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STATE OF CONNECTICUT *v.* ELIZARDO MONTANEZ
(AC 40359)

Alvord, Prescott and Beach, Js.

Syllabus

Convicted of the crimes of murder, conspiracy to violate the dependency-producing drug laws, carrying a pistol without a permit and criminal possession of a firearm, the defendant appealed. The defendant, whose probation also was revoked, claimed, inter alia, that the trial court violated his right to due process and a fair trial when it denied his motion for a mistrial after the jury reported that there was a bullet hole in a window in the jury deliberations room that had not been there the day before. Defense counsel claimed that there was no cure for the potential bias that may have developed in the jurors' minds as a result of their discovery of the bullet hole. The trial court instructed the jury as a group that the matter was unrelated to and not part of the evidence in the case, and that it could infer no negative inference against the defendant as it deliberated. The court thereafter denied the defendant's motion for a new trial. On appeal, the defendant claimed that the trial court's response to the jury's report of the bullet hole was insufficient under *State v. Brown* (235 Conn. 502), and that the bullet hole incident had resulted in substantial and irreparable prejudice to his case. The defendant also claimed that the trial court improperly determined that testimony by an FBI agent, W, about drive test survey data, which measures cell phone signals in relation to the location of a crime and plots those signals on a map, was admissible under the test for the admissibility of scientific evidence in *State v. Porter* (241 Conn. 57). *Held:*

1. The defendant could not prevail on his unpreserved claim that the trial court improperly denied his motion for a mistrial, which was based on his assertion that the court abused its discretion by inquiring of the jury as a group as to whether it could follow the court's instruction and remain fair and impartial: that court complied with *Brown's* mandate that it conduct a preliminary inquiry of the jury on the record, as the factual basis on which the court relied was established on the record with both parties' knowledge and participation, the jury experienced the bullet hole incident as a group and, thus, the court properly inquired of the jury as a group, and the defendant presented no authority that the court was required to question the jurors individually, as a court may fulfill its obligation under *Brown* by informing both parties of the allegations, providing them with an adequate opportunity to respond and stating on the record its reasons for conducting a limited proceeding; moreover, the bullet hole incident was not presumptively prejudicial, as it did not pertain directly to the merits of the matter, the court issued a curative instruction to the jury that the bullet hole was unrelated to the case and that the jury may infer no negative inference against the defendant, the court reminded the jury that the deliberation process must continue based only on the evidence that was presented, and the jury sent the court a note after it returned to the deliberations room that indicated that it could continue to deliberate without any prejudice to the defendant.
2. The trial court did not abuse its discretion in concluding that W's testimony about drive test survey data was admissible in evidence under *Porter*: W's methodology was reliable, as he testified that he and other members of the FBI used drive test data on a daily basis to locate fugitives, recover evidence and find victims, he testified that the cell phone handset had never not been where the record said it would be, and the court properly credited his testimony that the cell phone industry routinely relies on drive tests that are conducted in the same manner as W's test to design, maintain and optimize cell phone networks; moreover, W's testimony was relevant and satisfied the fit requirement of *Porter*, as W testified that the technology, towers, sectors and azimuths were the same for the relevant towers from the time the crime occurred through the time when he conducted the drive test, and he testified that he expected the signal strength to be the same during that time period, there was an

unobstructed view of the cell tower in question, day-to-day weather had a negligible impact on cell service and older technology did not undergo a lot of change; furthermore, even if the challenged evidence was admitted improperly, any error was harmless and did not substantially affect the jury's verdict, as it was not vital to the state's case, other unchallenged evidence corroborated W's testimony on material points, the defendant did not challenge historical cell site location evidence and had a full opportunity to cross-examine W, and even without the drive test survey data, the state had a strong case against the defendant.

Argued April 19—officially released October 23, 2018

Procedural History

Substitute information charging the defendant with the crimes of murder, conspiracy to violate the dependency-producing drug laws, carrying a pistol without a permit and criminal possession of a firearm, and information charging the defendant with violation of probation, brought to the Superior Court in the judicial district of Fairfield, where the court, *Pavia, J.*, ordered that the charges of criminal possession of a firearm and violation of probation be tried to the court; thereafter, the charges of murder, conspiracy to violate the dependency-producing drug laws and carrying a pistol without a permit were tried to a jury; subsequently, the court denied the defendant's motions to preclude certain evidence and for a mistrial; thereafter, the charge of violation of probation was tried to the court; verdict of guilty of murder, conspiracy to violate the dependency-producing drug laws and carrying a pistol without a permit; subsequently, the charge of criminal possession of a firearm was tried to the court; thereafter, the court denied the defendant's motion for a new trial; judgment of guilty of murder, conspiracy to violate the dependency-producing drug laws, carrying a pistol without a permit and criminal possession of a firearm, and judgment revoking the defendant's probation, from which the defendant appealed. *Affirmed.*

Erica A. Barber, assigned counsel, for the appellant (defendant).

Ronald G. Weller, senior assistant state's attorney, with whom, on the brief, were *John C. Smriga*, state's attorney, and *Joseph T. Corradino*, senior assistant state's attorney for the appellant (state).

Opinion

ALVORD, J. The defendant, Elizardo Montanez, appeals from the judgment of conviction, rendered following a jury trial, of murder in violation of General Statutes § 53a-54a (a), conspiracy to violate the dependency-producing drug laws in violation of General Statutes §§ 53a-48 and 21a-277 (a), and carrying a pistol without a permit in violation of General Statutes § 29-35 (a), and, following a court trial, of criminal possession of a firearm in violation of General Statutes § 53a-217 (a) (1). The defendant also appeals from the judgment revoking his probation after the trial court found him to be in violation of his probation in violation of General Statutes § 53a-32. On appeal, the defendant claims that (1) he was denied his right to due process and trial by a fair and impartial jury when the court denied his request for a mistrial after a bullet hole was discovered in the jury room during deliberations, and (2) the trial court abused its discretion in concluding that drive test survey data is admissible under the test for admissibility of scientific evidence set forth in *State v. Porter*, 241 Conn. 57, 698 A.2d 739 (1997), cert. denied, 523 U.S. 1058, 118 S. Ct. 1384, 140 L. Ed. 2d 645 (1998). We affirm the judgments of the trial court.

The jury reasonably could have found the following facts. At the defendant's request, Jesus Gonzalez contacted the victim, Ernesto Reyes-Santos, on April 7 or 8, 2014, to ask him to bring heroin from New York to Bridgeport. Gonzalez knew the victim through their heroin sales together. The victim would supply Gonzalez with heroin, and Gonzalez would bring customers to the victim. Gonzalez had also known the defendant for a long time, and the defendant became involved with Gonzalez and the victim's heroin business. The defendant told an acquaintance, Valerie Gomez-Delavega, with whom he socialized daily, that Gonzalez had someone coming from New York with drugs that the defendant needed her to try. He also told her that they were going to rob the person from New York and that they would have to kill him so that no one would retaliate.

On April 9, 2014, Gonzalez agreed to meet the victim in Bridgeport on Davis Avenue, near where Gonzalez lived. Gonzalez drove his white Jeep Cherokee to the meeting spot at about 9 p.m., and the defendant walked from around the corner and got into the Jeep's front passenger seat. The victim arrived and got into the Jeep's backseat, sitting behind the passenger seat. The victim then "had words with the defendant." The defendant wanted to bring the heroin somewhere to have someone try it. The victim refused and exited the Jeep. The defendant also exited the Jeep and shot the victim, who later died of the gunshot wound at a hospital.¹

Gonzalez then drove home and, at 9:24 p.m., called

the defendant, who came to Gonzalez' house. When he arrived, the defendant pointed a gun at Gonzalez and said that if Gonzalez told anyone what happened he would kill him. The defendant also took Gonzalez' cell phone. The day after the victim was shot, the defendant asked Gomez-Delavega whether she had heard about the killing. He told her that they robbed the victim and that he had shot and killed him. The defendant said that he pulled the trigger and shot the victim as the victim reached for the gun, and that the victim fell out of the Jeep.

A couple of days later, the defendant told Gonzalez to get rid of the Jeep and said that he would pay Gonzalez for it. Gonzalez parked it somewhere with the key in it and never saw it again. When Gonzalez asked the defendant why he did it, the defendant responded that "he was mad." Gonzalez told his girlfriend, Latasha Vieira, that the Jeep had been stolen, and Vieira reported it stolen to the police on May 8, 2014. Sometime after that date, the defendant went to the Walmart pharmacy where Vieira worked to find out whether Gonzalez had told her anything, and he asked her to leave with him after work. Vieira said no, and the defendant grabbed her as she walked away. She pushed him back and told him to leave and not come back.

The defendant was arrested on July 14, 2014.² Thereafter, the defendant was tried before a jury and found guilty of murder, conspiracy to commit a violation of the dependency-producing drug laws, and carrying a pistol without a permit.³ The court sentenced the defendant to a total effective term of fifty-two and one-half years of incarceration, followed by seven and one-half years of special parole. This appeal followed. Additional facts will be set forth as necessary.

I

The defendant first claims that he was denied his right to a fair trial by an impartial jury after his motion for a mistrial was denied. Specifically, he claims that jurors, during deliberations, "discovered bullet holes in the jury room" and that "there was no conceivable cure for the potential bias that may have developed in jurors' minds as a result of this interference into the required solemnity of the trial process." The state responds that "the jurors were not in the deliberation room when the hole was created, and . . . there was no evidence that the incident was related to this case. Moreover, the trial court's thorough canvass of the jurors confirmed that they could continue deliberations without any prejudice to the defendant." Accordingly, the state argues that the court acted within its discretion in denying the motion for a mistrial. We agree with the state.

The following additional facts and procedural history are relevant to the defendant's claim. On the afternoon of January 28, 2016, the jury's second day of delibera-

tions, the jury delivered a note to the court requesting to go home for the day. The court agreed to release the jury for the day, and when the jury entered the courtroom, the court released the jury for the evening. At that time, the court asked: "Is there a question?" One of the jurors responded, stating: "There's a bullet hole in our window and the ceiling, and it's really disconcerting, and it wasn't there yesterday." The court responded: "All right. So, the maintenance has been notified. I know that you had asked to see a marshal, and maintenance has been notified. They're going to check it out. I'll give you an update tomorrow when we figure out exactly what it is, okay?" After the jurors were released for the day and exited the courtroom, the court addressed counsel: "Nobody has seen it yet. We'll have maintenance take a look. I'm not saying that it's a bullet hole; I don't know what it is, but let's have somebody look at it and then we'll give them an update. They're obviously concerned about it; they've mentioned it to the marshals; they've mentioned it here. The only question is whether we use a different room, then, for purposes of deliberation. If it's bothering them, I certainly don't want to distract them or—the word disconcerting, you know, you just don't want that. But I think it might make them feel better if we at least tell them what it is, one way or the other; so, we'll address that tomorrow, okay?"

The next morning, defense counsel made an oral motion for a mistrial pursuant to Practice Book § 42-43. He argued, in part: "The Practice Book says that upon motion of a defendant, the judicial authority may declare a mistrial at any time during the trial if there occurs during the trial an error or legal defect in the proceedings, or any conduct inside or outside the courtroom which results in substantial and irreparable prejudice to the defendant's case.

"And it's very concerning that this incident could cause irreparable damage. The jurors have not been interviewed yet, and I don't think we're going to interview them one by one, but there has to be a natural concern here that a young man was on trial for a shooting death is now being—his guilt or innocence is going to be determined by a group of twelve that believed possibly that someone is firing a gun into the jury room."

The state opposed the motion, arguing that there was no connection between the bullet hole incident and the case before the jury. It further contended that any potential prejudice could be avoided by an instruction to the jury that it should not hold the incident against the defendant and should decide the case only on the basis of what it heard in court. In its ruling, the court stated: "I am going to deny the motion as it stands right now. We haven't inquired of the jury. The jurors brought it to our attention, and we addressed it immediately. I'm going to give them an instruction now. I'm going

to inquire in terms of whether they're able to follow that instruction. I think that perhaps based on their response to that, that may warrant further discussion on this motion. But right now, on the four corners of the evidence that we have, the motion is denied. Now, I do want to put some things on the record in terms of how this occurred and the surrounding circumstances. But I think that perhaps first we'll address the jury and then just so that the record's very clear, let's put some things on the record so it's there for any further review, okay?"

After the jury entered the courtroom, the court gave the following instruction: "So, in response to where we ended yesterday, I obviously was concerned with what you had brought to my attention. We brought that to the attention of the police department, both the local and the state police. It is being reviewed and investigated by them right now, which is one of the main reasons that we are not in that courtroom right now. We also obviously don't want that to be a distraction to you at all. It is, as I said, being reviewed, and they will look into that fully, and I appreciate your bringing that to our attention.

"Now, in terms of this case itself, I'm giving you this instruction. The fact that obviously you brought this issue to our attention, and that it is being reviewed and investigated right now, is completely and totally unrelated to the case at hand, all right? There is zero suggestion that it relates to this case, and it is certainly not part of the evidence in this case. So, I am instructing you that you must keep that out of your mind as you're deliberating.

"The defendant is entitled to his presumption of innocence and to the fact that you can impartially look at and review all of the evidence that has been presented in this case. That also means that you may infer no negative inference upon the defendant in any way in relation to this issue.

"The deliberation process must continue based only on the evidence that was presented here in this courtroom while the court was in session. And you must not concern yourself with this issue at all in your deliberations. So, having said that, I'm going to ask all members of the jury to go back and report to me whether or not, and you don't have to do this individually, this can be done as a whole, whether or not you feel that you could follow that instruction; whether you could at this point continue to deliberate on this matter based only on the evidence presented in this courtroom while the court was in session, and not concern yourself in any manner whatsoever with this other issue and not hold it in any way against the defendant, all right? So, I'm going to ask that you all retire and write that in a note to me if you could. Thank you."

After the jury exited, the court inquired of counsel whether there was “[a]nything else that you’d like me to indicate to them” Both counsel responded in the negative, and defense counsel replied: “I think you covered it.” The court followed up with defense counsel, remarking: “I know it’s your motion right now. If there’s a specific inquiry that you think I didn’t make, then obviously you could let me know.” Defense counsel responded: “No, I think what you did is sufficient because the ultimate question at this moment in time is whether they can continue to serve and follow the court’s instructions, and disregard yesterday’s incident. That is the ultimate question. So, I think what you did is sufficient.”

The court then placed the following on the record: “So, one thing I wanted to address was really just the sequence of events that the jury brought to the court’s attention at the end of the day; the fact that they believed that there was in fact a bullet hole through the window; that I asked counsel to remain present so that we could all see it for ourselves. We all did, I think both state’s attorneys, defense, myself, went back into the jury room. We went back into the jury room, and I wanted to make this clear for the record. After the clerk had gone in and taken out all of the exhibits, had taken out the notebooks, and had been able to secure what was a chalkboard in a situation where nobody could view or see the chalkboard. Ultimately, that chalkboard had to be transported down to this jury room, and what the clerks did was, they put large paper that was secured and taped around both sides of the chalkboard, and it was transported in that fashion. I certainly did not see anything, counsel did not see anything, and all of the evidence remains secure and away from anybody’s ability to review it.”

At this point, the jury delivered a note, which the court read aloud and marked as the court’s exhibit seven. The note, signed by the foreperson, stated: “We are fine with continuing our deliberations without any prejudice.” The court then indicated that it would continue making a record of the incident before hearing any further argument from counsel.

The court continued: “So, the marshals were there for the viewing. At that point, we called in the state police, as they do have jurisdiction. As circumstance had it, the Bridgeport police crime scene unit came in to have a warrant signed, and they were able to inquire as to whether there had been any reports of shots fired or any complaints that had occurred last night or in the immediate vicinity to the trial. And they had indicated that they did not, and so the state police took over the investigation and they continued to do that throughout the night. It is my understanding that they are in the courtroom now. I believe the major crime squad is here. They have blocked off the courtroom so that they can

try to secure the evidence and complete the investigation. I know that we have additional presence in the building today in terms of just making sure that security is okay as they continue this investigation. There is an article that apparently just hit the [news]papers relating to this incident.”

The court then discussed with counsel the newspaper articles describing the incident, and the court indicated that the jury would be instructed that it may not review any media reports. The court further noted that the articles had been released after the jurors had reported for the day, and thus, they would not have seen them. After agreeing with the court that the record should reflect that “it would likely be impossible for the jurors to see” a particular article that included the defendant’s name, defense counsel stated: “Other than that, I don’t have anything else that needs to be added. I think the court covered it well, and your review is accurate.” The jury continued its deliberations until it returned with a question regarding proximate cause. The court further instructed the jury regarding proximate cause, and the jury recommenced deliberations. That afternoon, January 29, 2016, the jury returned its verdict.

On February 1, 2016, the defendant filed a motion for a new trial, arguing in part that the court had improperly denied his motion for a mistrial because the bullet hole incident had resulted in “substantial and irreparable prejudice to the defendant’s case.” During oral argument on the motion for a new trial, defense counsel represented that he became aware that the jurors had tried to determine the direction from which the bullet may have been shot and that the jurors had requested a state trooper escort to their cars after returning their verdict. The state responded by repeating that the jury was not in the room when the bullet was fired, and that the jury “satisfying an itch of curiosity” in looking at the building could not “fairly be said to have affected the determination on the verdict in this case.”

The court addressed defense counsel’s argument by remarking that no one knew when the “small hole” discovered by the jurors⁴ was made, but that “there was no suggestion” that it was made while the court was in session or while the jurors were there. The court further stated that once it was brought to the court’s attention, the jurors were released for the day and that they returned to deliberations the next day in a different room. The court had inquired of the jury and instructed it that “the hole, whatever it turned out to be, had no bearing upon this case or upon the defendant, [and] that they cannot consider it for purposes of their deliberations.” The court stated that it had asked the jury to “go back and, in fact, deliberate, so to speak, as to whether they could continue to deliberate without any prejudice to the defendant and with incorporating the court’s instructions that that bullet hole had—if, in fact,

it is a bullet hole—but that hole that was found had nothing to do with this case or with the defendant or with anybody associated with the defendant.”

The court continued: “The jurors did come out and provided a note to the court in which they not only indicated that, yes, they could continue to deliberate, but, just to make it clear that they fully understood the instructions, said that they could continue—that they understood the court’s instructions and could continue to deliberate. And they used . . . the word, to my memory right now, without any prejudice to the defendant. So, you know, that—that certainly, one, shows that—that they could follow the court’s instructions and, two, that they understood that it could not have any bearing against the defendant in terms of their deliberations.

“I will also indicate that the jurors had deliberated for a period of time. So, it’s not as if they just came in and they were only deliberating for forty-five minutes. They, in fact, had asked for some playback, they received that playback both the day before and on the day in question. So, there was more to their deliberations than just that one moment in time certainly. That, additionally, with regard to whether or not the jurors had—had gone out to see the—the window from the outside of the courthouse, I agree with the state that there’s no suggestion that—that there’s any misconduct involved. They certainly didn’t go and do any investigation with regard to an issue that they needed to deliberate on. I’m going to say this because I’m not sure that it—that this is clear for the record, that where the jurors park in Bridgeport requires them to walk outside by the area where you would see the window that is in question here. So, again, I don’t think that there’s anything on the record to suggest that the jurors said, let’s go meet and look at the window, but that the record would be that they, in fact, need to walk by it in order to get to their cars. So, whether or not they were looking at the window in conjunction with walking to their car, you know, I—I can’t speak to that. But I just want it clear for the record that that’s the way that they would need to go.

“And in terms of requesting the escort to their cars, I think we all know, from having done cases and certainly on some of the more serious cases, that after the verdicts are rendered, sometimes the juries do not appreciate having to walk on their own outside where there is some attention, both by way of media or family. And so that request was—was certainly agreed to and accommodated. But again, in no way was there ever a suggestion by any party or any side that there was any misconduct or any concern that related to that specific bullet hole if, in fact, it is a bullet hole. So, with that factual understanding on the record for any appellate purposes, I am denying the motion for a new trial.” The state also placed on the record that the layout of the

courthouse required the jurors to use the public entrances and corridors, a fact with which the court agreed.

We begin with our standard of review. “In our review of the denial of a motion for mistrial, we have recognized the broad discretion that is vested in the trial court to decide whether an occurrence at trial has so prejudiced a party that he or she can no longer receive a fair trial. The decision of the trial court is therefore reversible on appeal only if there has been an abuse of discretion.” (Internal quotation marks omitted.) *State v. Berrios*, 320 Conn. 265, 274, 129 A.3d 696 (2016).

“[J]ury impartiality is a core requirement of the right to trial by jury guaranteed by the constitution of Connecticut, article first, § 8, and by the sixth amendment to the United States constitution. . . . In essence, the right to jury trial guarantees to the criminally accused a fair trial by a panel of impartial, indifferent jurors. . . . The modern jury is regarded as an institution in our justice system that determines the case solely on the basis of the evidence and arguments given [it] in the adversary arena after proper instructions on the law by the court. . . . The United States Supreme Court has noted, however, that the [c]onstitution does not require a new trial every time a juror has been placed in a potentially compromising situation . . . [because] it is virtually impossible to shield jurors from every contact or influence that might theoretically affect their vote. . . . Were that the rule, few trials would be constitutionally acceptable. . . . We have recognized, moreover, that [t]he trial court, which has a first-hand impression of [the] jury, is generally in the best position to evaluate the critical question of whether the juror’s or jurors’ exposure to improper matter has prejudiced a defendant.” (Internal quotation marks omitted.) *State v. Ciullo*, 140 Conn. App. 393, 417–18, 59 A.3d 293 (2013), *aff’d*, 314 Conn. 28, 100 A.3d 779 (2014).

Appellate review of a trial court’s preliminary inquiry into claims of jury misconduct or bias is governed by *State v. Brown*, 235 Conn. 502, 668 A.2d 1288 (1995). In *Brown*, our Supreme Court invoked its supervisory authority over the administration of justice to hold that “a trial court must conduct a preliminary inquiry, on the record, whenever it is presented with any allegations of jury misconduct in a criminal case, regardless of whether an inquiry is requested by counsel.” (Internal quotation marks omitted.) *State v. Anderson*, 255 Conn. 425, 436, 773 A.2d 287 (2001). “The form and scope of such inquiry is left to the discretion of the trial court based on a consideration of multiple factors, including: (1) the private interest of the defendant; (2) a risk and value assessment of additional procedural safeguards; and (3) the government’s interest. . . . In outlining these factors, we also [have] acknowledged, however, that [i]n the proper circumstances, the trial court may

discharge its obligation simply by notifying the defendant and the state of the allegations, providing them with an adequate opportunity to respond and stating on the record its reasons for the limited form and scope of the proceedings held. . . . Accordingly, [a]ny assessment of the form and scope of the inquiry that a trial court must undertake when it is presented with allegations of jur[or] [bias or] misconduct will necessarily be fact specific.” (Citation omitted; internal quotation marks omitted.) *State v. James H.*, 150 Conn. App. 847, 853, 95 A.3d 524, cert. denied, 314 Conn. 913, 100 A.3d 404 (2014). “Our role as an appellate court is limited . . . to a consideration of whether the trial court’s review of alleged jury misconduct can fairly be characterized as an abuse of its discretion.” (Internal quotation marks omitted.) *State v. Anderson*, supra, 436.

Our Supreme Court subsequently considered whether the preliminary inquiry required in *Brown* was sufficient in cases involving allegations of racial bias on the part of a juror. *State v. Santiago*, 245 Conn. 301, 340, 715 A.2d 1 (1998). Exercising its supervisory authority, the court concluded that *Brown* “[did] not go far enough” and held that “[s]uch inquiry should include, at a minimum, an extensive inquiry of the person reporting the conduct, to include the context of the remarks, an interview with any persons likely to have been a witness to the alleged conduct, and the juror alleged to have made the remarks.” *Id.*

Our Supreme Court declined to so exercise its supervisory authority in *State v. Dixon*, 318 Conn. 495, 509, 122 A.3d 542 (2015), to require a specific scope of questioning in situations involving concerns about juror bias due to fear. In *Dixon*, the jury delivered a note to the court, stating: “One of the court attendees approached/spoke to one of the jur[ors] at a public place yesterday, 5/17 late night. The one jur[or] told that individual . . . the jury cannot speak to anyone. Is this an issue? *We have safety concerns.*” (Internal quotation marks omitted.) *Id.*, 502. With respect to the contact with the attendee, the court held an in camera hearing, first questioning under oath the jury’s foreperson, then the author of the note, and then each of the remaining jurors. *Id.*, 503–504. The court inquired, inter alia, whether the contact influenced each juror’s vote in the verdict. *Id.*, 508. The court also inquired of the foreperson and the juror who authored the note about safety concerns raised by the jurors. “Both seemed to indicate that, although the jurors had raised questions about the safety issues involved in serving on a jury in a murder trial, none raised any specific concerns about this case in particular.” *Id.* Our Supreme Court concluded that the trial court did not abuse its discretion in the manner in which it conducted a hearing to address the note, and further reasoned that “[a]llegations of fear do not give rise to the same concerns about prejudice as those raised by allegations of racial bias and, there-

fore, an inquiry pursuant to *State v. Brown*, supra, 235 Conn. 526, is sufficient.” *State v. Dixon*, supra, 509.⁵

In support of the defendant’s claim on appeal that his right to a fair trial by an impartial jury was violated when the trial court denied his motion for a mistrial, the defendant in the present case argues that a *Brown* inquiry is not sufficient in the present case. Specifically, he argues that “an external interference of the scope presented here—a real, ascertainable threat to the safety of the jury during its deliberations, as opposed to more innocuous disruptions . . . requires a concrete, thorough procedure to ferret out bias to the defendant.” Alternatively, he argues that the trial court’s response was not sufficient to satisfy *Brown*. The state asserts that these arguments are unpreserved and unreviewable. The defendant maintains that his arguments are preserved, but seeks review under *State v. Golding*, 213 Conn. 233, 239–40, 567 A.2d 823 (1989), as modified by *In re Yasiel R.*, 317 Conn. 773, 781, 120 A.3d 1188 (2015), in the event that this court determines otherwise.⁶

We conclude that the arguments raised by the defendant in this appeal were not asserted before the trial court, which had expressly asked defense counsel whether there was any inquiry it did not make, and therefore, such arguments are unpreserved. “Arguments asserted in support of a claim for the first time on appeal are not preserved.” *Bharrat v. Commissioner of Correction*, 167 Conn. App. 158, 181, 143 A.3d 1106, cert. denied, 323 Conn. 924, 149 A.3d 982 (2016). The defendant’s claim, however, is reviewable pursuant to *Golding* because the record is adequate for our review and the claim is of constitutional magnitude. See *State v. Biggs*, 176 Conn. App. 687, 706, 171 A.3d 457, cert. denied, 327 Conn. 975, 174 A.3d 193 (2017). The defendant’s claim fails on the merits because we hold, as further discussed, that there is no violation of constitutional law.

We first conclude, pursuant to *Dixon*, that *Brown* provides the proper framework for analyzing the defendant’s claim. The defendant, in an effort to demonstrate that the precautions taken in the present case were “wanting,” directs this court’s attention to cases in which the trial court questioned jurors individually in response to some allegation of juror misconduct or outside influence. See *State v. Berrios*, supra, 320 Conn. 269–71, 298–99 (after defendant’s mother approached juror outside courthouse to tell him that police officer who testified was lying, court conducted individual voir dire of jurors before determining that jury remained fair and unbiased); *State v. Anderson*, supra, 255 Conn. 437–38 (after juror made statements, inter alia, that he “knew the defendant from the street” and that he was “not a nice guy,” court conducted interviews with each juror to determine whether they could remain impartial); *State v. Santiago*, supra, 245 Conn. 339 (hearing

inquiring into alleged racial bias would permit court to observe juror's demeanor under cross-examination and to evaluate his answers in light of particular circumstances of case).

In the present case, as the state emphasizes, the bullet hole incident was experienced by the jury as a group, and, thus, the trial court did not abuse its discretion in inquiring of the jury as a group whether it could follow the court's instruction and remain fair and impartial. As our Supreme Court has noted, "[a]ny assessment of the form and scope of the inquiry that a trial court must undertake when it is presented with allegations of jur[or] [bias or] misconduct will necessarily be fact specific." (Internal quotation marks omitted.) *State v. West*, 274 Conn. 605, 648, 877 A.2d 787, cert. denied, 546 U.S. 1049, 126 S. Ct. 775, 163 L. Ed. 2d 601 (2005). Moreover, the defendant presents this court with no authority suggesting that a trial court is required to question jurors individually. To the contrary, *Brown* makes clear that in some instances, the trial court may fulfill its obligation by informing both parties of the allegations, providing them with an adequate opportunity to respond, and stating on the record its reasons for conducting a limited proceeding. *State v. Brown*, supra, 235 Conn. 529.

The defendant argues that the bullet hole incident in the present case should be presumed prejudicial.⁷ "Under *Remmer* [v. *United States*, 347 U.S. 227, 74 S. Ct. 450, 98 L. Ed. 654 (1954)], prejudice is not presumed unless the court is implicated in the alleged conduct, or there was an external interference with the jury's deliberative process via private communication, contact, or tampering with jurors that relates directly to the matter being tried." *State v. Biggs*, supra, 176 Conn. App. 710; see also *State v. Berrios*, supra, 320 Conn. 292 (concluding that "the *Remmer* presumption is still good law with respect to external interference with the jury's deliberative process via private communication, contact, or tampering with jurors that relates directly to the matter being tried" [footnote omitted]). "[T]he improper contact must pertain directly to the merits of the matter, rather than merely relate to the trial more topically." *State v. Berrios*, supra, 292 n.25. In the present case, the bullet hole incident in the jury room was determined by the court to be "completely and totally unrelated to the case at hand," and the jury was instructed further that "[t]here is zero suggestion that it relates to this case" Accordingly, we conclude that the external interference did not pertain directly to the merits of the matter and was not presumptively prejudicial.

The defendant argues that three circumstances contributed to prejudice in the present case: "(1) an initial threat in the form of gun violence; (2) a substantive correlation between the shooting and the alleged threat-

ening involvement of the defendant; and (3) provable fear after trial.” Specifically, he argues that “[t]he state’s case-in-chief involved allegations of the defendant’s purported efforts to silence witnesses and obstruct the police investigation.” Those efforts included threatening Gonzalez at gunpoint. As we noted previously, however, the court issued a curative instruction to the jury that the bullet hole was unrelated to the case and that “you may infer no negative inference upon the defendant in any way in relation to this issue.”⁸ It further reminded the jury that “[t]he deliberation process must continue based only on the evidence that was presented here in this courtroom while the court was in session.” After receiving the curative instruction, the jury indicated that it could continue to deliberate without any prejudice to the defendant. It is well established that “[i]n the absence of an indication to the contrary, the jury is presumed to have followed [the trial court’s] curative instructions.” (Internal quotation marks omitted.) *State v. Necaize*, 97 Conn. App. 214, 225, 904 A.2d 245, cert. denied, 280 Conn. 942, 912 A.2d 478 (2006).

The defendant also points to the fact that jurors requested a police escort to their cars after returning their verdict. The trial court addressed this claim by noting that it is not uncommon for jurors in cases involving serious charges to feel uncomfortable leaving the courthouse, walking by media and family, after returning their verdict. We reiterate that “[t]he trial court, which has a first-hand impression of [the] jury, is generally in the best position to evaluate the critical question of whether the juror’s or jurors’ exposure to improper matter has prejudiced a defendant.” (Internal quotation marks omitted.) *State v. Ciullo*, supra, 140 Conn. App. 418. Accordingly, we decline to disturb the trial court’s assessment.

We conclude that the initial inquiry in the present case complies with *Brown*’s mandate that the court conduct “a preliminary inquiry, on the record” *State v. Brown*, supra, 235 Conn. 526. We note that the factual basis on which the court relied was established on the record, with both parties’ knowledge and participation. See *State v. Stuart*, 113 Conn. App. 541, 555, 967 A.2d 532 (concluding that court did not abuse its discretion in concluding that no further inquiry was required beyond “limited inquiry” to the jury and curative instruction, where “on the record, the court immediately informed counsel of the submission to the jury of the exhibits at issue, [which had been marked as an exhibit for identification only] and extended the opportunity to comment”), cert. denied, 293 Conn. 922, 980 A.2d 914 (2009); cf. *State v. Kamel*, 115 Conn. App. 338, 348, 972 A.2d 780 (2009) (“court’s ex parte interactions with the jurors and its unilateral determination that they did not consider the brass knuckles [which had been marked for identification only] during their deliberations further failed to fulfill the requirements

of *Brown* because any preliminary inquiry must be conducted on the record”).

Moreover, the court noted, just before issuing its inquiry to the jury, that “perhaps based on their response” to the court’s question, it “may warrant further discussion on this motion.” The inquiry itself addressed the central issue, whether the jury believed that it could follow the court’s instruction and continue to deliberate based only on the evidence presented in the courtroom, and not concern itself in any manner with the bullet hole and not hold it against the defendant. After issuing the question, the court again sought counsel’s input, specifically requesting that defense counsel let the court know if he thought there was any inquiry it did not make. Defense counsel responded: “No, I think what you did is sufficient because the ultimate question at this moment in time is whether they can continue to serve and follow the court’s instructions, and disregard yesterday’s incident. That is the ultimate question. So, I think what you did is sufficient.”

The jury responded to the court’s question that it was “fine with continuing our deliberations without any prejudice.” In light of the court’s curative instruction, the jury’s assurance that it could deliberate without prejudice to the defendant, the input the court sought from counsel, and the defendant’s failure to request any further inquiry, the court did not abuse its discretion in conducting its inquiry. See *State v. Necaize*, supra, 97 Conn. App. 225 (noting that defendant did not request further inquiry in concluding that “this case is one of those in which the failure to hold an evidentiary hearing does not violate the defendant’s constitutional rights”); *State v. Bangulescu*, 80 Conn. App. 26, 51, 832 A.2d 1187 (noting defendant’s failure to seek any additional questioning or investigation by court despite opportunities to do so in concluding that court did not abuse its discretion in conducting cursory inquiry), cert. denied, 267 Conn. 907, 840 A.2d 1171 (2003). Moreover, after the jury answered the court’s question and the court placed additional facts on the record, defense counsel responded to the court: “I think the court covered it well, and your review is accurate.”

As stated previously, “[o]ur Supreme Court has recognized that [t]he trial court, which has a first-hand impression of [the] jury, is generally in the best position to evaluate the critical question of whether the juror’s or jurors’ exposure to improper matter has prejudiced a defendant.” (Internal quotation marks omitted.) *State v. Ciullo*, supra, 140 Conn. App. 419. We conclude that the court did not abuse its discretion in denying the defendant’s motion for a mistrial.

II

The defendant’s second claim on appeal is that the

trial court abused its discretion in concluding that drive test survey data was admissible because it was reliable and relevant under *State v. Porter*, supra, 241 Conn. 57. We conclude that the trial court did not abuse its discretion.

The following additional facts and procedural history are relevant to the defendant's claim. On January 18, 2016, the state disclosed that it intended to proffer the expert testimony of Special Agent James J. Wines of the New Haven bureau of the Federal Bureau of Investigation (FBI) regarding cell site location information and drive test survey data. The next day, the defendant filed a motion to preclude Wines' testimony and a request for a *Porter* hearing as to Wines' testimony regarding the drive test survey data, arguing that such testimony was neither generally accepted nor relevant to the case. Specifically, the defendant argued that the drive test was not conducted until December, 2015, approximately twenty months following the shooting in April, 2014.

The court held a hearing outside of the presence of the jury on January 25, 2016. Defense counsel represented at the outset that the defendant was not challenging the use of cell site technology evidence. Rather, the motion solely challenged the drive test survey data. The court granted the defendant's request for a *Porter* hearing, and the state proffered Wines' testimony. Wines, a member of the FBI's cellular analysis survey team (CAST), explained the drive test he conducted. After placing a scanner in his car, Wines conducted the test by driving around the Black Rock area where the crime occurred and surrounding areas while the tool is "scanning the environment and taking measurements of all of the signals from the different cell phone towers that it sees as it's driving around." The measurements were then "plotted using a mapping software program to give the actual coverage area of a particular tower."⁹ Wines testified that he believed a drive test would produce "an accurate representation of the coverage area of the particular sectors" in which he was interested because "the towers, the sectors, the orientation technology and the azimuths of the particular towers . . . had not changed from April of 2014 until December of 2015." Using one Sprint tower as an example, he testified that "the tower itself was the same, the sectors were the same, and the azimuths were the same, and the technology was the same. So, based upon that and based upon my training and experience, I would expect that the . . . radio frequency [RF] footprint of that particular tower or that particular sector would be the same in December of 2015 as it was in April of 2014."¹⁰

For purposes of the hearing only, the state marked an exhibit containing seven slides that Wines prepared depicting the drive test survey data. The slides illustrated the dominant and possible coverage areas for

one Sprint cell sector, one AT&T cell sector, and one T-Mobile cell sector. The first slide showed the dominant and possible coverage area of Sprint tower 533, sector 3, azimuth 205. Wines testified that a handset making a call registering on that sector likely would be in the dominant coverage area, which has the “strongest clearest signal” Within the possible coverage area, Wines stated that “there are other towers and sectors which would have dominant coverage,” which creates “an overlap area.”

Wines testified that the cell phone industry routinely relies on drive test analysis, conducted in the same manner that he conducted his drive test, to “design, maintain and optimize their network so that they can provide the best coverage to their customers.” He stated that drive test analysis was not developed solely for purposes of litigation but rather for carriers to optimize and maintain their cell networks. He testified: “[T]he cell phone industry is a multibillion-dollar industry, and there’s a lot of competition between carriers. So, for example, if I had a Sprint phone and I kept dropping calls when I moved from one area to another, I would likely port my number over to another carrier, say, Verizon or T-Mobile, with the expectation I would get better cell phone coverage. So, the carriers don’t want to lose customers. They don’t want to lose their revenue stream, so they spend a considerable amount of time, effort, and resources to optimize their networks to provide the best coverage possible.”

On cross-examination, Wines testified that although he was not aware of any scientific publications or scholarly articles addressing drive test analysis, he was aware that “radio frequency theory has been in existence for 150 years; cell phones have been [in] existence . . . since the 1980s, and the way that cell phones communicate with towers has been generally accepted. All the drive test is, is a measurement of signal and plotting that signal on a map. I don’t know of a scientific review; it’s simply a collection or measurement of signal and then plotting that signal on a map.” He further testified that “on a daily basis around the country, myself and other members of my team use drive test data . . . to locate fugitives, recover evidence, find victims; it works in a real world setting on a daily basis.” In response to questioning regarding a rate of error, Wines stated: “I don’t know about a rate of error, but in my own personal experience the handset has never not been where the record said it would be.” With respect to the factors affecting whether a cell phone would connect with the closest tower, Wines testified that although topography could be a factor, “in this particular case there’s a clear line of sight from the tower to the location where the incident occurred, so topography would not be an issue in this particular case.” Wines stated that “day-to-day weather has negligible effect on cell service,” but that a “catastrophic weather event” that physically damaged

the tower could play a role. He further testified that call overload to a tower would not send a handset to a different tower—if the tower was at capacity, the call would not go through.

Wines testified that he would not have conducted a drive test analysis in this case if something was different as to a tower.¹¹ Regarding signal strength between April, 2014, and December, 2015, Wines testified: “I could not say that they are exactly the same, but I would expect them to be very similar.” Wines testified that he reviews the status of the towers through lists provided by the carriers, and that although he did not specifically know whether any improvements were made to the equipment, some of the technology from the Sprint and AT&T towers were 2G and 3G, and that is “not a technology that undergoes a lot of change because it’s an older technology.”

The court issued an oral ruling, finding that Wines’ drive test analysis satisfied the first prong of *Porter*, in that it was “a procedure rooted in science,” and was “supported and followed by police, law enforcement, FBI as well as the phone companies” It further found that “it has been used for many years in a whole variety of means and methods,” and that it was “not based on any subjective or speculative analysis.” Turning to the second prong, the court found, for purposes of the initial inquiry, that the proffered evidence was relevant. The court noted: “I am not saying that everything that was addressed here or that the state indicated that they intended to question this witness on are necessarily permissible. I think we have to see what is objected to and what’s not objected to.” The court further found that “the issues of its effectiveness or its reliability go more to weight than it does to admissibility; but again, anytime that the defense deems it appropriate with regard to each individual question, they should in fact object if they think that the evidence is not properly admissible.”

Following the court’s ruling, the jury returned to the courtroom, and the state began its direct examination of Wines. Wines testified as to the historical cell site analysis and drive test he conducted. The state introduced a PowerPoint presentation created by Wines, which depicted the cell site analysis and drive test survey data.¹² Defense counsel did not object to the introduction of the presentation, nor did he object to any of the state’s questions to Wines.

According to the defendant, Wines “claimed to be able to eliminate the possibility that the cellular handset associated with the defendant was anywhere other than within the coverage area of a cell tower near the location of the shooting during the relevant time period.” Through Wines’ drive test survey data, the state posits that it was able to show that Gonzalez’ phone “was located somewhere in the coverage area of the BJ’s

[Wholesale Club] tower just before the shooting and that the crime scene was also in that coverage area.”¹³ According to the state, “[t]he drive test results further showed that both [Gonzalez] and the defendant’s phones were located somewhere in the coverage area of the BJ’s tower minutes after the shooting, and that the crime scene was also in that coverage area.” Wines testified that while “the call detail record reflects which tower the handset selected . . . the drive test results reflect the RF footprint of that particular tower and sector, and the handset could not have been anyplace else except within that RF footprint in order to make or receive a call.”

Before addressing the merits of the defendant’s argument, we begin with the applicable legal principles and standard of review governing our analysis. In *State v. Porter*, supra, 241 Conn. 57, “this court followed . . . *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), and held that scientific evidence should be subjected to a flexible test, with differing factors that are applied on a case-by-case basis, to determine the reliability of the scientific evidence. . . . Following [*Porter*], scientific evidence, and expert testimony based thereon, usually is to be evaluated under a threshold admissibility standard [relating to] the reliability of the methodology underlying the evidence

“[I]n *State v. Porter*, supra, 241 Conn. 78–80, we expressly recognized that, because the term scientific evidence houses such a large and diverse variety of topics, the formulation of a mechanical evidentiary standard of admissibility designed to apply universally to the many forms scientific evidence may take is an unworkable concept. Rather, the better formulation is a general, overarching approach to the threshold admissibility of scientific evidence In accordance with this philosophy, we set forth in *Porter* a number of different factors, nonexclusive and whose application to a particular set of circumstances could vary, as relevant in the determination of the threshold admissibility of scientific evidence. . . . In particular, we recognized the following considerations: general acceptance in the relevant scientific community; whether the methodology underlying the scientific evidence has been tested and subjected to peer review; the known or potential rate of error; the prestige and background of the expert witness supporting the evidence; the extent to which the technique at issue relies [on] subjective judgments made by the expert rather than on objectively verifiable criteria; whether the expert can present and explain the data and methodology underlying the testimony in a manner that assists the jury in drawing conclusions therefrom; and whether the technique or methodology was developed solely for purposes of litigation. . . .

“In *Porter*, we also set forth a fit requirement for scientific evidence. . . . We stated that the proposed scientific testimony must be demonstrably relevant to the facts of the particular case in which it is offered, and not simply be valid in the abstract. . . . Put another way, the proponent of scientific evidence must establish that the specific scientific testimony at issue is, in fact, derived from and based [on] . . . [scientifically reliable] methodology.” (Emphasis omitted; internal quotation marks omitted.) *State v. Guilbert*, 306 Conn. 218, 231–32, 49 A.3d 705 (2012).

“[I]t is well established that [t]he trial court has broad discretion in ruling on the admissibility [and relevancy] of evidence. . . . [Accordingly] [t]he trial court’s ruling on evidentiary matters will be overturned only upon a showing of a clear abuse of the court’s discretion.” (Internal quotation marks omitted.) *State v. Haughey*, 124 Conn. App. 58, 72, 3 A.3d 980, cert. denied, 299 Conn. 912, 10 A.3d 529 (2010). “Because a trial court’s ruling under *Porter* involves the admissibility of evidence, we review that ruling on appeal for an abuse of discretion.” (Internal quotation marks omitted.) *State v. Victor O.*, 301 Conn. 163, 173, 20 A.3d 669, cert. denied, 565 U.S. 1039, 132 S. Ct. 583, 181 L. Ed. 2d 429 (2011).

On appeal, the defendant argues that the state failed to “meet its burden of showing that its drive test survey data met even minimal reliability and relevance requirements under *Porter*.” With respect to reliability, the defendant argues that the state (1) presented no studies supporting the accuracy of Wines’ technique, (2) “provided no basis for Wines’ conclusions about the cell site coverage at the time of the shooting in April, 2014,” and (3) “did not provide information by which the trial court could judge the reliability of the method Wines used to arrive at his conclusions,” where Wines conceded that certain factors may interfere with towers’ signal strength. With respect to relevancy, the defendant argues that the state did not meet its burden, where “all the drive test survey data revealed was the coverage area of selected cell towers nearly two years after the incident at issue,” and therefore the evidence lacked a valid scientific connection to the question before the jury.

With respect to reliability, we conclude that the court did not err in concluding that Wines’ methodology satisfied *Porter*’s first prong. The defendant challenges Wines’ testimony on grounds that the state did not present any studies in support of his technique and that Wines himself could not provide a rate of error, thereby failing to demonstrate the accuracy of his approach.¹⁴ We first note that “[p]eer review and publication is . . . only one of several nonexclusive factors. . . . No single *Porter* factor is dispositive.” (Citation omitted.) *Hayes v. Decker*, 263 Conn. 677, 685 n.2, 822 A.2d 228 (2003); *id.* (trial court “improperly treated *Porter* as a

mechanical factor test” in ruling that expert opinion was inadmissible because it was not supported by treatises or studies).

Although our appellate courts have yet to address the issue of reliability of drive test survey data, this court has previously remarked generally that “the precision of drive testing makes it the preferred method for determining the shape and size of a cell sector” *State v. Steele*, 176 Conn. App. 1, 23–24, 169 A.3d 797, cert. denied, 327 Conn. 962, 172 A.3d 1261 (2017). Certain federal courts have had occasion to consider the admissibility of drive test survey data under the *Daubert* standard, and have declined to find drive test data unreliable on the basis of a lack of scientific testing and publications. See, e.g., *United States v. Morgan*, 292 F. Supp. 3d 475, 484 (D.D.C. 2018) (noting, in finding drive testing testimony sufficiently reliable, that “the *Daubert* inquiry is flexible, and a [c]ourt should not automatically exclude evidence because it is too new, or of too limited outside interest, to generate extensive independent research or peer-reviewed publications”); *United States v. Allums*, Docket No. 2:08-CR-30 TS, 2009 WL 806748, *2 (D. Utah March 24, 2009) (finding drive test methodology admissible despite expert being unable to identify rate of error or any peer review process the methodology has undergone); see also *United States v. Mack*, Docket No. 3:13-cr-00054 (MPS), 2014 WL 6474329, *4 (D. Conn. November 19, 2014) (concluding, in different context of estimating coverage area, that expert’s methods were “not rendered unreliable merely because they have not been validated by scientific peer review”).

Courts considering drive test survey data have looked to evidence presented that the data is successfully used to locate missing persons and fugitives as a type of “field testing” that can demonstrate reliability. See *United States v. Allums*, supra, 2009 WL 806748, *2 (“the [c]ourt finds that the success achieved by [the agent] and others in catching fugitives while using this methodology is sufficient to establish the methodology’s reliability”); see also *State v. Steele*, supra, 176 Conn. App. 23 (noting that drive testing has been used by law enforcement agencies to track suspects and fugitives). Ultimately, a number of courts have determined that drive test survey data satisfies the *Daubert* factors. See, e.g., *United States v. Frazier*, Docket No. 2:15-cr-044-GMN-GWF, 2016 WL 4994956, *3 (D. Nev. September 16, 2016).

We find these federal decisions persuasive in evaluating whether the trial court properly determined that Wine’s methodology was reliable. Here, Wines testified during the *Porter* hearing that he and other members of the FBI CAST team use drive test data on a daily basis to locate fugitives, recover evidence, and find victims. He also testified to his own personal experience

with the accuracy of drive testing, that “the handset has never not been where the record said it would be.” We also find no error in the trial court’s crediting, as a consideration weighing in favor of reliability, Wines’ testimony that the cell phone industry routinely relies on drive tests, conducted in the same manner that he conducted his test, to “design, maintain and optimize their network” See *T-Mobile Central, LLC v. Unified Government of Wyandotte County/Kansas City, Kansas*, 528 F. Supp. 2d 1128, 1166 (D. Kan. 2007) (noting that “drive tests are widely used throughout the wireless industry and are generally recognized as reliable and accurate”), *aff’d in part*, 546 F.3d 1299 (10th Cir. 2008).

Although the defendant argues that Wines’ alleged inability to account for “various factors [that] may interfere with the signal strength of cell towers” goes to both reliability and relevancy, it more appropriately is analyzed under the relevance prong of *Porter*. See *United States v. Morgan*, *supra*, 292 F. Supp. 3d 485.¹⁵ In fact, during the *Porter* hearing, defense counsel acknowledged the issue as one of relevancy.

We conclude that the trial court did not err in concluding that the state’s proffered evidence was relevant. Wines testified that the technology, towers, sectors, and azimuths¹⁶ were the same for the relevant towers from April, 2014, when the crime occurred, through December, 2015, when he conducted the drive test. He also testified that weather has a negligible impact on cell service and that there was an unobstructed view of the tower in question, such that topography would not be a factor in this case. Wines did not know “specifically whether or not there were any improvements” to the towers, but he was able to opine that “for example, with the Sprint tower, the type of [2G] technology . . . is not a technology that undergoes a lot of change because it’s an older technology.” Wines further opined that although he could not say that signal strength was exactly the same from April, 2014, to December, 2015, he “would expect them to be very similar.” Such testimony is sufficient to satisfy the fit requirement of *Porter*.

We reiterate that “the purpose of the *Porter* hearing is to ascertain the *validity*, not the *weight*, of the methodology underlying the proffered scientific evidence.” (Emphasis in original.) *Fleming v. Dionisio*, 317 Conn. 498, 512, 119 A.3d 531 (2015). Challenges to Wines’ alleged inadequacies in accounting for different variables were legitimate material for cross-examination of Wines at trial. See *United States v. Allums*, *supra*, 2009 WL 806748, *2 (arguments that expert failed to account for weather conditions or possibility of high call volumes on days that defendant placed calls “would be appropriately raised on cross-examination”).

We conclude that the court did not abuse its discre-

tion in admitting the state's scientific evidence under *Porter*. The court therefore properly denied the defendant's motion in limine. Moreover, even if we assume, *arguendo*, that the challenged evidence was improperly admitted, the defendant has failed to show that any such impropriety was harmful.

“When an improper evidentiary ruling is not constitutional in nature, the defendant bears the burden of demonstrating that the [impropriety] was harmful.” (Internal quotation marks omitted.) *State v. Guilbert*, *supra*, 306 Conn. 265. “[W]hether [an improper ruling] is harmless in a particular case depends upon a number of factors, such as the importance of the witness' testimony in the prosecution's case, whether the testimony was cumulative, the presence or absence of evidence corroborating or contradicting the testimony of the witness on material points, the extent of cross-examination otherwise permitted, and, of course, the overall strength of the prosecution's case. . . . Most importantly, we must examine the impact of the . . . evidence on the trier of fact and the result of the trial. . . . [T]he proper standard for determining whether an erroneous evidentiary ruling is harmless should be whether the jury's verdict was substantially swayed by the error. . . . Accordingly, a nonconstitutional error is harmless when an appellate court has a fair assurance that the error did not substantially affect the verdict.” (Internal quotation marks omitted.) *State v. Edwards*, 325 Conn. 97, 133, 156 A.3d 506 (2017).

We first note that the disputed evidence, “while compelling, was not vital to the state's case.” *State v. Bonner*, 290 Conn. 468, 501, 964 A.2d 73 (2009). The heart of the challenged evidence before the jury consisted of Wines' conclusion, on the basis of his drive test survey data, that the cell phone associated with the defendant accessed a tower with a coverage area near the location of the shooting during the relevant time period, and that the phone could not have been anywhere else except within that coverage area in order to make that connection. There was, however, significant unchallenged evidence corroborating Wines' testimony on material points. See *State v. Bouknight*, 323 Conn. 620, 628, 149 A.3d 975 (2016) (any error harmless where, *inter alia*, state presented ample evidence corroborating challenged exhibits). Although the defendant challenged Wines' use of the drive test survey data, the defendant expressly did not challenge the historical cell site location evidence, from which the jury could conclude that shortly after the shooting, the defendant's cell phone accessed a tower that was located 0.39 miles from the crime scene. See *State v. Edwards*, *supra*, 325 Conn. 134 (erroneous admission of police officer's testimony as to historical cell site location evidence was harmless, where “the jury still could conclude from the cell phone records themselves that the defendant's cell phone accessed cell towers in Rocky Hill and Weth-

ersfield on the date of the robbery, which coincides with the victim's testimony that she was followed from the grocery store in Rocky Hill and robbed at her home in Wethersfield"). Further, the court did not limit the defendant's ability to challenge Wines' drive test survey data evidence. The defendant had a full opportunity to cross-examine Wines. See *State v. Bonner*, supra, 501 (any error harmless where defendant had "full opportunity to cross-examine" witnesses whose testimony was challenged).

Finally, even without the drive test survey data, the state had a strong case against the defendant. The jury had before it evidence that on the night of the shooting, the defendant was in telephone contact with Gonzalez, who was also in contact with the victim. Gonzalez' testimony put the defendant at the scene of the crime, and, as referenced previously, the historical cell site location evidence showed the defendant's phone accessing a cell tower near the crime scene shortly after the shooting. The jury also had before it the testimony of a number of individuals regarding incriminating statements the defendant had made both before and after the murder. See *id.* (error harmless where witness testified that defendant had confessed guilt to her). Gomez-Delavega testified that the defendant told her he was planning to rob the victim and that he would have to kill him to prevent retaliation. Moreover, after the murder, the defendant told Gomez-Delavega that he had, in fact, shot and killed the victim. The defendant also told Gonzalez that he would kill him if he told anyone and made Gonzalez get rid of the Jeep. The jury also heard testimony from Vieira that the defendant had approached her at her job, asking her whether Gonzalez had told her anything.

For the previously discussed reasons, we conclude that any improper admission of the drive test survey evidence did not substantially affect the jury's verdict and it therefore was harmless.

The judgments are affirmed.

In this opinion the other judges concurred.

¹ Police officers were dispatched to the scene and arrived to find the victim lying in the street. The victim was transported to the hospital where he died. The cause of death was determined by autopsy as "a gunshot wound to the trunk."

² Gonzalez, who testified that he was originally charged with a number of offenses arising out of the events on April 9, 2014, including murder and conspiracy to commit murder, entered into a cooperation agreement with the state and ultimately pleaded guilty as a second offender to sale of narcotics in violation of General Statutes § 21a-277 (a).

³ The defendant was tried before the court and convicted of criminal possession of a firearm and violation of probation.

⁴ The defendant's principal brief to this court also includes a photograph above an explanatory caption depicting the affected window. The photograph was not made an exhibit at trial.

⁵ The defendant requests that this court "reconsider" the determination made in *Dixon*. "It is axiomatic that, [a]s an intermediate appellate court, we are bound by Supreme Court precedent and are unable to modify it [W]e are not at liberty to overrule or discard the decisions of our Supreme Court but are bound by them. . . . [I]t is not within our province

to reevaluate or replace those decisions.” (Internal quotation marks omitted.) *State v. Madera*, 160 Conn. App. 851, 861–62, 125 A.3d 1071 (2015).

⁶ Under *State v. Golding*, supra, 213 Conn. 239–40, “[a defendant] can prevail on a claim of constitutional error not preserved at trial only if *all* of the following conditions are met: (1) the record is adequate to review the alleged claim of error; (2) the claim is of constitutional magnitude alleging the violation of a fundamental right; (3) the alleged constitutional violation . . . exists and . . . deprived the defendant of a fair trial; and (4) if subject to harmless error analysis, the state has failed to demonstrate harmlessness of the alleged constitutional violation beyond a reasonable doubt.” (Emphasis in original; internal quotation marks omitted.) *State v. Biggs*, 176 Conn. App. 687, 705–706, 171 A.3d 457, cert. denied, 327 Conn. 975, 174 A.3d 193 (2017).

⁷ The defendant also proffers a related argument that certain intrusions are so disruptive that no actual prejudice must be demonstrated. He argues: “Where exposure to extreme prejudicing circumstances may have a deleterious effect on the jury’s ability to remain fair and objective, a new trial may be necessary, even absent an affirmative showing that the verdict was affected.” The cases cited by the defendant in support of this proposition are distinguishable. See *Sheppard v. Maxwell*, 384 U.S. 333, 353, 355, 86 S. Ct. 1507, 16 L. Ed. 2d 600 (1966) (no showing of prejudice required where “bedlam reigned” during trial, jurors were “forced to run a gauntlet of reporters” every time they entered or exited the courtroom, and photos of jurors along with addresses were published in newspaper resulting in jurors receiving anonymous letters, which “should have made the judge aware that this publicity seriously threatened the jurors’ privacy”); *Estes v. Texas*, 381 U.S. 532, 538, 544, 85 S. Ct. 1628, 14 L. Ed. 2d 543 (1965) (finding extensive television coverage had “set [the case] apart in the public mind as an extraordinary case” and holding such coverage was inconsistent with concepts of due process, where forty-eight states and federal rules had deemed use of television improper in the courtroom, and four of selected jurors had viewed all or part of broadcasts of previous hearings in the case); *Turner v. Louisiana*, 379 U.S. 466, 468, 473, 85 S. Ct. 546, 13 L. Ed. 2d 424 (1965) (two key witnesses for the prosecution, who were deputy sheriffs and whose credibility was central issue in trial, were also in charge of jury throughout trial, ate meals with jury, ran errands for them, and drove them to their lodgings each night; *Irvin v. Dowd*, 366 U.S. 717, 728–29, 81 S. Ct. 1639, 6 L. Ed. 2d 751 (1961) (The court vacated the judgments of conviction where “[t]wo-thirds of the jurors had an opinion that petitioner was guilty and were familiar with the material facts and circumstances involved, including the fact that other murders were attributed to him, some going so far as to say that it would take evidence to overcome their belief. One said that he could not . . . give the defendant the benefit of the doubt that he is innocent. Another stated that he had a somewhat certain fixed opinion as to petitioner’s guilt.” [Internal quotation marks omitted.]).

⁸ To the extent that the defendant challenges the trial court’s finding that the bullet hole was unrelated to his case, he failed to object to the court’s instruction on this basis. Moreover, at the conclusion of the trial court’s recitation of its findings on the record, defense counsel replied: “I think you covered it.”

⁹ Wines testified that he received training from the FBI regarding how to set up and use the scanner to collect measurements. Another component of his training involved conducting drive tests and presenting the results in a moot court. Wines testified that although he had participated in a drive test for one prior case, this case was his first time testifying in court as to his analysis. He explained that other CAST members conduct and testify as to drive tests “on a regular basis all around the country.”

¹⁰ Wines testified that the cell signal comes off the tower as a radio wave, and the RF footprint of the signal is what is measured by the scanner.

¹¹ Wines gave the following example: “About two months [ago] I did an analysis on a case in New London that . . . involved analyzing Nextel phone records, and I did not conduct a drive test in that case because the Nextel network is no longer in existence.”

¹² Wines’ analysis relied on call detail records from Sprint and AT&T for two cell phone numbers associated with Gonzalez, and call detail records from T-Mobile for a cell phone number associated with the defendant.

¹³ Wines testified that cell towers for T-Mobile, Sprint, and AT&T were located on a water tower in the BJ’s parking lot, which was 0.39 miles from the crime scene.

¹⁴ We find the sole case cited by the defendant regarding reliability in the

context of cell site location evidence distinguishable, given that it does not address drive test survey data, but rather involves “granulization theory,” a method of estimating “the range of each antenna’s coverage based on the proximity of the tower to other towers in the area” and predicting “where the coverage area of one tower will overlap with the coverage area of another.” *United States v. Evans*, 892 F. Supp. 2d 949, 952 (N.D. Ill. 2012). Moreover, other courts considering the issue have reached the opposite conclusion of the court in *Evans*. See *United States v. Machado-Erazo*, 950 F. Supp. 2d 49, 57 (D.D.C. 2013); *United States v. Davis*, Docket No. 11-60285-CR, 2013 WL 2156659, *6–7 (S.D. Fla. May 17, 2013).

¹⁵ We note that courts have treated arguments regarding variables that could affect signal strength in different manners, some analyzing the issue as either one of reliability or relevance under *Daubert*, and others treating such arguments as going to the weight of the evidence to be raised on cross-examination. One federal court addressed the reliability of drive test testimony in the context of a fifteen month delay between the date of the crime and the date the FBI agent conducted the drive test. *United States v. Cervantes*, Docket No. CR 12-792 YGR, 2015 WL 7734281, *11 (N.D. Cal. December 1, 2015). The court originally found the government’s explanation inadequate that the agent “would not have conducted the . . . drive-test” if any of the towers or antennas had been replaced or adjusted in the intervening period. (Internal quotation marks omitted.) *United States v. Cervantes*, Docket No. 12-cr-00792-YGR, 2015 WL 5569276, *4 (N.D. Cal. September 22, 2015). The court permitted the government to submit a supplemental declaration to the extent that it intended to offer opinions that were based on the drive tests. *Id.* The government thereafter submitted a supplemental affidavit, in which the agent stated that the “cell towers at issue were located at the same locations at the time of the crime as at the time of the field experiment.” *United States v. Cervantes*, *supra*, 2015 WL 7734281, *11. The declaration further stated that “cell tower locations and sector azimuths during the time frame of the crime were examined and compared to cell tower locations and sector azimuths during the time frame of the measurements.” (Internal quotation marks omitted.) *Id.* In light of the declaration, the court denied the defendant’s motion to exclude or limit the FBI agent’s testimony. *Id.*, *12.

The court in *Morgan* addressed the claim that “any testimony regarding the drive test results is based on the incorrect premise that a drive test conducted six months after an alleged event, at a different time of year and at a different time of day, can *accurately* depict the coverage area of a cell sector.” (Emphasis in original.) *United States v. Morgan*, *supra*, 292 F. Supp. 3d 485–86. The court concluded that cross-examination of the expert and presentation of conflicting expert testimony would cure any possible prejudice. *Id.*, 486.

¹⁶ Wines defined the azimuth as “the direction that the signal is coming off of a particular sector.”
