
Appeal No. 23-CF-196



DISTRICT OF COLUMBIA COURT OF APPEALS

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RAKEEM WILLIS,

Appellant,

v.

UNITED STATES OF AMERICA,

Appellee.

Appeal from the Superior Court of the District of Columbia
Criminal Division

BRIEF FOR APPELLANT

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DISCLOSURE STATEMENT

Appellant Rakeem Willis was initially represented by Kevin McCants. After Mr. McCants withdrew from the case, Howard McEachern was appointed counsel and represented Mr. Willis at trial. Co-defendant Jonathan Winston was represented by Kevin Irving and Erin Scialpi. The government was represented by Assistant United States Attorneys Michael Spence and Ariel Dean. The Honorable Milton Lee presided over the pretrial litigation, and the Honorable Michael Ryan presided over the trial. On appeal, Mr. Willis is represented by Jaclyn Frankfurt, Alice Wang, and Stefanie Schneider of the Public Defender Service for the District of Columbia.

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ISSUES PRESENTED

1. Whether the motions court reversibly erred in admitting expert testimony on cell site location information without: (a) requiring the government to disclose prior to trial a written summary of the expert's opinions, and the bases and reasons for those opinions, as required by Superior Court Rule of Criminal Procedure 16; and (b) assessing the reliability of the expert's principles and methods, and his application of those principles and methods to the facts of the case, as required by Federal Rule of Evidence 702.
2. Whether the trial court reversibly erred in failing to disqualify an inattentive juror who repeatedly slept during the most important parts of the trial.

STATEMENT OF THE CASE AND JURISDICTION

On September 22, 2021, a grand jury returned a superseding indictment charging Rakeem Willis, Jonathan Winston, and Jeffrey Felder with conspiracy to kill Sean Shuler and to conceal evidence of the crime by killing Javon Abney and Tyrik Haygood, in violation of D.C Code §§ 22-2101, -1805a. App. 1.¹ Mr. Willis and Mr. Winston were also each charged with three counts of first-degree (premeditated) murder while armed, in violation of D.C. Code §§ 22-2101, -4502; three counts of possession of a firearm during a crime of violence (“PFCV”), in violation of D.C. Code § 22-4504(b); and one count of unlawful possession of a firearm (prior conviction) (“FIP”), in violation of D.C. Code § 22-4503(a)(1), (b)(1). App. 5-6. Mr. Willis was further charged with fleeing from a law enforcement officer

¹ Citations to “App. *” refer to pages in the Appendix for Appellant. Citations to “**/**/** at *” designate a particular date and page from the trial transcripts.

on the day of his arrest, in violation of D.C. Code § 50-2201.05b (b)(2). App. 7.²

Following pretrial litigation before Judge Milton Lee, a joint jury trial commenced before Judge Michael Ryan on October 25, 2022. At the close of the government’s case, Judge Ryan granted Mr. Winston’s motion for judgment of acquittal (“MJOA”), 11/8/22 at 6, and the government voluntarily dismissed the conspiracy charge against Mr. Willis, *id.* at 19-20. The jury convicted Mr. Willis of first-degree murder while armed and fleeing a law enforcement officer, but acquitted him of PFCV and FIP. 11/16/22 at 3-6. Judge Ryan sentenced Mr. Willis to 120 years of imprisonment, followed by five years of supervised release. 2/10/23 at 30-31; App. 11. Mr. Willis filed a timely notice of appeal. App. 12-13. This Court has jurisdiction pursuant to D.C. Code § 11-721(a)(1).

STATEMENT OF FACTS

I. Overview

Around 10 p.m. on January 26, 2019, Sean Shuler, Javon Abney, and Tyrik Haygood were killed by gunfire in the 1500 block of Fort Davis Place—a residential street in Southeast D.C. Neighbors reported hearing gunshots and catching a glimpse of two shooters and a dark car, but they could not describe the shooters. Around 11 p.m., police responded to a vehicle fire in Capitol Heights, Maryland, and discovered a burned black Lexus that was presumed to be the dark car involved in the shooting.

The government theorized that Mr. Willis, Mr. Winston, and Mr. Felder

² Mr. Felder was charged with three counts of accessory after the fact for first-degree murder while armed, in violation of D.C. Code §§ 22-1806, -2101, -4502. App. 7-8. His case was severed, 6/6/22 at 3-4, 8, and the government subsequently dismissed all charges against him. App. 9-10.

conspired to kill Mr. Shuler and killed Mr. Abney and Mr. Haygood to eliminate any witnesses. According to the government, Mr. Willis lured Mr. Shuler to the 1500 block of Fort Davis Place, where he and Mr. Winston lay in wait in a black Lexus; they then shot an unsuspecting Mr. Shuler, Mr. Abney, and Mr. Haygood, and drove north to Capitol Heights, where they met up with Mr. Felder and burned the Lexus.

Despite this elaborate theory, the government presented no evidence directly tying Mr. Willis or his alleged co-conspirators to the shooting or the burned Lexus. No eyewitness testimony or surveillance footage placed any of them at the murder scene or burn site. Although a gun was found in the burned Lexus, it was inconsistent with the shell casings found at the murder scene. No DNA or fingerprints linked Mr. Willis or his alleged co-conspirators to the murders or the burned Lexus. Nor did the government posit a motive for why any of these men would want to kill Mr. Shuler.

Instead, the government's case was built around call detail records ("CDRs") and cell site location information ("CSLI") for five unregistered cell phone numbers: 240-856-8168 ("the 240 number"); 443-454-9090 ("the 443 number"); 720-421-3650 ("the 720 number"); 202-821-8262 ("Mr. Felder's number"); and 202-725-5567 ("Mr. Shuler's number"). The government presented circumstantial evidence to link Mr. Willis to the 240 and 443 numbers and Mr. Winston to the 720 number. It relied on the CDRs to argue that Mr. Willis communicated repeatedly with Mr. Winston, Mr. Felder, and Mr. Shuler on the day of the murders. Finally, over defense objection, the government called Federal Bureau of Investigation ("FBI") Agent Billy Shaw as an expert in CSLI to opine about the locations of the phones on the day of the murders. Agent Shaw presented a series of maps showing the cell towers,

or “cell sites,” used by the phones to make and receive calls throughout the day. The maps showed pie-shaped wedges emanating from the activated sectors of the towers that, according to Agent Shaw, represented each sector’s coverage area, and by extension, the phone’s location at the time of the call. The government argued that the CSLI placed Mr. Willis at the murder scene at the time of the shooting and showed him traveling north toward the burn site immediately afterward.

By the close of the government’s case, serious deficiencies in the evidence became clear. Finding the evidence insufficient to link Mr. Winston to the 720 number, Judge Ryan granted Mr. Winston’s MJOA on all charges. The government voluntarily dismissed the conspiracy charge against Mr. Willis. The jury acquitted Mr. Willis of PFCV and FIP, indicating that it could not find that he was one of the shooters. On appeal, Mr. Willis contends that: (1) Judge Lee reversibly erred in admitting Agent Shaw’s expert testimony without requiring adequate expert notice under Superior Court Criminal Rule 16, and without assessing the reliability of the testimony under Federal Rule of Evidence 702; and (2) Judge Ryan reversibly erred in failing to remove an inattentive juror who repeatedly slept during the most critical portions of the trial, including the cross-examination of Agent Shaw.

II. The Shooting

At 10 p.m. on January 26, 2019, police responded to a shooting in the 1500 block of Fort Davis Place, SE. 10/25/22 at 59-60, 64, 85; 11/7/22 at 93. They found Mr. Shuler’s dead body in the middle of the road and the dead bodies of Mr. Abney and Mr. Haygood seated in a parked grey Toyota Camry with the engine running and the windows and driver’s door open. 10/25/22 at 65, 85, 87; 10/27/22 at 88. A

medical examiner performed autopsies and concluded that all three men died from multiple gunshot wounds. 10/31/22 at 106, 148, 151; 11/7/22 at 93.³

Ernest Mason and Shantell Walker were in their bedroom at 1512 Fort Davis Place when they heard gunshots. 10/26/22 at 23-26; 10/27/22 at 46-47. Ms. Walker looked out her window and saw an unfamiliar car and a figure standing over a body in the street. 10/27/22 at 48-49. Upon hearing more shots, she left the window. *Id.* at 50. Mr. Mason heard a muffled firecracker sound, followed by additional gunshots 20 to 30 seconds later. 10/26/22 at 26-27. Looking out a different window, he saw two “silhouette[s]”—one on the sidewalk and one in the street—shooting into a grey or black car. *Id.* at 27-28, 48. The shooters then ran down the hill to a car parked next to a body, got in the car, drove two to three feet, and stopped. *Id.* at 28-29, 31. Someone got out of the car, stood over the body, appeared to “mess[] with it,” and got back in the car. *Id.* at 31. The car then drove away. *Id.* at 33. Ms. Walker and Mr. Mason could not describe the shooters, *id.* at 50-51; 10/27/22 at 53, 55, and provided only generic descriptions of the car. Ms. Walker described a dark, four-doored sedan, 10/27/22 at 48, and Mr. Mason said it was dark blue or black, possibly an Acura. 10/26/22 at 51. Neither saw the license plate. *Id.* at 51; 10/27 at 54.

³ Crime scene technicians recovered multiple cartridge casings from inside and around the Camry; three jackets and a firearm inside the Camry; a Rolex watch in the grass; \$334.47 in Mr. Shuler’s pockets; \$240.45 in Mr. Abney’s pockets; and \$2,000 in Mr. Haygood’s pockets. 10/27/22 at 91, 102, 104, 105, 113, 121-22, 125, 133-34, 139, 140. According to the government’s firearms expert, the cartridges were shot from two firearms—a .40 caliber handgun and a .45 caliber handgun. 11/7/22 at 81. No DNA or fingerprints tied Mr. Willis (or Mr. Winston or Mr. Felder) to any of the physical evidence found at the scene.

III. The Fire

Around 11 p.m., police responded to a vehicle fire at 1743 Kenilworth Avenue in Capitol Heights, Maryland. 10/26/22 at 69. Firefighters were extinguishing a fire in a black Lexus with license plate number 9CP4566. *Id.* at 75, 78-79, 89, 94-95. Police later searched the car and found parts of a Glock 27 handgun, bullets, and cartridge casings. *See id.* at 105-36. A firearms expert testified that the Glock 27 was inconsistent with the ammunition recovered from the murder scene. 11/7/22 at 80.

IV. The Surveillance Videos

The government presented video footage from two home surveillance systems and two traffic cameras depicting a dark sedan at various locations in Southeast D.C. on the night of the shooting. The government argued that the videos cumulatively showed a black Lexus traveling toward the murder scene and then toward the burn site, *see* 11/8/22 at 47, 52, 56, 57 (closing), but none of the videos showed the license plate number, make, or model of the car, much less who was in the car. According to the government, a ten-minute video (beginning at 9:42 p.m.) from a speed camera at the intersection of Southern Avenue and Forest Glen Court, SE, 10/26/22 at 147-48, 152, depicted “the black Lexus” traveling north toward the crime scene at 9:46 p.m., 11/8/22 at 47. The government argued that footage from 3195 Q Street, SE showed the same car entering the 1500 block of Fort Davis Place at 9:50 p.m. and leaving just after 10 p.m., 10/25/22 at 115-22; 11/8/22 at 48, 52, 56 (closing), while footage from 1677 Fort Davis Street showed the car crossing R Street as it left the crime scene, 10/25/22 at 130-37; 11/8/22 at 56 (closing). Finally, the government argued that a five-minute video (beginning at 10:05 p.m.) from a red-light camera at

the intersection of Pennsylvania and Minnesota Avenues, SE, 10/26/22 at 155-57, captured “the black Lexus” en route to the burn site in Capitol Heights, 11/8/22 at 47.⁴ Defense counsel disputed that the government had proven that the dark sedans in the videos were even the same vehicle, let alone the car used by the shooters or the black Lexus burned later that night. *Id.* at 77-79.

V. The Cell Phone Attribution Evidence

The government sought to link Mr. Shuler, Mr. Felder, Mr. Winston, and Mr. Willis to five unregistered cell phone numbers used on the day of the murders.

A. 202-725-5567 (“Mr. Shuler’s Number”)

The government introduced a screen shot from Shade Sweeny’s cell phone documenting a video call with 202-725-5567 (labeled “my heart,” her nickname for Mr. Shuler) on January 26, 2019, at 9:57 p.m. 10/27/22 at 21-22. Ms. Sweeny testified that Mr. Shuler was in the backseat of a car during the call. *Id.* at 23-24, 27.

B. 202-821-8262 (“Mr. Felder’s Number”)

Deputy U.S. Marshal Michael Maradin testified that tracking 202-821-8262 led to Mr. Felder’s apprehension in September 2021. 11/2/22 at 190-93.

C. 720-421-3650 (“The 720 Number”)

The government unsuccessfully tried to link the 720 number to Mr. Winston. Jade Wiggins, the mother of Mr. Winston’s child, testified that, in January 2019, she lived in an apartment at the Wharf, and Mr. Winston sometimes slept there. 10/26/22 at 10-11, 16-17. Agent Shaw testified that the 720 number activated a cell tower at

⁴ The government played this footage for the jury but never drew the jury’s attention to the cars it would later argue were the burned Lexus.

the Wharf on January 26, 2019 at 2:20 p.m., and on January 27, 2019 at 1:04 a.m. 11/3/22 at 41, 56. Detective Joshua Branson testified that Mr. Winston's brother was incarcerated in Colorado and that 720 is a Colorado area code. 11/2/22 at 167-69. At the close of the evidence, Judge Ryan ruled that it was "simple speculation" that Mr. Winston used the 720 number and granted his MJOA. 11/8/22 at 6.

D. 443-454-9090 ("The 443 Number")

Mr. Willis's ex-girlfriend, Elaine Gaye, testified that Mr. Willis's mother died on January 4, 2019. 11/2/22 at 138. The government adduced a life insurance claim form purportedly signed by Rakeem Willis on February 6, 2019, that listed the 443 number as the contact number. *Id.* at 37-43.

E. 240-856-8168 ("The 240 Number")

The parties stipulated: "Rakeem Willis provided the number (240) 856-8168 to a Government official to whom he . . . was under a duty to provide a telephone number. In January 2019 that Government official called Rakeem Willis on the number (240) 856-8168 and spoke to Rakeem Willis over the telephone." 11/7/22 at 93. Ms. Gaye testified that Mr. Willis had called her from the 240 number. 11/2/22 at 101, 134. The government also played a "B.O.P. recorded prison call . . . on January 26th, 2019, from the account of Derrick Phillips to (240) 856-8168." *Id.* The caller said, "I'm sorry to hear about[] your mother, man," and "everybody don't know what it's like to lose a mother." App. 15.⁵

⁵ The government also adduced evidence that the 240 and 443 numbers were connected to each other because each number had, at different times, been activated on an iPhone recovered from Mr. Felder's son Avontae. Avontae's mother testified that she gave his iPhone to a detective in May 2019. 10/27/22 at 35-38. The phone's

VI. The CDR Evidence

The government introduced call detail records (“CDRs”) provided by T-Mobile and Verizon for the five phone numbers. 10/31/22 at 18-21, 59-63. The CDRs listed the calls made and received by each number on the day of the murders, as well as the cell sites (i.e., cell towers) used for each call. 11/3/22 at 37-38. The government compiled the CDRs into a summary exhibit, introduced as Exhibit 572, which showed the calls among the five numbers from 12:00 p.m. on January 26, 2019, to 1:05 a.m. on January 27, 2019. *Id.* at 119-21; App. 20-60. Exhibit 572 showed that the 443 number exchanged calls with the 720 number and Mr. Felder’s number throughout the day. App. 20-60. It also showed calls between the 443 number and Mr. Shuler’s number from 2:20:23 p.m. to 5:13:10 p.m.; calls between the 240 number and Mr. Shuler’s number from 6:23:09 p.m. to 9:55:46 p.m.; no calls between 9:56:20 p.m. and 10:20:29 p.m.; a call from the 443 number to an IHOP in New Carrollton, Maryland, at 11:50:22 p.m.;⁶ an “abnormal completion call” from the 443 number to the 240 number at 12:42:26 a.m.; and two calls between the 443 number and the 720 number just after 1:00 a.m. App. 20-60. Neither the 443 number nor the 240 number called Mr. Shuler’s number after 10:00 p.m. 11/3/22 at 133-34.

activation log indicated that the 240 number was activated on January 20, 2019; the 443 number was activated on February 9, 2019; and another number was activated on March 27, 2019. 10/31/22 at 29-31.

⁶ The government introduced surveillance footage from the IHOP showing a white Infiniti pulling into the parking lot and a Black man picking up a carryout order. 10/31/22 at 64, 69-76. Detective Joshua Branson identified the man as Mr. Willis. 11/2/22 at 177-79. Ms. Gaye testified that Mr. Willis drove a white Infiniti. *Id.* at 133-34. The government presented no evidence linking the white Infiniti to the shooting or the burned Lexus.

VII. The CSLI Evidence

The centerpiece of the government’s case was FBI Agent Billy Shaw’s expert testimony about the CSLI for the 443 number, the 240 number, the 720 number, and Mr. Felder’s number, as depicted in his “report” (introduced as Exhibit 531)—a 28-page slide deck of maps showing the cell towers activated by the phones as they made and received calls on the day of the murders. *See* App. 61-89. The maps showed pie-shaped wedges that, according to Agent Shaw, represented the coverage areas of the activated sectors, and by extension, the locations of the phones at the time of the calls. The government relied on this evidence to argue that Mr. Willis (using the 443 and 240 numbers) met up with the 720 number; traveled to the crime scene just before the murders; and fled north in the direction of the burn site to meet up with Mr. Felder. However, both the adequacy of the expert notice and the admissibility of the expert testimony were hotly disputed pretrial.

A. The Pretrial Litigation

In a pretrial discovery letter dated September 16, 2020, the government stated its intent to call Agent Lynda Thomas of the FBI’s Cellular Analysis Survey Team (“CAST”) as “an expert in the field of cellular phone technology, cellular towers, and the analysis of historical cellular phone records for the purpose of determining the approximate location from which a phone was used at the particular time or range of times.” App. 95. The letter advised that Agent Thomas had “conducted an analysis of the call detail records” and would “interpret the call detail records [s]he analyzed,” *id.*, but it did not say what the expert’s interpretation would be. Instead, the letter incorporated by reference four previously disclosed draft “reports” for the phone

numbers the government sought to attribute to Mr. Willis and his alleged co-conspirators. The maps plotted the locations of the cell towers in the Verizon and T-Mobile networks that the phones used when making and receiving calls on January 26, 2019, and depicted 120-degree wedges (“sector illustrations”) emanating from the activated sectors of the towers. *See* App. 98-184. The reports stated that “a sector illustration shows the general area of coverage as it relates to a specific geographic area and indicates incoming or outgoing call activity.” App. 117, 141, 169.

Each report also contained the following vague description of the expert’s “methodology” and “conclusions”:

2. Methodology

An analysis was performed on the call detail records obtained for the target cell phones. The call detail records documented the network interaction to and from the target cell phones. Additionally, the records documented the cell tower and cell sector (“cell site”) which served the cell phones during this activity. Used in conjunction, the call detail records and a list of cell site locations illustrate an approximate location of the target cell phones when they initiated contact with the network.

2.1 Cell Site Locations

Cell sites in existence during the time of the incident were input into mapping software using latitude/longitude coordinates of the cell sites provided by the services provider(s). The cell sites associated with the target cell phones, were located utilizing the mapping software and the plotted cell site data.

3. Conclusions

A historical cell site analysis was performed on the call detail records for the target cell phone. The methods detailed in Sections 2 and 2.1 were used to produce the attached historical cell site analysis maps.

App. 99, 113, 137, 165. Neither the discovery letter nor the reports explained how the expert used the “cell site locations” to determine the “approximate” locations of the phones; what “mapping software” the expert used to create the maps; and how

the expert or the software determined the “general” coverage areas of the cell sites.

The defense moved in limine to exclude the expert testimony under Superior Court Criminal Rule 16, as well as Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), which this Court adopted in *Motorola Inc. v. Murray*, 147 A.3d 751 (D.C. 2016) (en banc). App. 185. The defense contended that the expert notice was inadequate under Rule 16 because it did not describe the expert’s opinions or their bases and reasons, *id.*, and the reports “merely plot[ted] the cell towers to which certain cell phones connected on a map and show[ed] angle shaped segments purportedly indicating that tower’s coverage area,” App. 186, without providing the “scientific bases, reasoning, or methodology for how Agent Thomas reache[d] these conclusions,” App. 188. Although the CDRs provided by Verizon and T-Mobile identified the cell sites used for each call, they provided no information about the sector’s coverage area or the phone’s location.

Absent more information about the expert’s opinions and methodology, the defense “[p]resum[ed]” that the expert’s opinion about the locations of the cell phones would be based on a methodology known as “granulization theory” that was found unreliable under Rule 702 in *United States v. Evans*, 892 F. Supp. 2d 949, 956 (N.D. Ill. 2012). App. 188-89. The defense explained that an expert using granulization theory will draw “shapes [to] represent the approximate coverage area of a cell tower” based on the “faulty assumption” that “the cell phone will connect to the closest tower nearly one hundred percent of the time.” App. 189. The theory assumes that, if the phone had been physically closer to a tower *other* than the activated tower, it would have connected to that closer tower instead; thus, the

location of the next closest tower places an outer limit on the maximum possible distance between the phone and the activated tower. *Id.* The defense argued that this methodology for determining the coverage area of a cell tower—and the corresponding possible locations of the phone—is unreliable because phones do not always connect to the closest tower. *Id.* Rather, myriad other factors, such as network congestion, tower maintenance, signal strength, terrain, and nearby structures influence a phone’s tower selection. App. 190-91. The defense emphasized that the government had not identified an error rate, CSLI standards or protocols set by a governing scientific body, or peer-reviewed articles to support the reliability of the expert’s opinion and report under Rule 702. App. 189.

In opposing the motion to exclude the expert testimony, the government did not defend the adequacy of its expert notice or otherwise respond to the defense request to exclude the expert testimony under Rule 16. With respect to Rule 702, the government argued that “federal courts have routinely admitted historical cell site data as reliable,” and represented that the expert in this case “did *not* rely on [granulization] theory” and would not “estimate the range of certain cell sites based on one tower’s location relative to other towers.” App. 200-01. However, the government did not identify what methodology, if not granulization theory, its expert used to determine the coverage areas of the cell sites or the locations of the phones.

At the motions hearing, the government stated that its expert would opine on the locations of the phones as is “typically done here in Superior Court, obviously with the sort of pie shaped wedges that show the general area that the phone is in when it makes and receives calls.” 6/17/22 at 11. The prosecutor stated: “[T]here’s

nothing that you're going to see, I think, in this case that is going to be any different from any other cell site presentations other than perhaps more cell sites." *Id.*

Defense counsel pointed out that the judge did not have "enough information" to rule on the motion and requested a "standard Da[u]bert hearing" so that the judge could "actually hear . . . what *this* [CAST] agent is going to say," and also "hear evidence" about the reliability of the methodology and conclusions. *Id.* at 16-17 (emphasis added). The government had not disclosed its expert's methodology for drawing the sector illustrations, and it had not explained why the "angle shapes" depicting "these supposed general [coverage] areas" were "different sizes." *Id.* at 20. Defense counsel expressed concern that the expert would overstate the confidence with which a phone's location could be confined to the pictured wedges, and insist that a phone could not have been closer to a tower other than the one it activated because a phone "typically or almost always" connects to the closest tower. *Id.* at 13. Counsel maintained that there is no "scientific evidence that that is true," and any such testimony would be unreliable and inadmissible under Rule 702. *Id.* at 14.

The government proffered that its expert would testify that a phone "typically" connects to the closest tower, but whether it actually does so "depend[s] on things like total number of calls being made on the network at a time," the presence of "large bodies of water," and "other factors." *Id.* Judge Lee, who had heard CAST agents testify in other cases that sometimes phones "connect to the next closest tower," asked if the government's expert was "prepared to . . . recognize that there are other variables," beyond proximity, that affect which tower a phone connects to, such as "the strength of the tower" and "[h]ow busy the activity is on the tower." *Id.*

at 15. The prosecutor answered: “Yes. I think this is going to look exactly like every cell site expert who has ever testified in the Superior Court and I have yet to see an FBI expert get up there and double down and say no, it must have been the closest tower. It’s *carefully caveated testimony*.” *Id.* at 15 (emphasis added).

Judge Lee ruled that a *Daubert* hearing was unnecessary because he had “already heard” the trial testimony of other CAST agents in other cases, and “other courts” had already found that testimony reliable. *Id.* at 17 (“I could do [a hearing], but I think I’ve already heard it. I think I’ve heard it over and over and over again and I think other courts have done the same.”); *id.* at 19 (“There’s a methodology; a process that they use. The Courts have pretty routinely said [they] are reliable.”). Based on the “general acceptance in court” of “this type of information,” *id.* at 16, Judge Lee admitted the expert testimony, subject only to the “limitation”—similar to this Court’s limitation in “gun cases”⁷—that the opinion “can’t be an absolute” because “rarely in life are there absolutes,” and “the science doesn’t back that up.” *Id.* at 15. Judge Lee explained that, apart from that limitation, any concerns about the reliability of “granulization theory” or the accuracy of the expert’s conclusions were not for the judge to determine under Rule 702, but for the jury to assess based on defense counsel’s cross-examination of the expert. *Id.* at 17, 20, 23.

Argument about the adequacy of the government’s expert notice resurfaced before Judge Ryan, who had replaced Judge Lee in this case, when the government

⁷ *Williams v. United States*, 210 A.3d 734, 743 (D.C. 2019) held that it was error, under Rule 702, to allow a firearms examiner to “provide unqualified opinion testimony that purports to identify a specific bullet as having been fired by a specific gun via toolmark pattern matching.”

moved to exclude the testimony of Mr. Winston’s proffered CSLI expert based on the inadequacy of the defense’s expert notice under Rule 16. App. 212. Counsel for Mr. Winston countered that he should not have to provide details about his expert’s opinions until the government disclosed “what the first guy is going to say.” 7/28/22 at 20.⁸ He reiterated that, although the government expert’s “report” illustrated the “approximate” coverage areas of the cell sectors used by the phones, it did not state “where the expert plans to say the phones were located or with what level of approximation or range.” App. 225. Nor did it describe the “expert’s opinion with respect to whether the phones in this case connected to the nearest cell site towers or not, or how they reached their conclusion.” *Id. See also* 7/28/22 at 17 (arguing that the report “has nothing to do with what the expert is going to come in and say how far, then, the phone is from the point”).

The prosecutor represented that, in his experience, CAST agents do not and cannot offer opinions about a phone’s *distance* from the activated tower, and instead testify only about a phone’s “*general direction*” from the tower:

[T]he expert in my experience and certainly with the FBI and we’re using the FBI here, they never say how far it is from that point. They say it’s in this *general direction*. . . . [I]t’s caveated sort of testimony. They can’t say with any sort of specificity other than it’s in, you know, a *general direction* from . . . the tower, at least with the technology that was used back in 2019.

7/28/22 at 17-18 (emphases added). When Judge Ryan asked whether *this* expert would testify about a phone’s distance from the activated tower, the prosecutor responded: “No, he can’t; he doesn’t know.” *Id.* at 18. The expert might opine that

⁸ Mr. Winston’s expert did not ultimately testify at trial because Judge Ryan granted his MJOA at the end of the government’s case.

the phone was not “halfway across Maryland,” but he would acknowledge that there are numerous “factors that can play into” the distance between the phone and the activated tower, such as “the topography of the land,” that “certain towers could be down at certain points for maintenance,” and the presence of large bodies of water such as a river. *Id.* at 18-19. The prosecutor insisted that CAST agent testimony is “always the same” “caveated testimony.” *Id.*

On July 1, 2022, the government gave notice that Agent Billy Shaw would testify in lieu of Lynda Thomas, and that his final report would be substantially the same as the previously disclosed draft reports. App. 228.

B. Expert Testimony of Billy Shaw

FBI CAST Agent Billy Shaw testified as an expert in the field of historical cellular record analysis. 11/3/22 at 27, 31.⁹ He explained that a cell phone is a radio, and when it places or receives a call, it communicates with the cell tower with the strongest signal. *Id.* at 32. Cell towers are typically divided into three 120-degree sectors, *id.* at 37-38, and each tower has a “unique identifier” or “cell tower ID,” *id.* at 32. Cellular service providers like Verizon and T-Mobile keep lists of “every cell tower in every market” and the “specific latitude and longitude of every tower in the network.” *Id.* at 32, 38. These companies also keep records of all phone calls made on their networks, known as call detail records, or CDRs. *Id.* at 32-33, 37. CDRs list the phone numbers that made and received each call; the day and time of the call; the activated cell tower’s unique identifier; and the activated sector. *Id.* at 37-38.

⁹ Agent Shaw received 248 hours of FBI-led training on CSLI, *id.* at 28, but had no other educational background in science, engineering, or computer science, *id.* at 58.

Agent Shaw testified that, by “put[ting] . . . together” the CDRs for the phone numbers in this case with the latitudes and longitudes for the activated towers, he created a 28-page slide deck of maps, admitted as Exhibit 531, that showed the “approximate area of where [the phones] were located . . . when they placed or received the call.” *Id.* at 38.¹⁰ *See* App. 61-89. The green and red dots on the maps represented towers in the T-Mobile and Verizon networks, respectively, and the red flag represented the murder site. 11/3/22 at 39. The “wedges indicate[d] an approximate area of where the call happened.” *Id.* at 38.

Relying on these slides, the prosecutor elicited Agent Shaw’s opinion about the locations of the phones throughout the day, vis-à-vis each other and the crime scene. *Id.* at 40-56. The prosecutor then used the maps to argue in closing that the 443 and 240 numbers (attributed to Mr. Willis) met up with the 720 number at the Wharf; traveled to the murder site minutes before the shooting; fled north on I-295 (in the direction of the burn site in Capitol Heights, Maryland) and met up with Mr. Felder’s number in Maryland; traveled with the 720 number to the IHOP in New Carrollton, Maryland; and then returned with the 720 number to the Wharf. 11/8/22 at 41-62. In particular, Agent Shaw testified that Slide 13 (2:53 p.m. to 4:08 p.m.) showed the proximity of the 443 and 720 numbers. 11/3/22 at 43. Slide 22 (8:46 p.m. to 9:36 p.m.) and Slide 23 (9:44 p.m. to 9:55 p.m.) were consistent with the 240 number moving towards the crime scene, *id.* at 47-49. Slide 24 was consistent with the 720 number “going up 295 possibly or any road that is traveling in that same

¹⁰ Agent Shaw finalized a report that he had received from another agent. *Id.* at 34.

northeast direction.” *Id.* at 51-52. Slide 25 (10:20 p.m. to 10:57 p.m.) placed the 443 number moving northeast on I-295 and meeting up with Mr. Felder’s number in Maryland, followed by Mr. Felder’s number departing the area. *Id.* at 53-54. Slide 26 (11:27 p.m. to 11:50 p.m.) showed the 443 number connecting to a tower east of FedEx Field, *id.* at 54-55, which the government told the jury was south of the IHOP at 8500 Annapolis Road where Mr. Willis was seen on video, 11/8/22 at 59-60. Slide 27 (12:19 a.m.) showed the 720 number connecting with a tower on Annapolis Road, 11/3/22 at 55, which the government argued showed the 720 number leaving IHOP, 11/8/22 at 62.¹¹ Finally, Slide 28 (1:04 a.m.) showed the 720 and 443 numbers together at the Wharf. 11/3/22 at 56.

On cross-examination, defense counsel sought to undermine the accuracy of Agent Shaw’s maps and inferences about the phones’ locations by establishing that Agent Shaw did not conduct any field studies to assess real-world circumstances, let alone their impact on the activated towers’ actual signal strength and corresponding coverage area. For example, Agent Shaw did not do a drive test to measure how far a tower’s signal extended. *Id.* at 67, 74-75, 87.¹² He did not verify the towers’

¹¹ Despite the government’s argument that the CSLI showed Mr. Willis traveling to the burn site and IHOP, Exhibit 531 did not label either location on the maps. It was thus unclear how close or far the activated towers were from these locations.

¹² *See also id.* at 66 (acknowledging that he could not say exactly “[h]ow far out is the possible cover[age] area for this tower,” “unless [he] performed a drive test and it would actually measure that actual frequency and how far the radio signal propagates”); *id.* at 67 (“[T]here’s no way to tell that unless we do an actual drive test to measure that true coverage area.”); *id.* at 81 (“I would need a drive test to see those actual numbers and provide that actual coverage area of the tower.”).

locations and sectors' orientations. *Id.* at 78-79.¹³ He did not obtain maintenance records from the cell phone companies to see if any towers were not working on January 26, 2019. *Id.* at 85. He did not review the topography of the area or determine if there were buildings tall enough to change the propagation of a tower's signal. *Id.* at 93. Nor did he obtain records of network congestion. *Id.* at 94. Agent Shaw did not rely on, and was not familiar with, any national scientific or forensic standards for CSLI analysis. *Id.* at 60-62.

Despite these concessions, Agent Shaw insisted that field studies were unnecessary because cell phones connect with the closest network tower, and he had used CSLI software designed around this principle to generate his maps. *Id.* at 65-66, 76. Agent Shaw revealed that his methodology was to import the CDRs and a list of network towers into a mapping software called ESPA, which was designed for law enforcement. *Id.* at 66-67, 116. Although he could not say whether ESPA's accuracy had been externally verified, he testified that his report was "peer reviewed by a different software that's FBI proprietary called CASTViz." *Id.* at 116. Agent Shaw rejected the suggestion that the sizes of the depicted coverage areas were arbitrary and did not convey meaningful information about the maximum possible distance between the phone and the activated tower. *Id.* at 65, 67. He explained that the wedge sizes were determined by the program's pre-set "parameters," which he did not alter. *Id.* at 65-66. He testified, "Typically we like to show the approximate coverage area near the next adjacent tower." *Id.* at 66. In other words, "the computer

¹³ Agent Shaw acknowledged that Verizon had previously disclosed errors in its recordkeeping between 2017 and 2021. *Id.* at 63-65.

itself has been set up that it will just set a particular area somewhere between the next tower.” *Id.* Neither the names of the mapping software nor their “parameters” had been provided to the defense during pretrial discovery.

Agent Shaw repeatedly rejected defense counsel’s suggestion (and the prosecutor’s pretrial concession) that multiple factors other than proximity impact which tower a phone connects to, and that a sector’s actual coverage area may have been substantially larger than the wedges reflected. He was adamant that a cell phone always connects with the closest tower unless a “larger structure like a mountain or a valley” (neither of which are present in the District) impedes the signal, *id.* at 92. *See also id.* at 76. He dismissed the possibility that a phone would be located closer to a nonfunctional tower, explaining that a tower could fail only in a “critical situation[]” such as a hurricane or earthquake, *id.* at 83, which did not occur on January 26, 2019. He denied that routine equipment malfunctions occur, noting that companies have a profit motive to ensure seamless service. *Id.* Agent Shaw flatly dismissed the possibility that a tower can “congest . . . so much that the phone company might make any other user connect to a different tower,” *id.* at 95 (“No. That does not happen.”). Finally, when directly asked whether an activated tower’s coverage area could have extended more than one mile, Agent Shaw responded: “[Y]ou’re going to have seamless coverage in the network. So one tower is going to reach to another tower as far as their signal. So if those towers are further than a mile away, to answer your question, yes. If not, they won’t.” *Id.* at 88-89.

VIII. Arrest of Mr. Willis

On June 11, 2019, Prince George’s County police assisted the U.S. Marshals

in executing an arrest warrant for Mr. Willis by pursuing him from Capitol Heights, Maryland, into the District of Columbia, where he was ultimately found under a backyard deck at 4336 D Street, SE. 10/27/22 at 71, 74-77; 11/2/22 at 61-62.

SUMMARY OF THE ARGUMENT

The most important evidence in this exceptionally weak murder case was Agent Shaw's expert testimony and report about the CSLI, which the government argued placed Mr. Willis at the crime scene around the time of the shooting. Not only was that evidence erroneously admitted, in violation of Superior Court Rule of Criminal Procedure 16 and Federal Rule of Evidence 702, but one of the jurors slept during much of Agent Shaw's testimony and numerous other important parts of the trial, leaving the fairness of Mr. Willis's trial in grave doubt.

First, Judge Lee erred in admitting Agent Shaw's expert testimony and report without requiring the government to provide advance written notice of his actual opinions in this case, and the bases and reasons for those opinions, as required by Rule 16, and instead accepting the prosecutor's proffer that the testimony would "look exactly like [that of] every cell site expert who has ever testified in the Superior Court." 6/17/22 at 15. Without knowing what Agent Shaw would say in *this* case about the locations of the phones in relation to the towers they activated, and how and why he reached those conclusions, defense counsel could not adequately prepare for trial, and Judge Lee could not fulfill his gatekeeping role under Rule 702. Indeed, instead of independently assessing whether Agent Shaw's opinions in this case were the product of "reliable principles and methods" that were "reliably applied," *Motorola Inc. v. Murray*, 147 A.3d 751, 757 (D.C. 2016) (en banc), Judge Lee

erroneously assumed that all CSLI experts espouse the same principles and methods, and that those principles and methods are necessarily reliable because “there is a general acceptance in court” of “this type of information.” 6/17/22 at 16. He erroneously concluded that any remaining questions about reliability were for the jury to decide. Because the admission of Agent Shaw’s testimony rested on a series of false assumptions rather than a proper application of Rule 16 and Rule 702, it was an abuse of discretion and requires reversal.

Second, Judge Ryan violated Mr. Willis’s Fifth and Sixth Amendment rights to a fair trial and impartial jury when he refused to replace Juror #2 with an alternate under Superior Court Criminal Rule of Procedure 24(c)(1), notwithstanding the overwhelming evidence that Juror #2 repeatedly slept during the most important parts of the trial, including the cross-examination of Agent Shaw. *See Samad v. United States*, 812 A.2d 226, 230 (D.C. 2002). Instead of evaluating the totality of the evidence, making factual findings, and determining whether there was a “serious risk” that Juror #2 could not or would not pay attention, *Hinton v. United States*, 979 A.2d 663, 680 (D.C. 2009) (en banc), Judge Ryan imposed an unduly stringent standard of certitude and denied the motion to replace the juror with an alternate based on the juror’s cursory denial that he had slept. On this comprehensive record—which included counsels’ frequent and mutually corroborating observations that the juror’s head was hung and his eyes were shut; the judge’s and prosecutor’s similar observations; and the juror’s concession that his eyes were closed during “numerous portions of the trial,” 11/2/22 at 55—substitution was required as a matter of law, and Judge Ryan’s failure to do so requires reversal.

ARGUMENT

I. THE JUDGE REVERSIBLY ERRED IN ADMITTING AGENT SHAW'S EXPERT TESTIMONY WITHOUT REQUIRING COMPLIANCE WITH RULE 16 AND WITHOUT PROPERLY APPLYING RULE 702.

A. RULES GOVERNING EXPERT TESTIMONY

As courts have long recognized, “expert or scientific testimony possesses an aura of special reliability and trustworthiness,” and therefore “must be carefully scrutinized.” *Ibn-Tamas v. United States*, 407 A.2d 626, 632 (D.C. 1979); *see also Daubert*, 509 U.S. at 595 (“Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it.”); *Blackwell v. Wyeth*, 971 A.2d 235, 242 (Md. 2009) (“[L]ay jurors tend to give considerable weight to ‘scientific’ evidence when presented by ‘experts’ with impressive credentials.”). Because expert testimony is “beyond the ken” of the average juror, *Ibn-Tamas*, 407 A.2d at 633, the rules of evidence require trial judges to “ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993). Since expert testimony is also beyond the ken of the average lawyer, the rules of criminal procedure require pretrial disclosure of the details and bases of expert testimony so that the opposing party can be prepared to challenge its admissibility and meet its force at trial. These rules work in tandem to ensure that criminal convictions are not obtained from seemingly powerful expert testimony that has not been adequately vetted for scientific validity and adequately tested by a prepared adversary. Without rigorous enforcement of these rules, “real life tragedies can occur.” *United States v. Machado-Erazo*, 47 F.4th 721, 737 (D.C. Cir. 2018) (Rogers, J., concurring).

Federal Rule of Evidence 702

In 2016, this Court adopted Federal Rule of Evidence 702, replacing the “*Dyas/Frye* test”¹⁴ as the standard for the admission of expert testimony, and explaining that Rule 702’s “expanded focus on whether reliable principles and methods have been reliably applied” would “lead to better decision-making by juries and trial judges alike.” *Motorola*, 147 A.3d at 752, 757. The 2011 version of the rule, which this Court adopted in *Motorola*, sets out four requirements for the admission of expert testimony:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Id. at 756 (quoting Fed. R. Evid 702 (2011)).¹⁵

Unlike the Court’s previous *Frye* test, which asks only whether “the theory or methodology [underlying the testimony] has gained general acceptance in the relevant scientific community,” “the answer [to which] cannot vary from case to case,” *id.* at 753, Rule 702 requires the trial court to exercise a more “robust gatekeeping function,” *id.* at 756, by making its own “preliminary assessment of whether the reasoning or methodology underlying the testimony is *scientifically*

¹⁴ See *Dyas v. United States*, 376 A.2d 827 (D.C. 1977); *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

¹⁵ Rule 702(d) was amended in 2023 to clarify the requirement that “the expert’s opinion reflects a reliable application of the principles and methods to the facts of the case.” Fed. R. Evid. 702(d) (2023).

valid and of whether that reasoning or methodology *properly can be applied to the facts in issue*,” *id.* at 754 (quoting *Daubert*, 509 U.S. at 592-93) (emphases added). A court may not “reflexively admit expert testimony because it has become accustomed to doing so under the *Dyas/Frye* test.” *Id.* at 758.

Rule 702(c) is “concerned with the reliability of the ‘principles and methods’ applied by the expert.” *Id.* at 756-57. Relevant considerations include whether the theory or technique can be tested; whether it has been subjected to peer review and publication; the known or potential error rate; and general acceptance in the relevant scientific community. *Daubert*, 509 U.S. at 593-94. Rule 702(d) “goes further and expressly requires the court to determine whether the expert has reliably applied the principles and methods to the facts of the case.” *Motorola*, 147 A.3d at 757 (internal quotation marks omitted). Under this framework, “[c]onclusions and methodology are not entirely distinct from one another.” *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). Sometimes there “is simply too great an analytical gap between the data and the opinion proffered” to withstand scrutiny. *Id.*

Superior Court Rule of Criminal Procedure 16

Superior Court Rule of Criminal Procedure 16 governs pretrial expert disclosure. At the time of the pretrial litigation in this case, that rule provided in pertinent part:

At the defendant’s request, the government must give to the defendant a written summary of any expert testimony that the government intends to use during its case-in-chief at trial. . . The summary provided under this subsection must *describe the witness’s opinions, the bases and reasons for those opinions*, and the witness’s qualifications.

D.C. Super. Ct. R. Crim. P. 16(a)(1)(G) (2017) (emphasis added).¹⁶ Like its federal counterpart, Rule 16 is “intended to minimize surprise that often results from unexpected expert testimony, reduce the need for continuances, and to provide the opponent with a fair opportunity to test the merit of the expert’s testimony through focused cross-examination.” *Ferguson v. United States*, 866 A.2d 54, 64 (D.C. 2005) (quoting Adv. Comm. Note to 1993 Amend.).¹⁷ Adequate pretrial disclosure is also necessary for a party to assess “whether in fact the witness is an expert within the definition of [Rule 702]” and for the judge to fulfill his gatekeeping role under Rule 702. *Machado-Erazo*, 47 F.4th at 734 (Rogers, J., concurring) (quoting Adv. Comm. Note to 1993 Amend.).¹⁸

This Court has strictly construed Rule 16 to require a specific description of the expert’s opinions; a list of topics does not suffice, even when accompanied by records. In *Ferguson*, for example, a government expert opined at trial that a bullet entered the victim’s body from the back. 866 A.2d at 60. This Court held that the government violated Rule 16 because, although it disclosed the victim’s medical records and proffered that the expert would “testify regarding” the victim’s “gunshot wounds,” “the severity of [his] injuries,” and “the medical care provided to [him]

¹⁶ Rule 16 was amended in 2023 and 2024 to reflect changes to the federal rule.

¹⁷ This Court construes Rule 16 “consistently with the federal rule.” *Waldron v. United States*, 370 A.2d 1372, 1373 (D.C. 1977).

¹⁸ Rule 16 authorizes a range of remedial options for a violation, including exclusion of the testimony. D.C. Super. Ct. R. Crim. P. 16. While a judge’s choice of sanction is reviewed for abuse of discretion, a “party’s compliance with its Rule 16 disclosure requirements is a question of law,” *Murphy-Bey v. United States*, 982 A.2d 682, 688 (D. C. 2009), which this Court reviews de novo, *Ferguson*, 866 A.2d at 59.

following the shooting,” the proffer identified only the “subject areas” of testimony and did not “‘describe [the expert’s] opinions,’ let alone the bases and the reasons for those opinions,’” as Rule 16 requires. *Id.* at 60, 64. The defense was not required to “divine[]” the expert’s opinion from the medical records. *Id.* at 65.¹⁹

This Court has also strictly construed Rule 16 to require a detailed description of “the bases and reasons” for the expert’s opinion. In *Murphy-Bey v. United States*, 982 A.2d 682 (D.C. 2009), this Court upheld the exclusion of a toxicology expert’s testimony because, although the proponent disclosed that the expert would testify “that while under the influence of the illegal drug crack cocaine and coupled with the psychotic schizophrenic drugs, a person would be frantic, nonsensical, agitated, overly hyper and in a state of mania,” *id.* at 687, it did “not provide the *bases and reasons* for those opinions, nor any *details* of them,” *id.* at 689 (emphases added). Similarly, in *Miller v. United States*, 115 A.3d 564 (D.C. 2015), the Court upheld the exclusion of expert testimony under Rule 16 where the pretrial notice stated that the expert “would opine that anal penetration of the type that [the complainant] reported suffering would increase the likelihood of penetration injury symptoms,” but did not include “necessary details about *how likely* penetration injury would be, two years after the trauma, and *why* [the expert] might advance such an opinion.” *Id.* at 567-68. In both cases, the Court held that the proponent’s failure to provide details about the expert’s rationale “hindered the [opponent’s] ability to prepare for trial or

¹⁹ The Court found a second Rule 16 violation because the doctor’s trial testimony differed from what he told defense counsel in a pre-trial interview, and the government’s midtrial “oral conveyance” of his changed views was untimely and “did not comply with the requirement of a written summary.” *Id.* at 64-65.

cross-examin[ation].” *Id.* at 568; *Murphy-Bey*, 982 A.2d at 689.

Relationship Between Disclosure and Gatekeeping Obligations

A judge’s ability to function as a gatekeeper of expert testimony under Rule 702 is contingent on the proponent’s compliance with Rule 16. The D.C. Circuit’s decision in *Machado-Erazo* illustrates how “the government’s failure to disclose promptly its proposed expert’s opinions and the bases for those opinions can hamstring the [trial] court’s effort to separate reliable expert testimony from ‘junk science’” *Machado-Erazo*, 47 F.4th at 734-35 (Rogers, J., concurring).

Prior to trial in that conspiracy and murder case, the government gave notice that FBI CAST Agent Magnuson would testify as “an expert in cellular technology and the analysis of historical cell site records” and provided the defense with his “report—a series of maps with annotations but little explanatory text—which [the government] contended showed the activity of the cell phones used by [appellants] on the day of the murder.” *Id.* at 731 (majority op.). In response to a motion in limine to exclude the testimony under Rule 702, the government proffered that the proposed testimony “would not claim to have determined the exact location of the phone user, but rather the general location where a cell phone would have to be located.” *Id.* At trial, however, Agent Magnuson testified about “a coverage range for the cell towers” and “the proximity between the two phones at the time of the murder,” and opined that the phones were “within a half mile” of a particular tower at the time of the murder. *Id.* at 732 (brackets and quotation marks omitted). None of these opinions had been disclosed pretrial.

The D.C. Circuit held that the trial court erred in admitting Agent Magnuson's testimony "because such testimony was neither disclosed pursuant to Federal Rule of Criminal Procedure 16, nor vetted as required by Federal Rules of Evidence 702 and 403." *Id.* at 731. The expert notice was deficient under Rule 16 because the agent's report merely "show[ed] the location of cell towers and the cell sector for particular calls without explanation," and the government's response to the motion "did little to clarify the scope of Agent Magnuson's testimony." *Id.* at 732. The government did not "describe[] the level of detail on which Magnuson would testify at trial, much less the methodology he used." *Id.* at 736 (Rogers, J., concurring). The government's "disclosure and statements, then, left both the District Court and the parties to presume what the testimony would be," which "in and of itself, show[ed] that the notice was deficient under Rule 16." *Id.* at 732 (majority op).

The government's inadequate disclosure "interfered with the [trial] court's ability to fulfill its gatekeeping role under *Daubert* and [Rule] 702" and to "assess[] with any measure of certainty whether the expert's testimony would be reliable." *Id.* at 736 (Rogers, J., concurring). Lacking specifics about the expert's methodology and ultimate opinions, the judge "attempted to fill this gap by relying on descriptions of cell site methodology in other cases," and he incorrectly "assumed" that Agent Magnuson's testimony would be "the same." *Id.* This "flawed approach," *id.* was wholly insufficient under Rule 702, which requires "an independent evaluation" of the "witness's *actual* methodology and the scope of the opinions the witness would offer at trial." *Id.* at 737. Critically, the judge never assessed how Magnuson derived his half-mile estimate and whether it was reliable. *Id.* at 732 (majority op.); *see also*

id. at 737-38 (Rogers, J., concurring). “By admitting this expert testimony without giving defendants sufficient prior notice and without first finding it to be relevant and reliable under *Daubert*, the [judge] abused [his] discretion.” *Id.* at 732 (majority op).²⁰ As explained below, Judge Lee committed the same errors here.

B. THE JUDGE ERRED IN ADMITTING THE EXPERT TESTIMONY WITHOUT REQUIRING COMPLIANCE WITH RULE 16.

In this case, as in *Machado-Erazo*, the government violated Rule 16 as a matter of law because it never provided a “written summary” of Agent Shaw’s actual “opinions, [and] the bases and reasons for those opinions,” as required by Rule 16. Super. Ct. R. P. 16 (a)(1)(G) (2017). The discovery letter from September 16, 2020 was plainly deficient, as it stated only that the expert had “conducted an analysis of the call detail records” and would “interpret the call detail records he analyzed,” App. 95, without actually describing either the expert’s interpretation of the records or the expert’s methodology for analyzing and interpreting the records. Like in *Ferguson*, the letter specified only the “subject areas” of the expert testimony, and did not ““describe [the expert’s] opinions,’ let alone the ‘bases and the reasons for those opinions,’” as Rule 16 requires. *Ferguson*, 866 A.2d at 64.

Neither the draft CSLI reports nor the final version admitted as Exhibit 531 filled in these gaps. As with the expert notice held insufficient in *Machado-Erazo*, the reports were “a series of maps with annotations but little explanatory text.” 47 F.4th at 731. Although the reports purported to describe the expert’s “methodology”

²⁰ The D.C. Circuit ultimately found the errors harmless in light of the overwhelming evidence of guilt, which included wiretap and co-conspirator testimony linking the appellants to the murder. *Id.* at 733; *see also id.* at 738 (Rogers, J., concurring).

and “conclusions,” App. 99, 113, 137, 165, the content was boilerplate and vague. The description of the so-called “methodology” stated only that an “analysis was performed” using the CDRs, “a list of cell site locations,” and “mapping software” to “illustrate an approximate location of the target cell phones when they initiated contact with the network.” *Id.* The “conclusion” was that these “methods” were “used to produce the attached historical cell site analysis maps.” *Id.* The reports did not state how the pie-shaped “sector illustration[s],” App. 141, were constructed; what software was used; what the expert actually concluded about the locations of the phones; what principles and methods the expert used to reach those conclusions; and with what level of confidence or precision the expert would express those conclusions. The defense “could not have divined” such information from the reports alone. *Ferguson*, 866 A.2d at 65. As this Court has held, an expert notice that “fails to summarize the expert’s expected testimony, [and] fails to describe the expert’s actual opinions . . . cannot be considered an adequate disclosure,” even when accompanied by the data underlying the expert’s opinions. *Miller*, 115 A.3d at 567.

Despite repeated requests for more concrete information about the expert’s opinions and methodology, the government never provided case-specific details in either written or oral form. It stated that its expert “did *not* rely on [granulization] theory,” App. 201, and did not conduct a drive test to measure the towers’ signal strength, 6/17/22 at 14, but it did not disclose what alternative methodology Agent Shaw and his predecessors used to determine the coverage areas depicted by the sector illustrations in Exhibit 531. It did not apprise the defense that the varying sizes of the depicted “coverage areas” were determined by preset “parameters” built into

a software program called ESPA, and reviewed using a program call CASTViz—information about the bases and reasons for Agent Shaw’s opinions that came out for the first time at trial. 11/3/22 at 116. It did not disclose what assumptions are built into these programs, what parameters can be changed by the CAST agent, or why Agent Shaw and his predecessors did or did not make changes. Nor did it disclose Agent Shaw’s opinions about the significance and accuracy of the sector illustrations in Exhibit 531 and the extent to which he would acknowledge that the phones could be farther from the towers than the wedges showed. Rather, in response to defense counsel’s concerns that the expert would overstate the accuracy and precision of the depicted coverage areas, the prosecutor simply referred to the testimony of other CAST agents from other cases, and predicted that the testimony in this case would be “the same.” 6/17/22 at 15.

Judge Lee erred in permitting Agent Shaw to testify at trial without enforcing the requirements of Rule 16 and instead accepting the prosecutor’s description of opinions typically espoused by CAST agents in other cases. Not only did the prosecutor’s “oral conveyance” of other testimony in other cases “not comply with the requirement of a *written* summary of [Agent Shaw’s] testimony,” *Ferguson*, 866 A.2d at 64 (emphasis added), but it provided no details about his opinions and their bases in *this* case, *Miller*, 115 A.2d at 568. Such generic and non-specific disclosure makes it difficult to challenge the opinion’s reliability or to effectively prepare for cross-examination of the expert—the purpose of Rule 16. *Ferguson*, 866 A.2d at 64.

Moreover, the prosecutor’s assumption that CAST agents are fungible and provide identical testimony in every case is false and cannot substitute for proper

expert disclosure under Rule 16. As the case law illustrates, CAST agents have testified differently about what the pie-shaped wedges represent and the maximum distance a phone can be from the tower it activates—the very questions on which defense counsel sought clarification. In *United States v. Jones*, 918 F. Supp. 2d 1 (D.D.C. 2013), for example, the “size of the pie wedge [was] unimportant” because the agent testified it did *not* represent the “coverage area” of the sector and rather showed only the “*direction* of the sector to which the phone connected.” *Id.* at 5 (emphasis added). In other cases, however, CAST agents have testified that the wedges represent the sector’s coverage area, opined on the maximum distance a phone could be from a particular tower, and given differing maximum distances. *See, e.g., State v. Burney*, 298 A.3d 1080, 1086 (N.J. 2023) (opining, based on “rule of thumb,” that a particular tower had a one-mile coverage area, represented by a 120-degree wedge); *Machado-Erazo*, 47 F.4th at 736 (opining phone “had to be within a half mile” of tower); *United States v. Hill*, 818 F.3d 289, 298 (7th Cir. 2016) (opining that Chicago tower’s signal could travel up to five miles). Given this variation in opinions about the meaning and significance of the sector illustrations produced by CAST agents, the government’s oral representation that its expert would testify “like every other cell site expert,” 6/17/22 at 15, did not provide the disclosure required by Rule 16. Instead, it “left both the [judge] and the parties to presume what the testimony would be,” which “in and of itself, shows that the notice was deficient under Rule 16.” *Machado-Erazo*, 47 F.4th at 732.

In this case, that presumption turned out to be false and misleading, and thus “hindered the [defense’s] ability to prepare for trial or cross-examin[ation]” of Agent

Shaw. *Miller*, 115 A.3d at 567-68 (quoting *Murphy-Bey*, 982 A.2d at 689). Based on its understanding of the prior testimony of other CAST agents, for example, the government represented that its expert would not “estimate the range of certain cell sites based on one tower’s location relative to other towers,” App. 201, and would opine only about the phone’s “general direction” in relation to the activated tower, and not its “distance” from the tower, 7/28/22 at 17-18. Agent Shaw testified, however, that the variously sized pie-shaped wedges in his report represented the sizes of the depicted coverage areas, which were determined based on the tower’s distance to the next closest tower, and placed an outer limit on where the phone could have been located when it placed or received the call. *See* 11/3/22 at 65-66, 88-89.

Although Agent Shaw acknowledged that the sector illustrations in his report represented only “approximat[e]” coverage areas, 11/3/22 at 67, because “radio frequencies don’t have hard boundaries,” *id.* at 67-68 (analogizing to a car’s radio reception that fades in and out on a drive), and coverage areas have an “amorphous shape,” *id.* at 91, he insisted that the illustrations accurately reflected the *sizes* of the coverage areas, and that these sizes were determined by preset “parameters” built into the ESPA and CASTViz software that “will just set a particular [coverage] area somewhere between the next tower.” *Id.* at 65-66. When asked if the coverage area “could be miles,” he said it depended on the distance of the nearest tower: “So if those towers are further than a mile away, to answer your question, yes. If not, they won’t.” *Id.* at 88-89. *See also id.* at 75 (“not likely” that particular tower’s coverage area extended to Benning Ridge because there were multiple other towers closer to Benning Ridge). None of these opinions were disclosed in advance of trial.

Similarly, the government proffered that its expert would acknowledge, like “every cell site expert who has ever testified in the Superior Court,” that numerous factors can affect whether a phone connects to the closest tower, such as the “number of calls being made on the network at a time,” “the strength of the tower,” and the presence of “large bodies of water” such as the rivers in the District of Columbia. 6/17/22 at 14-15. *See also* 7/28/22 at 18-19 (prosecutor insisting that CAST agents routinely testify that the “topography of the land” and “towers down . . . for maintenance” are “factors that can play into” tower selection). But Agent Shaw flatly denied that network congestion, tower maintenance, or events short of a hurricane or earthquake would ever result in a phone connecting to a tower other than the one closest to it, 11/3/22 at 83, 95, and he suggested that the only types of topography that could impede a tower’s signal were mountains and valleys, *id.* at 76, 92, neither of which exist in the District. None of these opinions were disclosed pretrial either.

Because the government failed to disclose Agent Shaw’s *actual* opinions and their bases and reasons prior to trial, it violated Rule 16. Judge Lee erred in admitting Agent Shaw’s testimony without requiring compliance with Rule 16 and instead accepting the prosecutor’s misguided and misleading assumption that Agent Shaw’s testimony in this case would “look exactly like [that of] every cell site expert who has ever testified in the Superior Court.” 6/17/22 at 15.

C. THE JUDGE ABUSED HIS DISCRETION IN ADMITTING AGENT SHAW’S EXPERT TESTIMONY UNDER RULE 702.

The government’s deficient expert notice also “interfered with the [judge’s] ability to fulfill [his] gatekeeping role” under Rule 702. *Machado-Erazo*, 47 F.4th at

736 (Rogers, J., concurring). Without pretrial disclosure of Agent Shaw’s actual testimony, Judge Lee could not assess the reliability of that testimony under Rule 702. Instead of enforcing Rule 16 and properly applying Rule 702, Judge Lee admitted Agent Shaw’s testimony based on his erroneous assumptions that all CAST agents use the same methodology; that their methodology must be reliable because their testimony is routinely admitted in court; and that any remaining questions about reliability are for the jury to decide. Because Judge Lee’s ruling lacked a firm factual foundation and rested on erroneous legal premises, it was an abuse of discretion.²¹

First, Judge Lee lacked a firm factual foundation for assessing the reliability of Agent Shaw’s testimony. Because the government never disclosed case-specific details about Agent Shaw’s actual opinions and their bases, Judge Lee could not assess whether those opinions were the product of “reliable principles and methods [that] have been reliably applied,” as required by Rule 702. *Motorola*, 147 A.3d at 757. Rather, as in *Machado-Erazo*, Judge Lee “attempted to fill this gap” in expert disclosure “by relying on descriptions of cell-site methodology in other cases”—a “flawed approach” encouraged by the prosecutor’s repeated invocation of what a prototypical CAST agent would say. 47 F.4th at 736 (Rogers, J., concurring). *See* 6/17/22 at 11-15; 7/28/22 at 17-19. Judge Lee dismissed defense concerns about expert overreach and its request for a *Daubert* hearing because he incorrectly

²¹ A trial court abuses its discretion in admitting expert testimony if it acts “for an improper or legally insufficient reason, if its ruling lacked a firm factual foundation, or if the trial court otherwise failed to exercise its judgment in a rational and informed manner.” *Faltz v. United States*, 318 A.3d 338, 347 (D.C. 2004) (quoting *Hinton*, 979 A.2d at 683-84).

presumed that all CAST agents use the same principles and methods to reach their conclusions, and that all CAST agents give the same testimony in every case. 6/17/22 at 17 (“I could do [a *Daubert* hearing], but I think I’ve already heard it. I think I’ve heard it over and over and over again . . .”); *id.* at 15 (referencing the “multiple times in trial” he had heard FBI agents acknowledge that factors such as signal strength and network congestion impact tower selection); *id.* at 19 (“There’s a methodology; a process that they use. The Courts have pretty routinely said are reliable.”); *see also* 4/7/22 at 19 (stating he had heard CAST agents 12 or 15 times).

That presumption was factually and legally flawed. As discussed above, not all CAST agents espouse the same principles, and the case law demonstrates that different CAST agents have testified differently about what their sector illustrations represent, and the maximum possible distance between a phone and the activated tower. *See supra* p. 34. “If *Daubert* is to have meaning, then [Judge Lee] had to satisfy [him]self that the witness in [*this*] case was an expert on a particular subject based on the witness’s *actual* methodology and the scope of the opinions the witness would offer at trial.” *Machado-Erazo*, 47 F.4th at 737 (Rogers, J., concurring) (first emphasis added). Judge Lee’s ruling, predicated on a series of assumptions rather than a concrete factual understanding of the testimony in *this case*, was an abuse of discretion. *Id.* at 732 (majority op.).

Second, and relatedly, Judge Lee’s ruling rested on a legally erroneous understanding of his gatekeeping role under Rule 702. Although Judge Lee identified Rule 702 as the governing standard, he failed to actually apply it. In part because the government never disclosed Agent Shaw’s actual methodology, Judge

Lee did not consider any factors relevant to its reliability under Rule 702(c), such as whether it had been tested; whether it had been subjected to peer review and publication; or its error rate. *See Daubert*, 509 U.S. at 593-94. Nor did Judge Lee consider whether Agent Shaw had “reliably applied” the methodology to the facts of *this* case, as required by Rule 702(d). Instead, he simply presumed that CAST agent testimony is always admissible because “there is kind of general acceptance in the Superior Court of the testimony.” 4/7/22 at 20; *see also* 6/17/22 at 16 (“I think [a]cross courts . . . *this type of information* is uniformly admitted into evidence and I think that a very powerful indicator of its general acceptance in court.” (emphasis added)). Judge Lee refused to conduct his own reliability inquiry in this case because he was not “prepared to act differently than what the vast vast majority of judges in this jurisdiction and in the federal system have done.” 6/17/22 at 17.

Judge Lee’s abdication of his gatekeeping role was an abuse of discretion. While “general acceptance” is one of many factors a judge may consider in assessing the scientific validity of an expert’s methodology, *Motorola*, 147 A.3d at 754 (citing *Daubert*, 509 U.S. at 594), “*judicial* acceptance is not relevant; what matters is general acceptance in the relevant *expert* (scientific or otherwise) community.” *Hill*, 818 F.3d at 297 (first emphasis added). “Consulting other judges’ analyses may be informative or persuasive, but not dispositive.” *Machado-Erazo*, 47 F.4th at 737 (Rogers, J., concurring). Without knowing what principles and methods Agent Shaw used in this case, and whether and how they differed from those used by CAST agents in other cases, Judge Lee could not assess the persuasiveness, or even the relevance, of admissibility rulings in other cases.

Indeed, Judge Lee did not adopt or even cite any specific findings made by other judges who had conducted *Daubert* hearings and concluded from the evidence that certain principles and methods used by CAST agents are scientifically valid. That CAST agents frequently testify in Superior Court does not mean that their principles and methods have survived repeated scrutiny under Rule 702 as the admissibility of their testimony frequently goes unchallenged, or its reliability is often presumed the way it was in this case. The absence of any opinions by this Court on the admissibility of expert testimony on CSLI reflects the infrequency of Rule 702 challenges in Superior Court.

Finally, even if Agent Shaw's principles and methods had already been vetted by other courts after a proper application of Rule 702(c), Judge Lee was still required by Rule 702(d) to go one step "further" and "determine whether 'the expert has reliably applied the principles and methods *to the facts of the case.*'" *Motorola*, 147 A.3d at 757 (quoting Rule 702(d)) (emphasis added); *see also Kuhmo Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999) (explaining that under Rule 702(d), the "gatekeeping inquiry must be tied to the facts of a particular case" (internal quotation marks omitted)). Judge Lee did not purport to conduct this inquiry. Nor could he do so without knowing Agent Shaw's actual methodology and opinions.

Rather, having concluded that "this type of information" has gained "general acceptance in court," 6/17/22 at 16, Judge Lee erroneously concluded that questions about the reliability of specific CSLI principles and applications of those principles were best tested through cross-examination and answered by the jury: "[Y]ou look at what Rule 702 codifies. . . I haven't heard anything that suggests that cross

examination is not the manner to test for the trier of fact the reliability.” 6/17/22 at 17. He ruled that the reliability of CSLI principles like the “granulization princip[le]” “would just be the subject of debate in front of the trier of fact,” and not grounds for exclusion under Rule 702. *Id.* at 20. Relatedly, in response to defense counsel’s concern about the accuracy of Agent Shaw’s variously sized sector illustrations, Judge Lee declined to assess their threshold reliability and instead treated them as a topic “fair for cross examination”: “It just seems to me to fit right in with what we would use as a tool to test the reliability of the princip[le], but also the reliability of its application to the data. That’s kind of what Da[u]bert suggests.” *Id.* at 22-23.

Daubert, however, makes clear that the *judge* must make “a preliminary assessment” of whether the expert’s methodology is scientifically valid and reliably applied to the facts of the case before the jury can be asked to assess the weight of the expert evidence. 509 U.S. at 592-93. To be sure, “[v]igorous cross examination, presentation of contrary evidence and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Id.* at 596. But these tools of the adversary system do not come into play until the judge has made a threshold determination that the methodology and its application to the facts of the case meet the requirements of “*evidentiary* reliability—that is, trustworthiness.” *Motorola*, 147 A.3d at 754 (quoting *Daubert*, 509 U.S. at 590 n.9). Judge Lee “fell short of [his] gatekeeping role,” *Falz*, 318 A.3d at 348, by admitting Agent Shaw’s expert testimony and report without independently assessing their reliability under Rule 702.

D. THE ERROR REQUIRES REVERSAL.

The erroneous admission of Agent Shaw’s expert testimony requires reversal because the government cannot show that it was “highly probable” that the error did not affect the verdict. *Kotteakos v. United States*, 328 U.S. 750, 765, 776 (1946) (holding that non-constitutional error requires reversal unless the government demonstrates, “with fair assurance, . . . that the judgment was not substantially swayed by the error”); *Wilson-Bey v. United States*, 903 A.2d 818, 844 (D.C. 2006) (en banc) (“To conclude that an error is harmless, we must find it ‘*highly probable* that [the] error did not contribute to the verdict.’”).²² The government cannot meet this burden in light of the “closeness of the case” and the “centrality of the error.” *Andrews v. United States*, 922 A.2d 449, 459 (D.C. 2007); *see also Allen v. United States*, 837 A.2d 917, 921 (D.C. 2003).

The government’s evidence in this triple murder case was exceedingly weak. *See Andrews*, 922 A.2d at 459 (equating “closeness of the case” with the “strength of the government’s case”); *Sims v. United States*, 213 A.3d 1260, 1273 (D.C. 2019) (conclusion that “government’s case was not strong” weighed heavily in favor of reversal). The government opened on the theory that Mr. Willis conspired with Mr. Winston and Mr. Felder to kill Mr. Shuler; that Mr. Willis and Mr. Winston drove a black Lexus to the 1500 block of Fort Davis Place, SE, where they shot and killed Mr. Shuler and the two men with him; and that they then drove to Capitol Heights,

²² Where, as here, multiple trial errors occur, this Court considers whether their “cumulative impact” “may have substantially influenced the jury’s verdict.” *Smith v. United States*, 26 A.3d 248, 264 (D.C. 2011) (cleaned up).

Maryland, where they met up with Mr. Felder and burned the Lexus to cover up the evidence of the murders. 10/25/22 at 21-33. But the government presented no direct or physical evidence tying Mr. Willis (or Mr. Winston or Mr. Felder) to either the shooting or the burned Lexus. Although eyewitnesses testified that they saw two shooters and a dark car, they could not describe the shooters or identify the make and model of the car. The government presented no evidence that the dark car at the murder scene was the black Lexus burned in Capitol Heights, much less that either car was associated with Mr. Willis or either of his alleged co-conspirators. Although police recovered cartridge casings from the murder scene, they did not recover any firearms consistent with those casings, and the government presented no fingerprint or DNA evidence connecting Mr. Willis (or Mr. Winston or Mr. Felder) to any of the physical evidence at the scene. Nor did the government present any motive evidence, or even any motive theory, to explain *why* Mr. Willis or either of his alleged co-conspirators would want to kill Mr. Shuler. Instead, relying almost entirely on the CDRs and associated CSLI for the two phone numbers attributed to Mr. Willis, the government asked the jury to infer Mr. Willis's guilt from his calls with Mr. Shuler and the purported locations of his phones on the day of the murder. *See* 10/25/22 at 25-33 (government's opening statement).

The government's theory of the case was so poorly substantiated that many of the charges were dismissed after the close of the evidence. The trial judge granted Mr. Winston's MJOA on all charges, and the government ultimately dismissed the conspiracy charge against Mr. Willis and all charges against Mr. Felder. 11/8/22 at 6, 19-20; App. 10. The "length of [the jury's] deliberations"—a total of nearly four

days, or almost half as long as the trial itself—reflected “the trier’s belief that the case [was] ‘close.’” *Brooks v. United States*, 367 A.2d 1297, 1310 (D.C. 1976).²³ And the split verdict—convicting Mr. Willis of murder but acquitting him of PFCV and FIP—further “tells us that the jury had difficulty reconciling the evidence with guilt.” *Malloy v. United States*, 186 A.3d 802, 819 (D.C. 2018).

Given the closeness of this case, the “centrality” of the erroneously admitted expert testimony was nothing short of “overwhelming.” *Andrews*, 922 A.2d at 461. Agent Shaw’s expert opinions about the locations of the 443 and 240 numbers on the day of the shooting were critical to the government’s case against Mr. Willis, as evinced by the prosecutor’s “repeated highlighting” of this evidence for the jury “during the course of the trial.” *Id.* at 460. *See id.* at 461 (“[A] prosecutor’s own estimate of his case, and of its reception by the jury at the time, is, if not the only, at least a highly relevant measure now of the likelihood of prejudice.” (quoting *Garris v. United States*, 390 F.2d 862, 866 (D.C. Cir. 1968))); *see also Hill v. United States*, 858 A.2d 435, 448 (D.C. 2004) (holding that erroneous admission of evidence was not harmless where it was “a focal point of the prosecution” that was “presaged in the government’s opening statement” and “showcased in the government’s closing argument”). The prosecutor opened on the CSLI, telling the jury that Agent Shaw “specializes in taking cell site data and applying it to a map to *actually indicate where a device is at any particular moment*,” 10/25/22 at 26 (emphases added);

²³ Trial began on October 25, 2022 and ended on the afternoon of November 8, 2022, at which point the deliberations began. The jury deliberated November 9, 10, and 15 and half a day on November 16.

displaying the CSLI maps that purported to place Mr. Willis at the murder scene, *id.* at 27-29; and previewing Agent Shaw’s testimony that the CSLI showed Mr. Willis “coming closer and closer and closer to the crime scene” and arriving “at the crime scene” minutes before the murder. *Id.* at 27; *see also id.* at 33 (instructing the jury to “[p]ay particular attention” to “the phone numbers in this case”).

During the presentation of evidence, the prosecutor walked Agent Shaw through each slide of his report, elicited his opinions about the phones’ locations throughout the day, and introduced his report into evidence as Exhibit 531. 11/3/23 at 35-36, 40-56. This testimony and report were both “powerful” and “misleading,” *Daubert*, 509 U.S. at 595. Agent Shaw testified with the “aura of special reliability and trustworthiness of an expert,” *Ibn-Tamas*, 407 A.2d at 632, but refused to acknowledge many of the previously agreed-upon factors that affect a phone’s tower selection and decrease the confidence with which one can conclude that the phone was located within the coverage areas depicted on his maps. *See supra* pp. 34-36.

Agent Shaw’s opinions about the CSLI were also front and center in summation. *See Garris*, 390 F.2d at 866 (“[T]he emphasis placed by the prosecutor upon the [challenged evidence] in his summation indicates his high appraisal of [its] importance.”); *Ellis v. United States*, 941 A.2d 1042, 1050 (D.C. 2008) (holding that prosecutor’s focus on erroneously admitted evidence in closing argument “bears heavily on the centrality of the error”). The prosecutor encouraged the jury to review Agent Shaw’s maps, which it argued showed that “Mr. Willis’ device is placing him at the crime scene.” 11/8/22 at 48; *see also id.* at 34 (“[W]hat has been proven to you, is who was using those phone numbers and where they were when they were

making these calls.”); *id* at 35 (“And most of what we’ll talk about comes from Government Exhibit 531, which is the CAST report that Special Agent Shaw talked to you about. . . And you should review those, and look at those calls. . .”). The prosecutor maintained that even if the jury did not “believe that Rakeem Willis was one of the shooters,” it could still convict him of first-degree murder as an aider and abettor because the CSLI showed that he was present at the murder scene and participated in the crimes. 11/8/22 at 67-68. The prosecutor argued that the calls between Mr. Willis and Mr. Shuler, combined with the CSLI evidence showing that Mr. Willis “travel[ed] to the scene where the murder happened in advance of Sean Shuler arriving” and was “present at the scene when Sean Shuler did, in fact, arrive,” 11/8/22 at 68, proved that Mr. Willis “intended for Sean Shuler to die” and “took steps to bring about that murder.” *Id.*; *see also id.* at 67 (arguing that Mr. Willis would be guilty of aiding and abetting the murders if he “plotted with the shooters, lured Sean Shuler to the scene, waited at the scene to make sure Sean Shuler arrived, and drove the two shooters”). The jury’s split verdict convicting Mr. Willis of the murders but acquitting him of the gun offenses indicates that, despite finding the government’s case too weak to prove that Mr. Willis was one of the shooters, it nonetheless found him guilty of aiding and abetting the murders based on the perceived strength of the CSLI, as urged by the prosecutor in summation.

The erroneous admission of Agent Shaw’s expert testimony and report lent an unwarranted aura of scientific credibility to an incredibly weak government case. Under these circumstances, the government cannot show that it is “highly probable” that the error did not affect the verdict. *Wilson-Bey*, 903 A.2d at 844.

II. THE JUDGE REVERSIBLY ERRED IN REFUSING TO REPLACE A JUROR WHO REPEATEDLY SLEPT THROUGHOUT THE TRIAL.

A. FACTUAL BACKGROUND

At the start of trial, Judge Ryan instructed the jury to “give this case its fullest and most serious attention.” 10/25/22 at 20. No sooner had the trial started, however, than Mr. Irving (counsel for Mr. Winston) reported that Juror #2 “appeared to [have been] sleeping” during the court’s preliminary instructions, as well as “parts of the opening[s]” of both the “government and defense.” *Id.* at 43. His “eyes were definitely closed,” and his “eyes and head [remained] down,” even as other jurors were “getting themselves ready” to go on break. *Id.* at 43-44. The juror then “all of a sudden jerked up as if he had been asleep and then noticed things were happening.” *Id.* at 44. At Mr. Irving’s request, *id.*, the judge instructed the jury: “[I]f anybody’s feeling drowsy or anything like that, please just always put your hand up if you do,” *id.* at 103.

The issue of Juror #2’s somnolence resurfaced several days later following Mr. Irving’s cross-examination of the medical examiner. As the prosecutor began redirect, Mr. McEachern (counsel for Mr. Willis) requested a bench conference, explaining that “Juror Two ha[d] been asleep,” and he hoped to “jolt him into being awake” by approaching the bench. 11/2/22 at 28-29; *see also id.* at 29 (“I didn’t want to interrupt [the prosecutor], but once he did it for the third time, I said let me just—I knew this would wake him up.”). Given the persistence of the problem, Mr. McEachern and Mr. Irving asked the judge to replace Juror #2 with an alternate. *Id.* at 30-31. Mr. Irving averred that he had observed Juror #2 sleeping through “major

portions of testimony” “on several occasions” since the first day of trial:

I know we mentioned this when we first started with Number 2 that he was falling asleep through major portions of testimony last week. He was falling asleep. His eyes were closed almost the entire time during some of the direct, through presentation of publishing exhibits. And only if somebody kind of walked by him at times he would wake up and look up but otherwise, his eyes were down and he appeared to be asleep.

Id. at 30. Mr. McEachern emphasized that it was problematic that the juror was asleep at 10:30 a.m., just minutes after the first witness took the stand. *Id.* at 31; *see also id.* (“Almost ten minutes after he gets here, he’s asleep.”). The prosecutor opposed removal and asked the judge to voir dire the juror because some people “may listen carefully with their eyes closed.” *Id.* at 31-32.

The judge acknowledged that he too had “seen the type of behavior which has been described, which is either looking down or eyes closed with head straightforward.” *Id.* at 32. However, he did not “know whether that conclusion that the person is sleeping is accurate or not.” *Id.* In the judge’s view, whether a juror is sleeping is “a very difficult issue to penetrate.” *Id.*; *see also id.* (“[I]t seems so basic, but it’s also a very difficult issue to get to the bottom of.”). The judge recalled “one notable time” when he held a post-trial hearing in another case and “was told adamantly” that the juror was not sleeping. *Id.*

When questioned during voir dire, Juror #2 summarily denied sleeping, without explaining his closed eyes and drooping head:

Judge: [T]here’s been a concern that you might have been falling asleep in the trial so far. Have you been falling asleep in the trial?

Juror: No, sir.

Judge: No?

Juror: No, sir.

Judge: Are you having difficulty staying awake?

Juror: No.

Judge: Have you missed any aspects of the testimony?

Judge: No sir.

Id. at 54.

The juror claimed to have seen every exhibit displayed on the screen:

Irving: Sir, have you been able to see all of the exhibits as they've been displayed?

Juror: Yes, sir.

Irving: Every single one you've had your eyes opened and look[ed] at the exhibits?

Juror: Yes, sir.

Irving: As they've been displayed on the screen?

Juror: Yes, sir.

Irving: There is nothing that's keeping you from paying attention to the screen, as those exhibits have been shown?

Juror: No.

Id. at 54-55.

When pressed by Mr. McEachern, however, Juror #2 conceded that his eyes had been closed during "numerous portions" of the trial:

McEachern: You indicated that you haven't fallen asleep, but it at least appears that your eyes have been closed during numerous portions. Are you still paying attention when your eyes are closed?

Juror: No, sir—yes, sir. I'm not falling asleep.

McEachern: You're what?

Juror: I said I'm paying attention.

McEachern: So, when your eyes are closed, is that just another way in which

you pay attention? Let me ask you this. If we were to say we think your eyes were closed on numerous portions, would you agree with that statement?

Juror: I didn't hear you.

McEachern: I said if we were to say that your eyes appeared to be closed during numerous portions of the trial, would you agree with that statement?

Juror: Yes.

McEachern: And so at those points, to differentiate from when your eyes are closed and your eyes are open, are you able to carry on the same amount of attention when your eyes are closed as when they're open?

Juror: Yes, sir.

McEachern: And you don't think that there's any problem with your hearing anything going on when your eyes are closed?

Juror: No sir.

Id. at 55-56.

Following voir dire, Judge Ryan told counsel that he had personally "seen times when . . . everything is in full floor in the courtroom and [the juror's] head was down and his eyes were shut." *Id.* at 57. But the judge was reluctant to conclude from such behavior that the juror had been sleeping, noting the inherent difficulty of making that factual determination. *Id.*; *see also id.* at 56 ("As I have noted, it's a particularly fraught area for factual development and conclusions to be drawn from those facts."); *id.* at 57 ("This is exactly the issue that's very difficult to tease out when it's arisen before.").

Mr. Irving rejoined that this incident was not an isolated one. Juror #2 had displayed sleep behavior "during many of the crosses" and "many of the directs," to

the point that Mr. Irving had developed an acronym to annotate “Juror 2 asleep.” *Id.* Critically, the juror’s eyes were closed when key exhibits, which required visual attention, were displayed on the screen:

[W]hen everybody else is up and looking at the screen, his eyes stay closed. And [he’s] done that on numerous exhibits. Not just once, not just twice, numerous. Every day he has had instances of that since this trial began.

Id. Mr. Irving maintained that the juror’s claim that his eyes were open for every exhibit was contrary to his own observations of the juror. He reiterated his request to replace Juror #2 with an alternate. *Id.* at 58.

Judge Ryan ruled that he did not have “the evidence” to find the juror unqualified “over [the government’s] objection.” *Id.* Even though the juror “acknowledged to Mr. McEachern that . . . his eyes have been shut numerous times,” *id.*, Judge Ryan said he would not disqualify the juror because the juror had denied sleeping. The judge reiterated his view that it is nearly impossible to know if a juror is sleeping unless the juror admits it: “These are really difficult facts to develop.” *Id.*

The following day, midway through Mr. Irving’s cross-examination of CSLI expert Agent Shaw, Mr. McEachern and Mr. Irving renewed their motion to replace Juror #2 with an alternate. At 11:57 a.m., Mr. McEachern emailed the judge and counsel that Juror #2 “appeared to be asleep.” 11/3/22 at 68. At the bench, Mr. McEachern represented that he had paid attention to Juror #2, and his eyes were closed and his head was “hanging” or “slumped” during much of Agent Shaw’s testimony. *Id.* at 69-70. Mr. McEachern argued that the “reasonable inference” was that the juror was asleep, *id.* at 72-73, or at a minimum, not “paying attention” to the testimony, *id.* at 70; *see also id.* at 72 (“[T]he actions that I described seem to belie

what the juror was saying paying attention with his eyes closed.”). This inattention was prejudicial because the cross-examination of the CSLI expert was an “important part of the case” and “very important” to Mr. Willis. *Id.* at 68; *see also id.* at 70 (“I thought it was at a point in the trial where you most absolutely must be paying attention.”). Mr. Irving stated that he too had at least twice seen the juror with his eyes closed and his head hanging while key portions of the CSLI slide deck were displayed on the screen for the jury. *Id.* at 71. Significantly, Juror #2 did not look up until “*after* that page was gone.” *Id.* (emphasis added). Even the prosecutor, who was “doing a lot of things” and “not just staring at Juror Number 2,” acknowledged “some looking down and eye resting behavior.” *Id.*²⁴

Judge Ryan said he too “looked over and saw the posture that Mr. McEachern describe[d],” but he declined to “comment as to whether the juror [was] sleeping.” *Id.* He explained that unless the government agreed to replace Juror #2, he could do so only if the juror was unqualified. *Id.* at 72. “[B]efore [he] would exercise [his] discretion to disqualify” the juror, he would “take evidence.” *Id.* The judge then denied the motion for the “previously stated reason,” *id.* at 73, and trial resumed.

At the lunch break, Mr. McEachern and Mr. Irving reported that Juror #2 had continued to sleep during the remainder of Mr. Irving’s cross-examination of Agent Shaw. *Id.* at 106-07. Specifically, he was “slumped” with his “head down” for a “duration of minutes.” *Id.* at 107. Mr. McEachern argued that the “reasonable inference” was sleep. *Id.* at 108. The prosecutor acknowledged seeing the juror’s

²⁴ The prosecutor claimed not to have seen the juror slumping, and he took the position that the juror was generally alert. *Id.* at 71.

head “nod and his eyes close,” *id.* at 107, but noted that there was no “dropping of notebooks or anything like that.” *Id.* at 107-08. The judge similarly observed closed eyes and a drooping head but remained reluctant to disqualify the juror:

I was watching him at 12:37 and he had his eyes closed and his head went down a little bit, then it went down a little farther, then it went down a little farther. And I looked back at 12:40 and his eyes were opened and he was paying attention to everything that was going on. But I don’t know.

Id. at 107. Mr. Irving underscored that the juror’s eyes were closed “while things are on the screen and being shown and pointed to.” *Id.* at 109. He remarked, “I don’t know how you can pay attention to something on the screen while your eyes are closed. It can’t be done.” *Id.* The judge, however, was unwilling to draw this conclusion: “Would that the world were so clear.” *Id.*

The next day, following the testimony of the government’s toolmark expert, Mr. McEachern renewed his motion to replace Juror #2. 11/7/22 at 89. He reported that the juror “had his eyes closed and [was] slumped” many “different times” during the one-hour-and-forty-five-minute direct examination of the witness, as well as during “a great portion” of Mr. Irving’s cross-examination. *Id.*; *see also id.* at 91 (describing the juror as being in a “slumped, closed eyes position for the majority” of cross-examination). Mr. McEachern argued that it was a “reasonable inference” that the juror was “no longer functionally paying attention.” *Id.* at 90. Such behavior was especially “concerning” because the change of examiners should have been “one of the natural awakening points.” *Id.* at 91. The judge asked: “Do you want to interview the juror? I mean what do you want me to do?” *Id.* Counsel suggested they proceed with the trial and come back to the issue later. *Id.*

The parties discussed Juror #2 following the closing arguments and jury instructions.²⁵ The prosecutor acknowledged that the juror's eyes were closed "[a]t times," including during the closings, but took the position that the juror was "generally attentive" and that the record was inadequate to disqualify him. 11/8/22 at 133-34, 136. Mr. McEachern, in contrast, estimated that Juror #2's eyes were closed and his head was slumped at least 15 times for a duration of more than 20 seconds each. *Id.* at 134-35. He maintained that the "reasonable inference" from this behavior was that the juror was "not paying attention." *Id.* Invoking Rule 24(c)(1), the judge asked: "Are you asking that I find him unable to perform—because the C1 says I have to either find that he's unable to perform his duties as a juror, [or] that he's disqualified in performing those duties." *Id.* at 135. Defense counsel answered affirmatively: "I think by the number of times that I have brought to the Court's attention, I think that will disqualify him, someone who can actually be eliminated at this point. He doesn't have the requisite knowledge to be competent." *Id.* at 136.

During a second voir dire, the juror again denied sleeping and claimed to have paid attention, but he offered no explanation for his closed eyes or how he had been able to process the visual exhibits without looking at them:

Judge: Juror in Seat 2, I had asked you some questions earlier about whether you had been having difficulties sleeping or paying attention in this case earlier. Do you remember that?

Juror: Yes, sir.

Judge: Have you had any difficulties paying attention or falling asleep in this case?

²⁵ Because Mr. Winston had won his MJOA, Mr. Irving did not participate.

Juror: No, sir.

Judge: No?

Juror: No, sir.

Judge: Do you feel like you've been able to pay attention throughout this time?

Juror: Yes, sir.

Court: On occasion, I think you've closed your eyes here and there, but, at least I noticed it, some times that you had. Were you falling asleep at all?

Juror: No.

Id. at 138-39. Mr. McEachern did not ask questions because he had previously questioned the juror and did not want the juror to “think [he was] beating on him” and hold it against his client. *Id.* at 139. The judge reiterated that “[i]t’s a totally difficult issue to get around every time it’s come up.” *Id.* He then denied the motion on the ground that he “d[id]n’t have a basis for disqualifying [the juror].” *Id.* at 140.

B. THE JUDGE ABUSED HIS DISCRETION IN ALLOWING A JUROR WHO WAS INATTENTIVE DURING CRITICAL PORTIONS OF THE TRIAL TO REMAIN ON THE JURY.

It is well-established that “[p]rolonged juror inattentiveness in a criminal trial . . . jeopardizes the defendant’s Fifth and Sixth Amendment rights to a fair trial before ‘a tribunal both impartial and mentally competent to afford a hearing.’” *Samad*, 812 A.2d at 230 (quoting *Tanner v. United States*, 483 U.S. 107, 126 (1987)). “[A] fair trial presupposes careful attention by the jurors to *all* of the testimony.” *Id.* (quoting *Welch v. United States*, 807 A.2d 596, 604 n.8 (D.C. 2002) (emphasis added)). “If sleep by a juror makes it impossible for that juror to perform his or her duties or would otherwise deny the defendant a fair trial, the sleeping juror should

be removed from the jury.”” *Id.* (quoting *United States v. Freitag*, 230 F.3d 1019, 1023 (7th Cir. 2000)). Indeed, in *Hinton*, 979 A.2d 663, the en banc court identified an empaneled juror who “cannot or will not pay adequate attention” as a paradigmatic example of a juror who is “unable or disqualified to perform juror duties” and may be replaced with an alternate under Rule 24(c)(1).²⁶ *Id.* at 680; see also *Shreeves v. United States*, 395 A.2d 774, 787 (D.C. 1978) (upholding trial court’s replacement of two inattentive jurors with alternates); *United States v. Cohen*, 530 F.2d 43, 48 (5th Cir. 1976) (upholding trial court’s replacement of sleeping juror with alternate pursuant to analogous Fed. R. Crim. P. 24(c)); *United States v. Barrett*, 703 F.2d 1076, 1083 (9th Cir. 1983) (explaining that judge has authority to replace sleeping juror pursuant to Fed. R. Crim. P. 24(c)); *United States v. Bradley*, 173 F.3d 225, 230 (3d Cir. 1999) (holding that sleeping juror was properly dismissed under Fed. R. Crim. P. 24(c) for “inability to serve as a juror”) (emphasis omitted).²⁷

Although the court “has considerable discretion in deciding how to respond” to a report of an inattentive or sleeping juror, if it is “reliably informed, that a juror is asleep during trial, the court has a responsibility to inquire and to take further action if necessary to rectify the situation.” *Samad*, 812 A.2d at 230 (brackets omitted). Specifically, the judge should hold a hearing to “determine whether the

²⁶ Rule 24(c)(1) provides: “The court may impanel up to six alternate jurors to replace any jurors who are unable to perform or who are disqualified from performing their duties.” D.C. Super. Ct. R. Crim. P. 24(c)(1).

²⁷ In construing Rule 24(c), this Court is “guided” by the federal courts’ construction of the “almost verbatim” federal rule. *Hinton*, 979 A.2d at 679.

juror had been asleep and, if so, whether the juror had ‘miss[ed] essential portions of the trial.’” *Golsun v. United States*, 592 A.2d 1054, 1057 (D.C. 1991) (quoting *Barrett*, 703 F.2d at 1083 n.13 (alteration in original)). The judge is “obliged to evaluate the facts and to resolve the matter using sound discretion that [takes] into account the substantial rights of the parties, including the defendant’s constitutional right to a fair and impartial jury.” *Id.* at 1058.²⁸

Here, Judge Ryan abused his discretion in failing to disqualify Juror #2 in the face of an overwhelming record of persistent sleeping and inattention that lasted from the preliminary instructions through closing arguments, and included critical segments such as opening statements, the cross-examination of the government’s CSLI expert, and the defense closing. The evidence of pervasive sleeping that the two defense lawyers marshalled was detailed and substantiated in numerous ways—including by its volume, its repetition, counsel’s interlocking observations, the judge’s own observations that he had seen the juror with closed eyes and a drooping head on multiple occasions (including during the cross-examination of the government’s all-important CSLI expert), *see, e.g.*, 11/2/22 at 32, 58; 11/3/22 at 72,

²⁸ As with all matters committed to discretion, a trial court errs if it declines to exercise that discretion, “preferring instead to adhere to a uniform policy.” *Johnson v. United States*, 398 A.2d 354, 36e (D.C. 1979). The response to indicia of juror inattention must be “based upon and drawn from a firm factual foundation.” *Id.* at 364. “Just as a trial court’s action is an abuse of discretion if no valid reason is given or can be discerned . . . so also it is an abuse if the stated reasons do not rest upon a specific factual predicate.” *Id.* In some instances, “the facts may leave the trial court with but one option it may choose without abusing its discretion, all the others having been ruled out.” *Id.* Additionally, reliance on an erroneous legal standard is an abuse of discretion. *Jones v. United States*, 17 A.3d 628, 631 (D.C. 2011).

and the juror's own admission that his eyes were closed during "numerous portions of the trial," 11/2/22 at 55. According to the undisputed and mutually corroborating observations of both defense counsel, the juror's eyes remained closed during the visual presentation of Agent Shaw's CSLI slide deck and defense counsel's cross-examination of him about that pivotal evidence. The judge was thus faced with the most compelling evidence, admitted to by the juror himself, that Juror #2 missed looking at the most important evidence as it was explained by the expert and challenged by the defense.

Despite this compelling record and the availability of qualified alternates that could have safeguarded Mr. Willis's constitutional rights, Judge Ryan appeared to require a level of certainty that is rarely achievable, and to treat the juror's own self-serving, cursory denials as dispositive. Reversal is required both because Judge Ryan's decision was infected by an erroneous approach to the required fact-finding and application of the legal standard, and because the remarkable record developed admitted of but one answer: substitution of an alternate for the unqualified juror under Rule 24(c)(1).

First, Judge Ryan abdicated his responsibility to evaluate the totality of the evidence, make appropriate findings, and rule accordingly. Instead, he treated as decisive the juror's failure to admit sleeping or not paying attention, notwithstanding the strength of the conflicting evidence. *See, e.g.*, 11/7/22 at 140 (stating that he did not "have a basis for disqualifying [Juror #2]," immediately after juror denied difficulties paying attention and without weighing evidence to the contrary). Judge Ryan repeatedly expressed discomfort with the task at hand and an unwillingness to

make factual findings about the juror's attentiveness. Time and again he lamented that discerning whether a juror is sleeping is "a very difficult issue to get to the bottom of." 11/2/22 at 32; *see also id.* at 56 ("As I have noted, it's a particularly fraught area for factual development and conclusions to be drawn from those facts."); *id.* at 57 ("This is exactly the issue that's very difficult to tease out when it's arisen before."); *id.* at 58 ("These are really difficult facts to develop."); 11/8/22 at 139 ("It's a totally difficult issue to get around, every time it's comes up."). In response to the logical argument that the juror could not pay attention to *visual* evidence with closed eyes, the judge retreated to his position that sleeping juror cases are hard to decipher: "Would that the world were so clear." 11/3/22 at 109.

Instead of evaluating the totality of evidence and making findings, Judge Ryan conducted a second voir dire and uncritically accepted the juror's answers without conducting further analysis or making explicit credibility findings. While it was within the judge's discretion to probe the juror further, the juror's curt denials—which offered no explanation for his apparent slumber—were no substitute for an independent evaluation of the evidence evincing inattention to the most critical portions of the trial. The judge's failure to make factual findings was an abuse of discretion.

Second, Judge Ryan abused his discretion by imposing an unduly stringent standard for replacement that is wholly at odds with safeguarding the constitutional rights at stake. Although he purported to apply Rule 24(c)(1), *see, e.g.*, 11/8/22 at 135, that rule does not require certitude, let alone an admission by the juror that he was sleeping. As *Hinton* explained, a judge may replace a juror with an alternate

where there is “a *serious risk* that the juror’s ability to deliberate fully and fairly will be compromised because the juror . . . *cannot or will not pay adequate attention.*” 979 A.2d at 680 (emphases added). Similarly, in *Abney v. United States*, 273 A.3d 852 (D.C. 2022), where appellant sought to replace a deliberating juror with an alternate on the ground that the juror’s imminent travel plans were coercive and compromised appellant’s right to a unanimous jury verdict, this Court explained that the relevant question was whether “the record reflect[ed] a *substantial risk* of juror coercion.” *Id.* at 859-60 (emphasis added); *see also id.* at 859 (citing *Hinton*, 979 A.2d at 680). Emphasizing that the proper “inquiry focuses on probabilities, not certainties,” this Court held that the trial court erred in not replacing the deliberating juror when the record raised “substantial concerns about the juror’s ability to decide the case free from undue pressure to return a speedy verdict.” *Id.* at 859-60.

A standard of “serious” or “substantial” risk makes sense in this context because certainty that a juror is sleeping is a near-impossible standard to meet, as Judge Ryan himself recognized, *see, e.g.*, 11/2/22 at 32, 56, 57, 58; 11/8/22 at 139. For one thing, a juror may underestimate the extent to which he dozed and missed evidence. In *Dimas-Martinez v. State*, 385 S.W.3d 238 (Ark. 2011), for example, defense counsel expressed concern that a juror had been “sleeping quite a bit,” had to be nudged awake, and would be unable to evaluate the testimony without relying on another juror’s recollection. *Id.* at 243. The judge, who had similarly noticed that the juror “comes and goes,” decided to question the juror, as Judge Ryan did here. *Id.* During voir dire, the juror acknowledged that he “might have been” a “little drowsy” and that another juror had nudged him. *Id.* However, when asked if he had

“picked up everything so far,” the juror answered, “Yes, I have.” *Id.* Likewise, when asked, “You don’t think you’ve missed anything,” the juror responded, “Not really.” *Id.* On that basis, the judge denied the defense motion to replace the juror with an alternate. *Id.* at 244. The appellate court reversed. *Id.* at 245. It explained that the judge “seemingly relied on the juror’s assertion that he did not miss much,” but that logic was flawed because a sleeping juror “has no way of knowing what he may have missed during the presentation of the evidence.” *Id.* The court concluded: “While this is a matter within the sound discretion of the circuit court, under the facts of this case, the circuit court abused that discretion in not removing [the juror].” *Id.*

The same is true here. Despite admitting to having his eyes closed during “numerous portions of the trial,” 11/2/22 at 55, Juror #2 claimed to have seen “[e]very single [exhibit]” displayed on the screen *id.* at 54-55, even though defense counsel observed that the juror’s eyes had been closed during the display of “numerous” visual exhibits throughout the trial, *id.* at 58. Although Juror #2 may have honestly believed that he saw every exhibit displayed on the screen, he “ha[d] no way of knowing what he may have missed” if his eyes were closed during the display of an exhibit. *Dimas-Martinez*, 385 S.W.3d at 245.

Indeed, the lengthy and tedious nature of this particular trial reduced the likelihood that Juror #2 could accurately evaluate the extent to which he had dozed during any of the “numerous portions” of trial when his eyes were closed. The government’s case was composed of largely disparate pieces of circumstantial evidence, elicited out of order through records custodians and experts, and with little explanation of their purported significance until closing argument. Indeed, Judge

Ryan compared watching the government's lengthy surveillance video of a low-trafficked intersection to watching paint dry. *See* 10/25/22 at 139 (“So I think the paint is dry. It was the most extraordinary slow walking that I’ve seen in a long time.”). Under these circumstances, Juror #2 may well have slept through critical testimony and visual exhibits without realizing that he missed something important.

Moreover, jurors have strong incentives to deny or minimize their sleep and inattention. Juror #2 may have been embarrassed about his behavior. He may have worried he would get in trouble with the judge if he admitted that he had not paid attention as instructed. And, he may not have understood that his inattention compromised appellant's constitutional rights, wrongly assuming that the other eleven jurors could just fill him in as necessary.

While a juror's self-report must be assessed with these potential biases in mind, and in light of the observations of others in the courtroom, the judge and counsel are hamstrung in their ability to meaningfully question a juror during a mid-trial voir dire to test the reliability of his representations. The judge must tread carefully so as to not intrude on a juror's deliberative process. *See Commonwealth v. Dancy*, 912 N.E.2d 525, 532 (Mass. App. Ct. 2009). For example, the judge can't quiz a juror to see if he remembers testimony he is believed to have slept through because doing so “would inevitably reveal aspects of the juror's thought processes.” *Id.* Likewise, no competent attorney would cross-examine a juror as though he were a government witness to expose his biases and misstatements. Defense counsel cannot afford to alienate a person who may decide his client's fate. Mr. McEachern took a significant risk in pushing Juror #2 on his flat denials, ultimately extracting a

concession that Juror #2 closed his eyes for “numerous portions of the trial,” 11/2/22 at 55—highly relevant information that the juror did not voluntarily disclose in response to the judge’s more generalized questions. At the same time, Mr. McEachern rightly concluded that he could not risk antagonizing Juror #2 by pressing him further at the second voir dire, 11/8/22 at 139, even though evidence of the juror’s sleep had mounted. These structural constraints on interrogating the attentiveness of a sleeping juror further underscore Judge Ryan’s error in relying on the juror’s cursory denial of inattention.

Finally, had Judge Ryan evaluated the totality of the evidence under the correct standard instead of deferring to the juror’s denials, there was but one conclusion: Juror #2 was unable or unqualified to serve as a juror under Rule 24(c)(1) because there was a serious risk that he had slept through openings, closings, and the presentation of the most critical evidence in the case, in violation of Mr. Willis’s constitutional right to a fair trial and impartial jury. This conclusion was not a close call. The record of Juror #2’s sleep and inattention is unparalleled in the case law. On *six* separate occasions, Mr. Irving and Mr. McEachern raised concerns that Juror #2 had been sleeping and/or inattentive. The judge heard argument on this issue: (1) following opening statements; (2) during the cross-examination of the government’s medical examiner; (3) during the cross-examination of government CSLI expert Agent Shaw; (4) immediately following the cross-examination of Agent Shaw; (5) following the testimony of the government toolmark examiner; and (6) following closing arguments. So prolonged was Juror #2’s apparent slumber that Mr. McEachern twice interrupted witness testimony in

an attempt to “jolt [the juror] into being awake.” 11/2/22 at 28-29. *See also* 11/3/22 at 69 (sending email about sleeping juror).

During each of the resulting colloquies, defense counsel substantiated their concerns with concrete and interlocking observations that supported a reasonable inference that Juror #2 was not paying sufficient attention to the trial to be qualified to judge the case. His eyes were closed, his head was hung, and his body was slumped during the opening statements; the expert testimony of the medical examiner, the CSLI expert, and the toolmark examiner; and the closing arguments. The juror maintained this posture even as the exhibit pages on the screen changed, 11/2/22 at 58; the examining attorney changed, 11/2/22 at 28-29; 11/7/22 at 91; and the jury was dismissed for a break, 10/25/22 at 44. Notably, Juror #2 was the sole juror who did not look at the visual exhibits. 11/2/22 at 57-58. Defense counsel’s observations were corroborated by Judge Ryan, who “saw the posture that [defense counsel] describes,” 11/3/22 at 71; by the prosecutor who saw the juror’s head “nod and his eyes close,” *id.* at 107; and by the juror’s concession that his eyes were closed for “numerous portions” of the trial, 11/2/22 at 55.²⁹

Although Juror #2 denied sleeping, his cursory “no, sir” and “yes, sir” responses were insufficient to rebut the overwhelming evidence of repeated inattention to the most important evidence in the case. Juror #2 provided no

²⁹ This case is a far cry from cases where the record was not fully developed at trial, *see, e.g., Lester v. United States*, 25 A.3d 867, 870 (D.C. 2011); where counsel did not object to the juror’s continued service, *see, e.g., Samad*, 812 A.2d at 231; *Golsun*, 592 A.2d at 1058-59; and where the juror slept at most a few brief minutes during the entire trial, *Welch v. United States*, 807 A.2d 596, 603 (D.C. 2002).

explanation whatsoever for his eye-closing and head-drooping behavior. That this behavior continued after concerns were raised at the first voir dire suggests that he was either unable or unwilling to stay engaged in the trial, and may have been unaware he was sleeping. Juror #2's representation that he could pay full attention with closed eyes also made little sense in the context of *this* trial, where the government's case was built on a series of visual exhibits displayed on the screen and from which the government asked the jury to infer that Mr. Willis was guilty. The exhibits included extended traffic footage, photographs of the scene, call detail records and subscriber information for various phones, a 28-page slide deck of CSLI, and a 41-page summary exhibit of calls among the phone numbers attributed to the alleged co-conspirators and the decedent. Mr. Irving reported that the juror's eyes remained closed as the pages of the exhibits changed on the screen, including during the presentation and cross-examination of the critical CSLI expert testimony on which the government's case rose or fell. *See* 11/3/22 at 71 (explaining that as the CSLI "exhibit was being shown at different [pages]," Juror #2 often would not look up until "after the page was gone."). Finally, Juror #2's blanket denials were suspect because he had a motive to deny or minimize his inattention and because they cannot be reconciled with counsels' and the judge's observations. Under these circumstances, Judge Ryan abused his discretion in allowing Juror #2 to remain on the jury. *See Dimas-Martinez*, 385 S.W.3d at 245.

C. REVERSAL IS REQUIRED.

Reversal is required because the failure to remove Juror #2 violated Mr. Willis's Fifth and Sixth Amendment rights, and the government cannot prove that

that the error was harmless beyond a reasonable doubt. *Chapman v. California*, 386 U.S. 18, 26 (1967). In assessing whether a juror’s inattentiveness “amounted to a deprivation of the fifth amendment due-process or sixth amendment impartial-jury guarantees,” *Barrett*, 703 F.2d at 1083 n.13, such that a new trial is required, courts assess whether the juror “missed large portions of the trial” or “the portions missed were particularly critical.” *Freitag*, 230 F.3d at 1023. *See also Samad*, 812 A.2d at 231 (explaining that where “juror had missed essential portions of the trial,” there is “substantial prejudice to the accused, meaning deprivation of the continued, objective, and disinterested judgment of the juror, thereby foreclosing the accused’s right to a fair trial”). Additionally, in assessing prejudice, courts consider the extent to which “defense counsel objected to the continued presence of [the] juror.” *Id.*³⁰

Here, not only did Juror #2 close his eyes for “numerous portions” of an exhibit-heavy trial, he was patently inattentive during the defense’s efforts to cast doubt on the government’s weak and highly circumstantial case. Opening statements and closing arguments were when defense counsel focused the jury’s attention on

³⁰ Numerous courts have reversed where the judge failed to remove an inattentive juror. *See, e.g., People v. South*, 177 A.D.2d 607, 608 (N.Y. App. Div. 1991) (reversing where defense counsel saw juror sleep during testimony and instructions); *People v. Valerio*, 141 A.D.2d 585, 586 (N.Y. App. Div. 1988) (reversing where trial court noted two jurors “dozing” during instructions); *Spunaugle v. State*, 946 P.2d 246, 252-53 (Okla. Crim. App. 1997) (reversing where defense counsel noted juror sleeping during parts of trial and judge stated that juror “had dozed during parts of the trial” but “paid attention for the most part”); *People v. Evans*, 710 P.2d 1167, 1168 (Colo. Ct. App. 1985) (reversing where juror slept during defense closing argument); *Dimas-Martinez*, 385 S.W.3d at 245 (reversing where juror dozed during witness testimony); *United States v. Groce*, 3 M.J. 369, 370 (C.M.A. 1977) (reversing where juror slept through court’s final instructions).

the speculative nature of the government's theory and the deficiencies in its evidence—i.e., the absence of any eyewitnesses, photographs, videos, ballistics, fingerprints, DNA, or motive linking Mr. Willis to the murders. However, the juror tuned out much of defense counsels' argument—startling awake only after openings had concluded, 10/25/22 at 44, and nodding off at least 15 times, for a duration of 20 seconds or more, during closings, 11/8/22 at 135. Additionally, Juror #2 had his eyes closed during much of Agent Shaw's testimony on both direct and cross-examination about the CSLI evidence depicted in his slide deck. To properly consider the limitations and problems with the CSLI on which the government's case turned, the jurors had to look at the maps in real time and evaluate them in the context of the questions posed by the parties. Juror #2 simply could not do this with closed eyes. The juror's inattention during the most critical portions of the trial deprived Mr. Willis of his Fifth and Sixth Amendment rights to due process and a fair trial by an impartial jury. Accordingly, reversal is required.

CONCLUSION

For the foregoing reasons, Mr. Willis respectfully requests that this Court reverse his convictions.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing brief has been served through the Court's electronic filing system upon Chrisellen Kolb, Esq., Chief, Appellate Division, Office of the United States Attorney on this 2nd day of December, 2024.

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