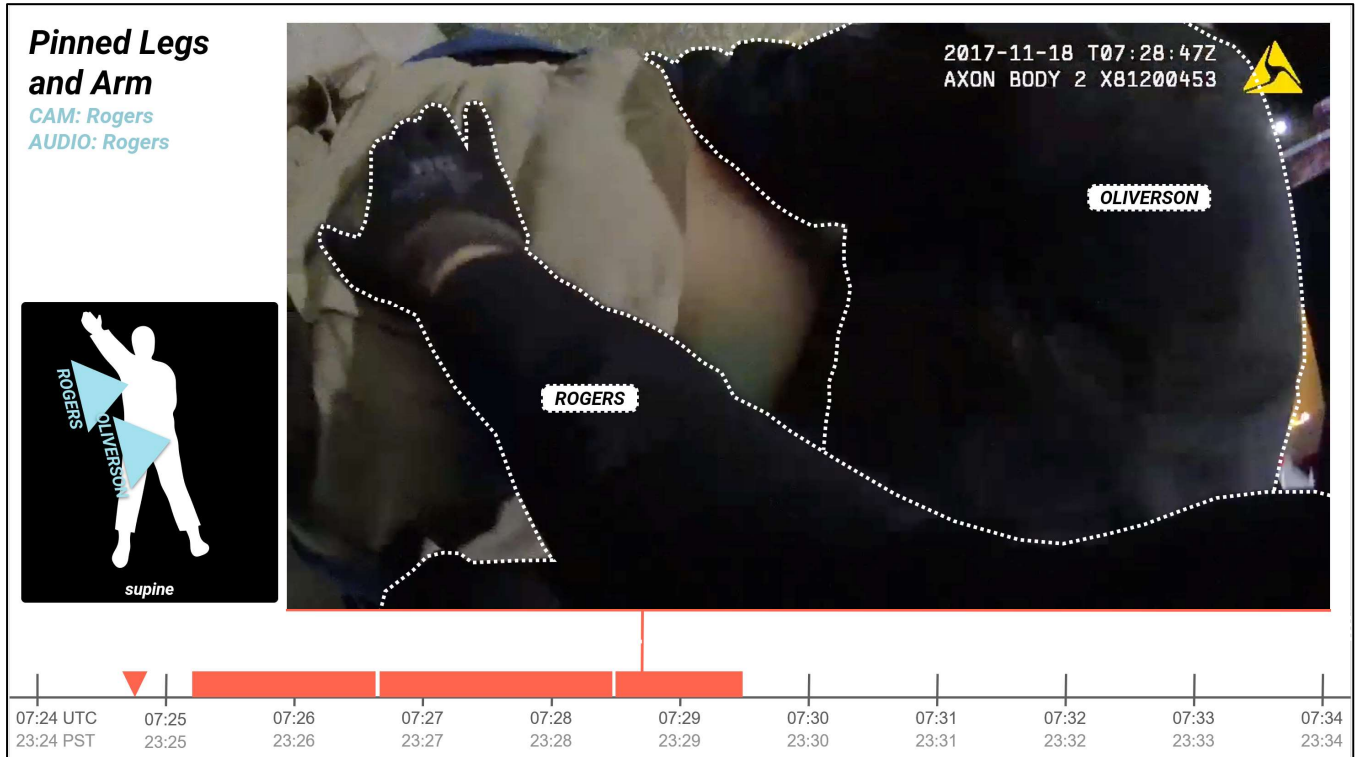


Figure 10 – Slide #7: “Pinned Legs and Arm”

Title Issues:

The title “Pinned Legs and Arm” is inaccurate and misleading. Though the left hand of Mr. Fredericks is being held down, the legs are not pinned in this video sequence.

Video Analysis Issues:

Review and analysis of the video show distance between the officers and Mr. Fredericks legs, and movement that is not consistent with his legs being pinned. Analysis could be performed that measures and quantifies the relative positions between the officers and Mr. Fredericks’s legs, but this was not performed.

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

The pictorial image on this slide shows Mr. Frederick’s represented as a scaled figure, lying on his back and covered by officers represented as triangle. The use of triangles to represent the officer’s position and orientation is inaccurate and misleading, and depicting their positions two dimensionally inaccurately flattens the distance between the officers and Mr. Frederick’s. The triangles do not represent the correct proportions or scale of the officers which makes the triangles an unsuitable comparison with a scaled person that represents Mr. Fredericks. The position and orientation of the officers relative to Mr. Fredericks is a central issue in this inquest, and pictorial images that are not scaled correctly, oriented correctly, or placed relative to Mr. Fredericks correctly with be

misleading and inaccurate. Peer reviewed and scientific methods exist for analyzing video to precisely locate the officers and Mr. Fredericks, though Mr. Cohen has not performed such an analysis.

Slide #8 “Officer Hay Arrives”

Slide #8 in the PowerPoint is titled “Officer Hay Arrives” and contains video from the BWV of officer Hay only. The clipped time range of the video in this slide is from 07:29:13 to 07:29:28. There is no pictorial commentary on this image. *Figure 11* depicts this slide.

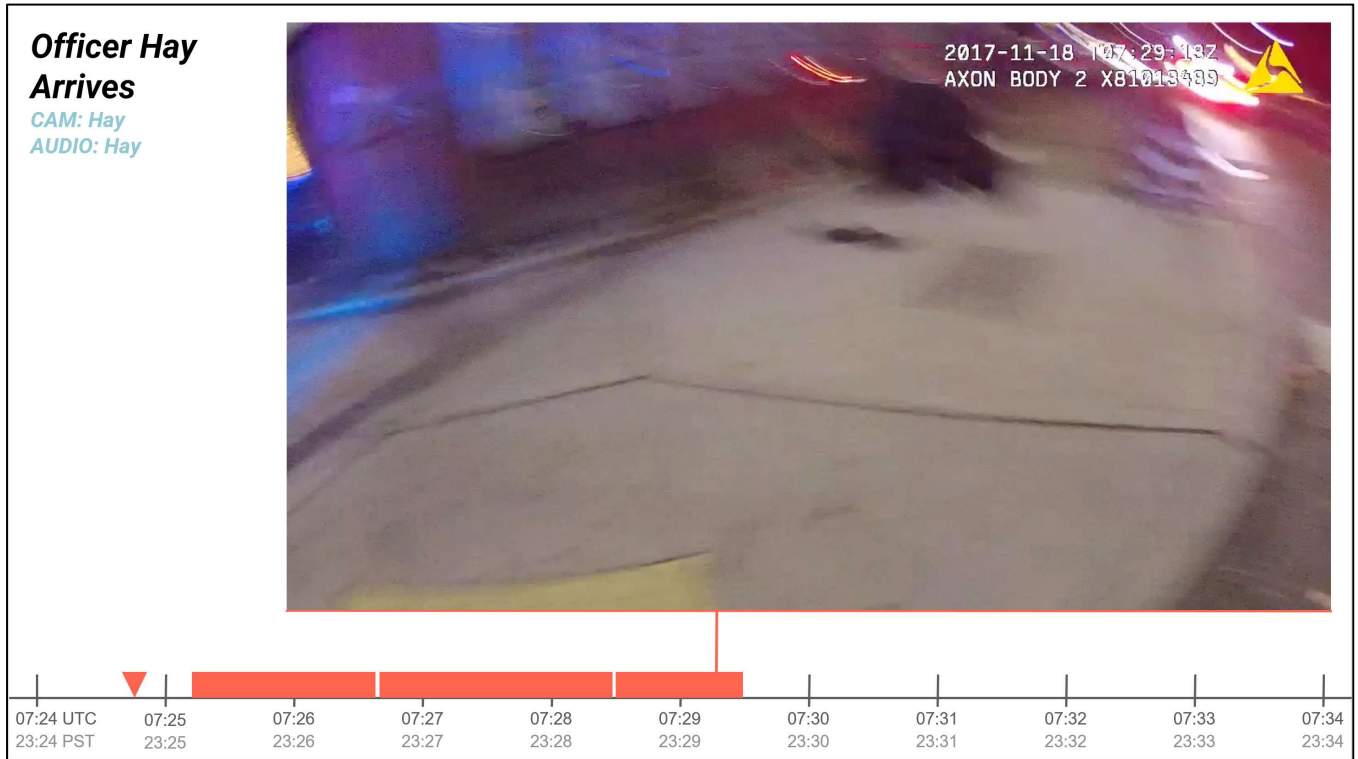


Figure 11 – Slide #8: “Officer Hay Arrives”

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Slide #9 “Officer Swartz Arrives”

Slide #9 in the PowerPoint is titled “Officer Swartz Arrives” and contains video from the BWV of officer Swartz only. The clipped time range of the video in this slide is from 07:29:19 to 07:29:21. There is no pictorial commentary on this image. *Figure 12* depicts this slide.

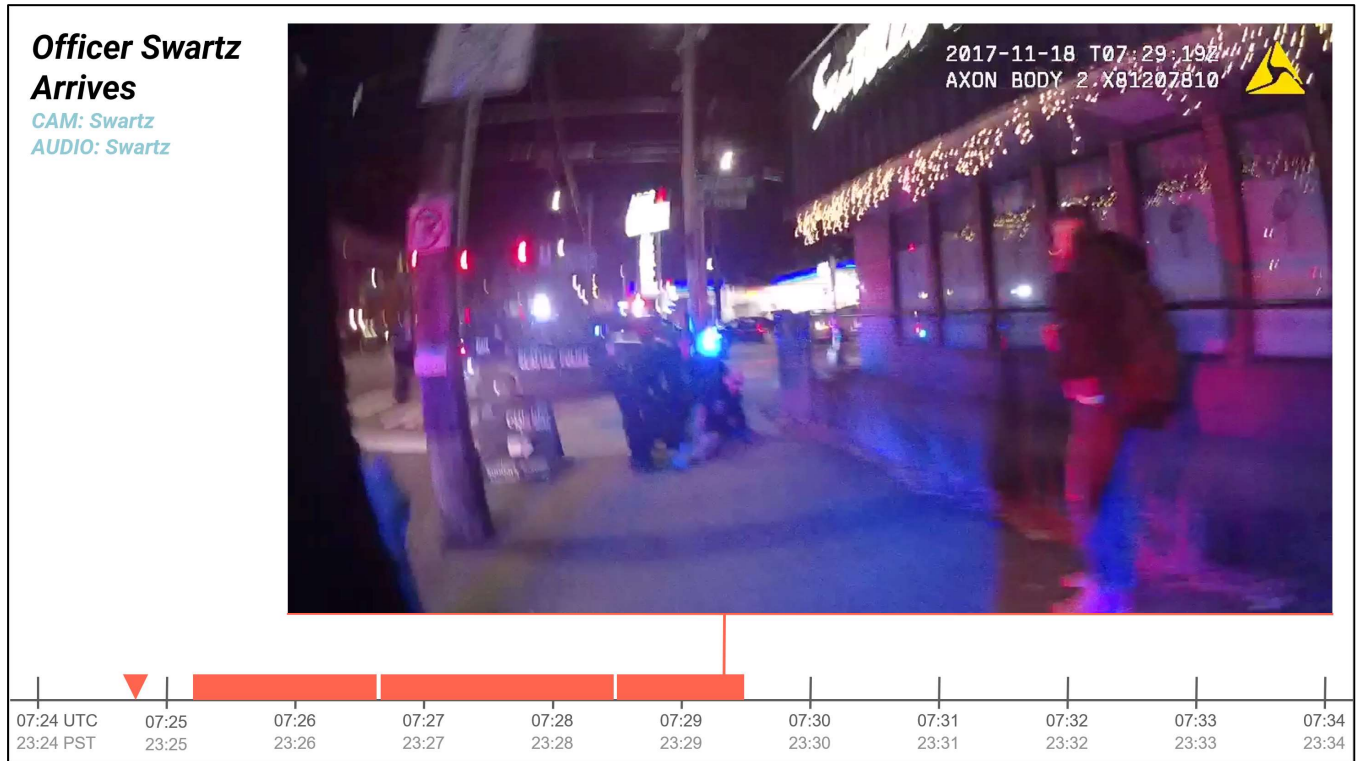


Figure 12 – Slide #9: “Officer Swartz Arrives”

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Slide #10 “Officer Jerome Arrives”

Slide #10 in the PowerPoint is titled “Officer Jerome Arrives” and contains video from the BWV of officer Jerome. The clipped time range of the video in this slide is from 07:29:21 to 07:29:28. There is no pictorial commentary on this image. Figure 13 depicts this slide.

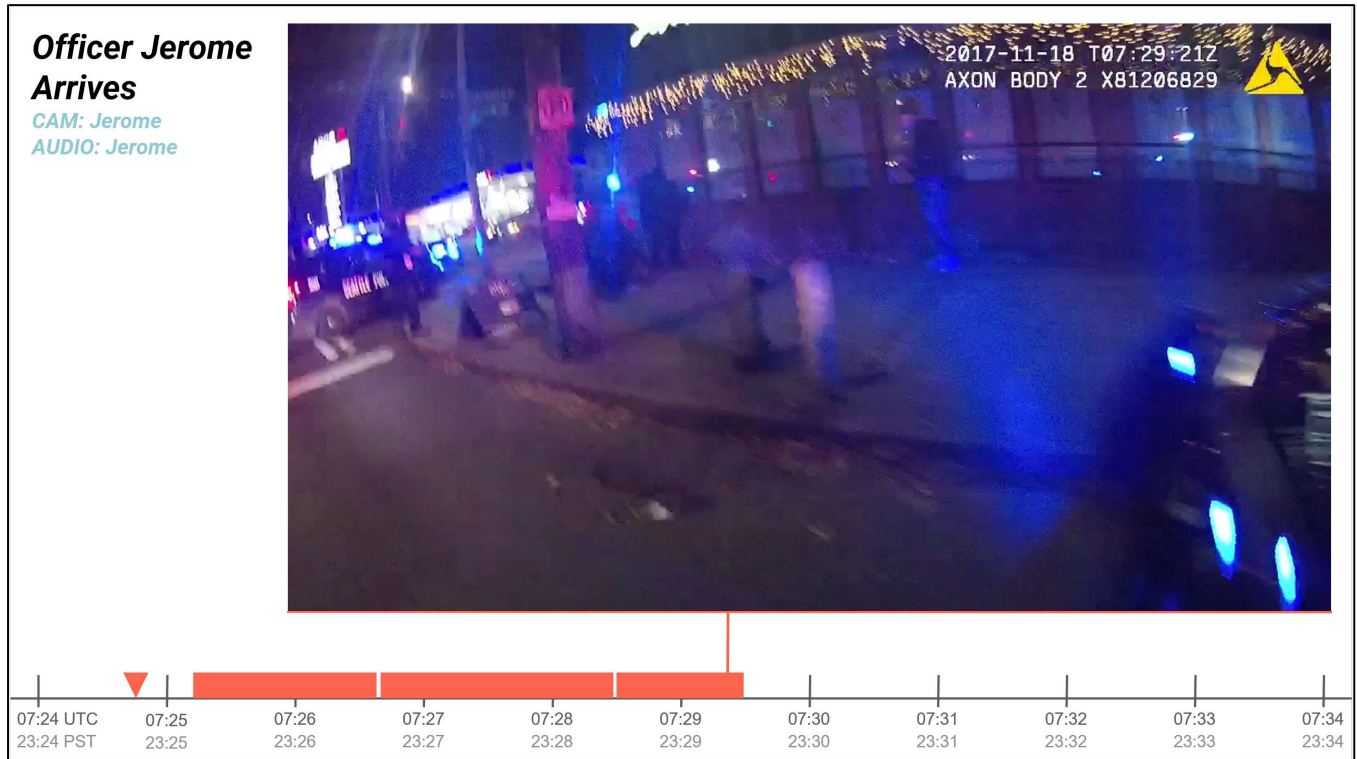


Figure 13 – Slide #10: “Officer Jerome Arrives”

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Slide #11 “Roll to Prone”

Slide #11 in the PowerPoint is titled “Roll to Prone” and contains video from the BWV of officer Rogers only. The clipped time range of the video in this slide is from 07:29:29 to 07:29:52. There is pictorial commentary on this image. *Figure 14* depicts this slide.



Figure 14 – Slide #11: “Roll to Prone”

Title Issues:
No Comment

Video Analysis Issues:
No comment.

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
The pictorial image on this slide shows Mr. Frederick’s represented as a scaled figure, lying on his back and covered by officers represented as triangle. The use of triangles to represent the officer’s position and orientation is inaccurate and misleading, and depicting their positions two dimensionally inaccurately flattens the distance between the officers and Mr. Frederick’s. The triangles do not represent the correct proportions or scale of the officers which makes the triangles an unsuitable comparison with a scaled person that represents Mr. Fredericks. The position and orientation of the officers relative to Mr. Fredericks is a central issue in this inquest, and pictorial images that are not scaled correctly, oriented correctly, or placed relative to Mr. Fredericks correctly with be misleading and inaccurate. Peer reviewed and scientific methods exist for analyzing video to precisely locate the officers and Mr. Fredericks, though Mr. Cohen has not performed such an analysis.

Slide #12 “Handcuffs”

Slide #12 in the PowerPoint is titled “Handcuffs” and contains video from the BWV of officer Hay only. The clipped time range of the video in this slide is from 07:29:53 to 07:30:30. There is no pictorial commentary on this image. Figure 15 depicts this slide.



Figure 15 – Slide #12: “Handcuffs”

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Slide #13 “Snoring”

Slide #13 in the PowerPoint is titled “Snoring” and contains video from the BWV of officer Jerome only. The clipped time range of the video in this slide is from 07:30:47 to 07:31:14. There is no pictorial commentary on this image. Figure 16 depicts this slide.

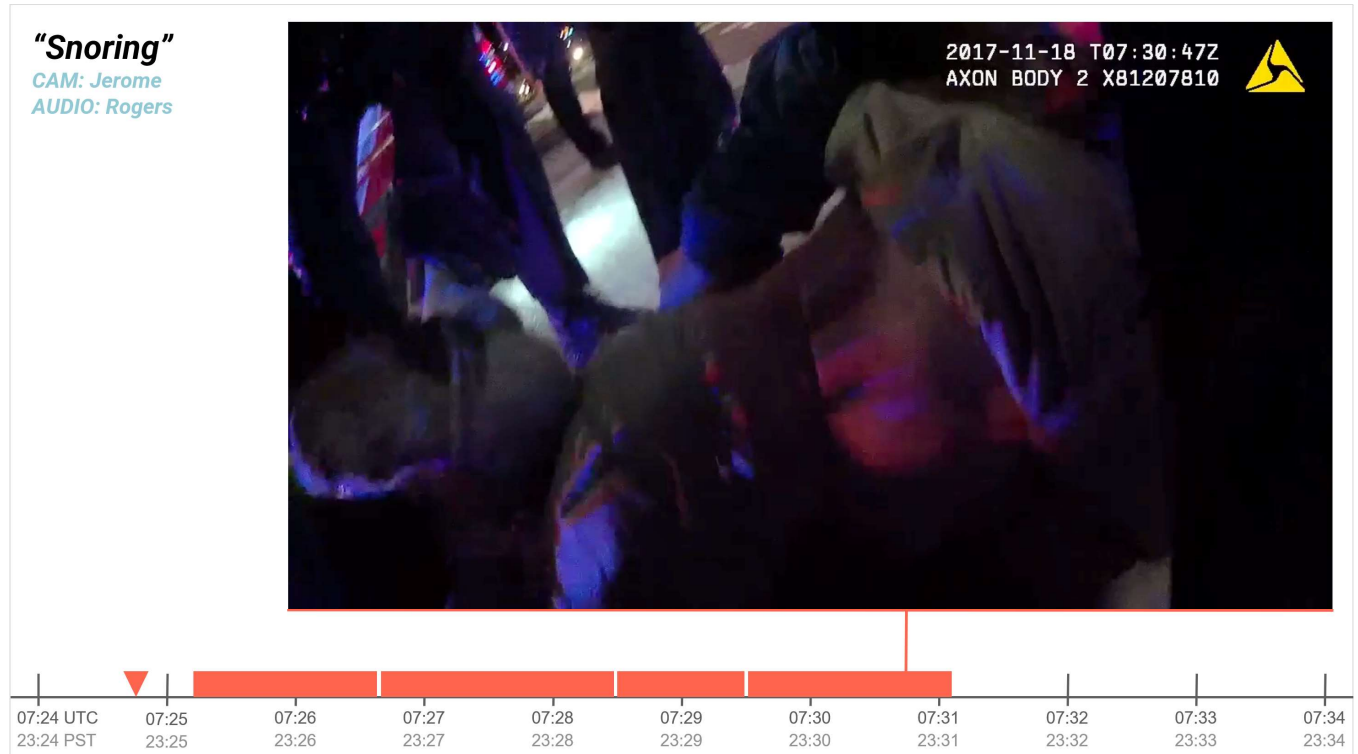


Figure 16 – Slide #13: "Snoring"

Title Issues:
No Comment

Video Analysis Issues:
From analysis of the video, it is unclear why this portion of video is chosen, other than as a specific critique and commentary of the officers' remarks.

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Slide #14 "Decides to take a nap now"

Slide #14 in the PowerPoint is titled "Decides to take a nap now" and contains video from the BWV of officer Oliverson only. The clipped time range of the video in this slide is from 07:31:28 to 07:31:38. The is pictorial commentary on this image. *Figure 17* depicts this slide.

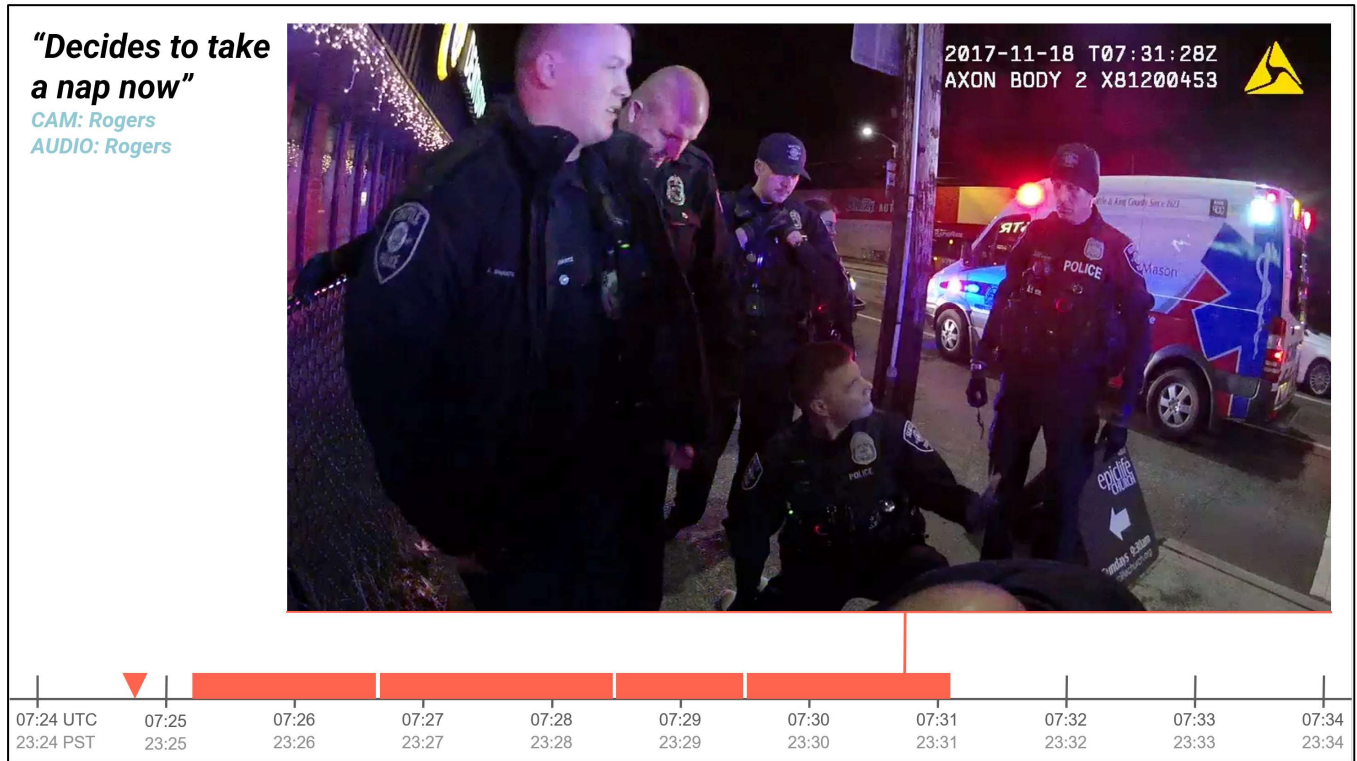


Figure 17 – Slide #14: "Decide to take a nap now"

Title Issues:

No Comment

Video Analysis Issues:

From analysis of the video, it is unclear why this portion of video is chosen, other than as a specific critique and commentary of the officers' remarks.

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

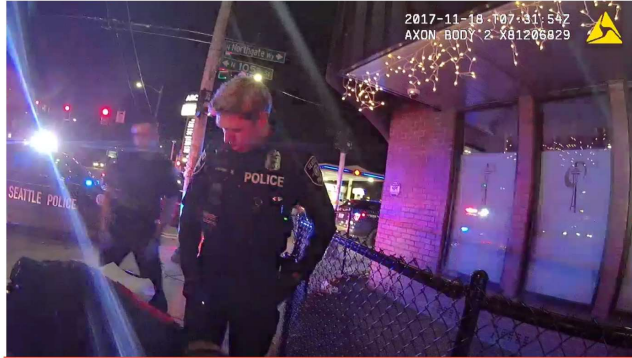
No comment

Slide #15 "Lift to Gurney"

Slide #15 in the PowerPoint is titled "Lift to Gurney" and contains video from the BWV of officers Jerome and Rogers. The clipped time range of the video in this slide is from 07:31:54 to 07:32:11. There is no pictorial commentary on this image. *Figure 18* depicts this slide.

Lift to Gurney

CAM: Jerome
AUDIO: Rogers



CAM: Rogers
AUDIO: Rogers

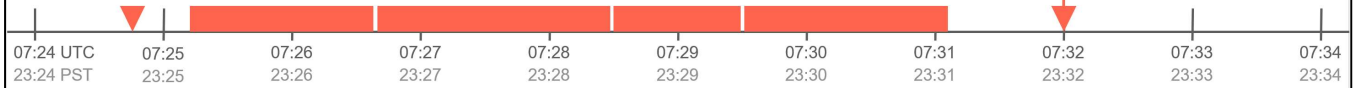


Figure 18 – Slide #15: "Lift to Gurney"

Title Issues:
No Comment

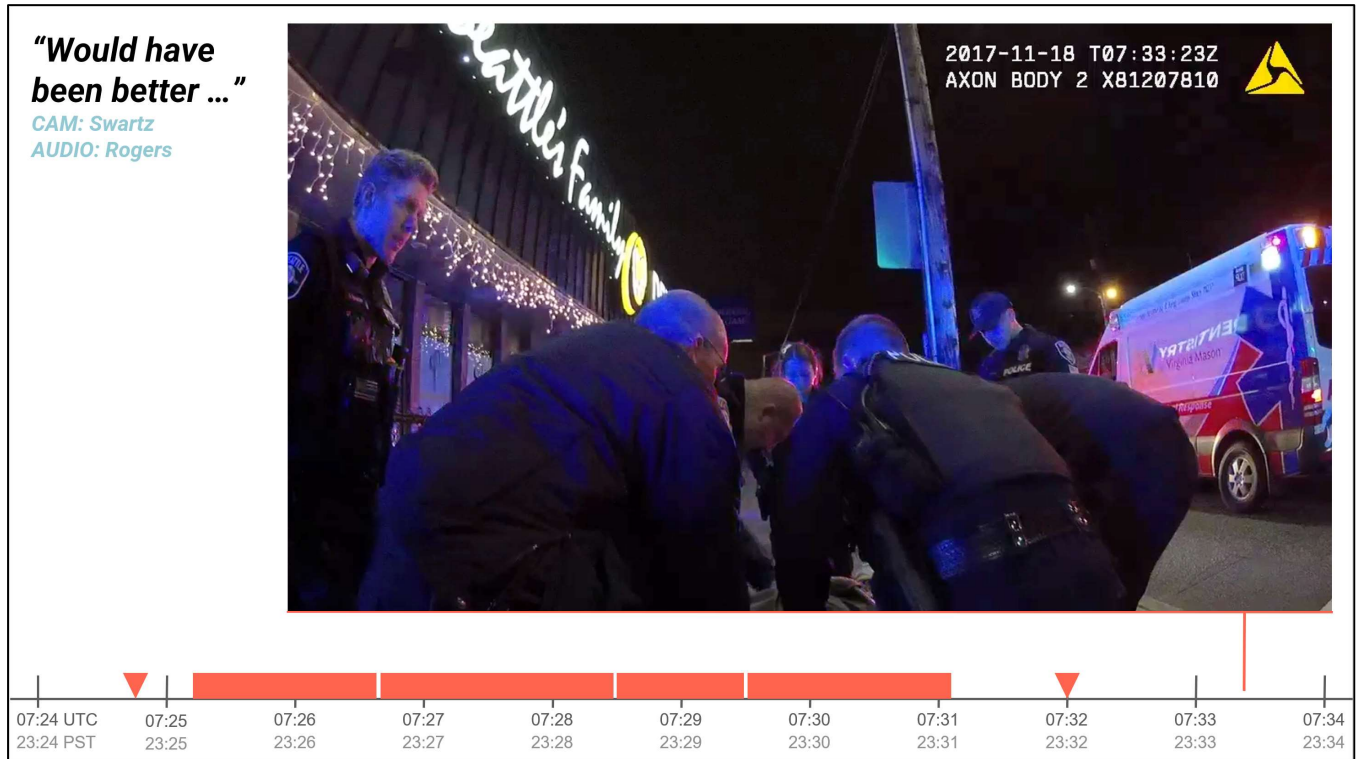
Video Analysis Issues:
No comment

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Slide #16 "Would have been better..."

Slide #16 in the PowerPoint is titled "Would have been better..." and contains video from the BWV of officer Swartz only. The clipped time range of the video in this slide is from 07:33:23 to 07:33:28. There is no pictorial commentary on this image. *Figure 19* depicts this slide.



Title Issues:

This title is misleading, and incomplete. There are multiple officers speaking at this time, and to what they are referring and the intent or meaning behind their words can not be clearly deduced from the context of the video.

Video Analysis Issues:

No comment

Contextual Issues:

This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:

No comment

Slide #17 "Leg Hanging from Gurney"

Slide #17 in the PowerPoint is titled "Leg Hanging from Gurney" and contains video from the BWV of officer Hay only. The clipped time range of the video in this slide is from 07:33:42 to 07:33:47. There is no pictorial commentary on this image. *Figure 20* depicts this slide.



Figure 19 – Slide #17: “Leg Hanging from Gurney”

Title Issues:
No Comment

Video Analysis Issues:
No comment

Contextual Issues:
This video on this slide only shows a small portion of the entire sequence of events. This extracted and isolated clip can be misleading since the events leading up to or after this trimmed section may be omitting relevant details that would lead a viewer to an entirely different understanding of what is actually occurring. In short, the trimmed video on this slide is taken out of context, which makes it vulnerable for misinterpretation.

Pictorial Issues:
No comment

Summary and Conclusions

- Mr. Cohen’s synchronized video files did not contain any significant errors.
- However, Mr. Cohen’s synchronized video files do not show the event in its entirety, despite the availability of the video and the ability and skills to do so.
- The PowerPoint slides contain commentary, titles and notations that are inaccurate or misleading, or both.
- Methodologies exist, that can be employed to accurately measure and determine the size, shape, orientation, distance, and spatial relationships between the officers and Mr. Fredericks.

Closing

The opinions and conclusions expressed in this report were reached to a reasonable degree of scientific certainty based on our investigation and analysis to date. Additional graphics, animations, and visual material may be created to assist JS Held in demonstrating and communicating the opinions and procedures expressed above. Further

information, data, investigation, or analysis may lead us to review or supplement these opinions and conclusions. A copy of my testimony list, and JS Held's current fee sheet is included as *Appendix D* and *E*.

Sincerely,



William T.C. Neale, M. Arch.
Director of Visualization

