IN THE SUPREME COURT OF APPEALS OF WEST VIRGINIA

January 2017 Term

No. 16-0265

FILED March 2, 2017 released at 3:00 p.m.

RORY L. PERRY, II CLERK SUPREME COURT OF APPEALS OF WEST VIRGINIA

STATE OF WEST VIRGINIA, Plaintiff Below, Respondent

V.

TULSA JOHNSON, Defendant Below, Petitioner

Appeal from the Circuit Court of Berkeley County Honorable John C. Yoder, Judge Criminal Action No. 15-F-48

AFFIRMED

Submitted: February 15, 2017 Filed: March 2, 2017

Matthew Brummond Public Defender Services Charleston, West Virginia Attorney for Petitioner Cheryl K. Saville Assistant Prosecuting Attorney Martinsburg, West Virginia Attorney for Respondent

JUSTICE DAVIS delivered the Opinion of the Court.

SYLLABUS BY THE COURT

1. In order for a lay witness to give opinion testimony pursuant to Rule 701 of the West Virginia Rules of Evidence, (1) the witness must have personal knowledge or perception of the facts from which the opinion is to be derived; (2) there must be a rational connection between the opinion and the facts upon which it is based; (3) the opinion must be helpful in understanding the testimony or determining a fact in issue; and (4) the opinion must not be based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

2. A witness must be qualified as an expert under Rule 702 of the West Virginia Rules of Evidence in order to present evidence of cell phone historical cell site data.

3. "Where objections were not shown to have been made in the trial court, and the matters concerned were not jurisdictional in character, such objections will not be considered on appeal." Syllabus point 3, *O'Neal v. Peake Operating Co.*, 185 W. Va. 28, 404 S.E.2d 420 (1991).

Davis, Justice:

This is a criminal appeal by Tulsa Johnson ("Ms. Johnson") from an order of the Circuit Court of Berkeley County sentencing her to imprisonment after a jury convicted her of felony murder and conspiracy to commit robbery. The circuit court imposed a sentence of life imprisonment without parole for the felony murder conviction, and one to five years imprisonment for the conspiracy conviction.¹ In this appeal, Ms. Johnson contends that she is entitled to a new trial because (1) a police officer improperly testified as a lay witness regarding historical cell site data and (2) the prosecutor made improper remarks regarding DNA evidence during closing arguments. After a careful review of the briefs, the record submitted on appeal, the applicable law, and listening to the argument of the parties, we affirm.

I.

FACTUAL AND PROCEDURAL HISTORY

The relevant facts of this case began during the afternoon of September 14, 2014, in Martinsburg, West Virginia. During that time, it appears that Ms. Johnson was driving around the city selling heroin. She was driving with a companion, LaQuadia Grant ("Ms. Grant"). At some point, Ms. Johnson indicated she needed more drugs to sell. Ms. Grant used her cell phone to contact a drug dealer named Michael Garcia ("Mr. Garcia") and

¹The sentences were ordered to be served consecutively.

arranged to meet with him so that Ms. Johnson could purchase more heroin. Before meeting with Mr. Garcia, Ms. Johnson stopped and picked up two more passengers, Vincent Smith ("Mr. Smith") and Jucobe Johnson ("Mr. Johnson").²

Mr. Garcia had initially told Ms. Grant to meet him at a gas station called ROCS. However, once they arrived at the gas station, Mr. Garcia informed Ms. Grant, by phone, that he wanted to make the drug sale at the home of a person identified as Davon Adams ("Mr. Adams").³ Once they arrived at the home of Mr. Adams,⁴ everyone went inside except for Mr. Johnson. After they entered the home, Ms. Johnson spoke with Mr. Adams privately in another room. Ms. Johnson informed Mr. Adams that they were going to forcibly take the drugs from Mr. Garcia. As a result of that conversation, Mr. Adams came out of the room and told everyone to leave his home and that no drug deal would be made there. After everyone left the home, Mr. Adams saw Ms. Johnson and Mr. Smith get into Mr. Garcia's vehicle and drive off in the direction of a cornfield near his home. Mr. Adams tried to call and text Mr. Garcia on his cell phone several times to warn him that he was going to be robbed, but could not reach him. Roughly a half hour or so after Mr. Garcia drove away, Mr.

²Mr. Johnson was not related to Ms. Johnson.

³It appears that Mr. Garcia did not get out of his vehicle, and no one got out of Ms. Johnson's vehicle.

⁴It appears that Mr. Adams lived in a housing complex outside of Martinsburg, in the town of Inwood, West Virginia.

Adams' daughter yelled from the outside that police cars and ambulances were in the area. Mr. Adams went outside to the area where Mr. Garcia had driven. Mr. Adams was stopped by the police from getting close to where the police were investigating. However, Mr. Adams was able to see Mr. Garcia lying in the gravel road and not moving. According to the testimony of the medical examiner, Mr. Garcia had been shot six times, with the fatal bullet piercing his heart.

On February 19, 2015, a grand jury indicted Ms. Johnson and Mr. Smith for first degree murder, felony murder, robbery in the first degree, and conspiracy to commit robbery. The grand jury indicted Mr. Johnson as an accessory after the fact to murder. Ms. Johnson and her co-defendants were tried together in September 2015. The State called fifteen witnesses during the trial.⁵ Neither Ms. Johnson nor her co-defendants testified at the trial. Counsel for Ms. Johnson called one witness, a private investigator. Counsel for Mr. Johnson called one witness, an expert in the field of computer science radio frequency engineering.⁶ Counsel for Mr. Smith did not call any witnesses. The jury returned a verdict convicting Ms. Johnson and Mr. Smith of felony murder and conspiracy to commit robbery.

⁵Relevant facts provided by the State's witnesses will be presented in the Discussion section of this opinion.

⁶The record indicates that the expert was testifying on behalf of all defendants.

Mr. Johnson was acquitted of the single charge against him. Ms. Johnson has now filed this appeal.⁷

II.

STANDARD OF REVIEW

The two assignments of error in this case have distinct standards of review that will be presented below with our discussion of the issues to which they relate.

III.

DISCUSSION

In this appeal, Ms. Johnson raises two issues: (1) the propriety of a police officer providing testimony about historical cell site data while testifying as a lay witness and (2) the propriety of comments regarding DNA evidence made by the prosecutor during closing arguments. We address each issue in turn.

A. Police Officer Testified as Lay Witness Regarding Historical Cell Site Data

Ms. Johnson contends that the circuit court committed error in allowing one of the investigating officers, Deputy W. Christian, to testify as a lay witness regarding

⁷Mr. Smith filed a separate appeal that was heard at the same time as Ms. Johnson's appeal.

historical cell site data, *i.e.*, cell phone tower location data. Based upon that data, Deputy Christian was able to testify that cell phone calls and text messages belonging to Ms. Johnson, Mr. Smith, Mr. Garcia, Mr. Adams, and Ms. Grant were made in the vicinity of cell towers that were near the crime scene.⁸ With respect to Ms. Johnson, based upon this testimony, the jury could infer that she was in the area of the crime scene near the time of the murder. Ms. Johnson argues that such testimony had to be presented by a person qualified as an expert in the area of interpreting historical cell site data. The State contends that Deputy Christian's testimony about the historical cell site data involved in this case was limited and did not have to be presented by an expert.⁹ We disagree with the State.

We note at the outset that "[t]he action of a trial court in admitting or excluding evidence in the exercise of its discretion will not be disturbed by the appellate court unless it appears that such action amounts to an abuse of discretion." Syl. pt. 10, *State v. Huffman*, 141 W. Va. 55, 87 S.E.2d 541 (1955), *overruled on other grounds by State ex rel. R.L. v. Bedell*, 192 W. Va. 435, 452 S.E.2d 893 (1994). *See also* Syl. pt. 4, *State v. Rodoussakis*, 204 W. Va. 58, 511 S.E.2d 469 (1998) ("A trial court's evidentiary rulings, as well as its application of the Rules of Evidence, are subject to review under an abuse of discretion

⁸Deputy Christian testified that he could not tell from the data who actually used the cell phones in question.

⁹It appears that the State did have an expert in this area, but did not call the expert to testify.

standard."). In determining whether a witness may render an opinion as a lay witness, we have held the following:

In order for a lay witness to give opinion testimony pursuant to Rule 701 of the West Virginia Rules of Evidence (1) the witness must have personal knowledge or perception of the facts from which the opinion is to be derived; (2) there must be a rational connection between the opinion and the facts upon which it is based; and (3) the opinion must be helpful in understanding the testimony or determining a fact in issue.

Syl. pt. 2, State v. Nichols, 208 W. Va. 432, 541 S.E.2d 310 (1999), overruled on other

grounds by State v. McCraine, 214 W. Va. 188, 588 S.E.2d 177 (2003), and reinstated by

State v. Herbert, 234 W. Va. 576, 767 S.E.2d 471 (2014). This formulation of the standard

for admitting lay opinion testimony was modified in 2014 by an amendment to Rule 701.

Rule 701 now provides as follows:

If a witness is not testifying as an expert, testimony in the form of an opinion is limited to one that is: (a) rationally based on the witness's perception; (b) helpful to clearly understanding the witness's testimony or to determining a fact in issue; and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

(Emphasis added). In view of the addition of subsection (c) to Rule 701, we now restate the standard for permitting a lay witness to render an opinion, and so hold, that, in order for a lay witness to give opinion testimony pursuant to Rule 701 of the West Virginia Rules of Evidence, (1) the witness must have personal knowledge or perception of the facts from

which the opinion is to be derived;¹⁰ (2) there must be a rational connection between the opinion and the facts upon which it is based; (3) the opinion must be helpful in understanding the testimony or determining a fact in issue; and (4) the opinion must not be based on scientific, technical, or other specialized knowledge within the scope of Rule 702.

In this case, Deputy Christian presented testimony as a lay witness that Ms. Johnson's cell phone was in the vicinity of the crime scene at the time of the murder. This testimony was given based upon Deputy Christian's interpretation of historical cell site data. Ms. Johnson argues that Deputy Christian's testimony was based upon technical or other specialized knowledge within the scope of Rule 702 of the West Virginia Rules of Evidence.¹¹ This issue requires the Court to determine whether an expert is needed to inform

¹¹Rule 702 provides in full:

(a) If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise.

(continued...)

¹⁰It has been recognized that, "[i]n addition to the express requirements of Rule 701, through case law the state Supreme Court has incorporated a requirement into the rule that a lay witness have 'personal knowledge' of the issue he or she will render an opinion on." 2 Louis J. Palmer, Jr., Robin Jean Davis & Franklin D. Cleckley, *Handbook on Evidence for West Virginia Lawyers* § 701.02, at 4 (6th ed. 2015).

⁽b) In addition to the requirements in subsection (a), expert testimony based on a novel scientific theory, principle, methodology, or procedure is admissible only if:

⁽¹⁾ the testimony is based on sufficient

a jury about historical cell site data. While this is an issue of first impression for this Court, it has been addressed in other jurisdictions.

As an initial matter, we must present some background information regarding the interplay of cell phones and cell phone towers. A cell phone transmits and receives signals throughout a cellular network like a two-way radio. *See United States v. Hill*, 818 F.3d 289, 295 (7th Cir. 2016) ("A cell phone is essentially a two-way radio that uses a cellular network to communicate."). Cell phone networks are divided into geographic coverage areas that are called "cell sites or towers." Each cell site contains an antenna that receives and transmits signals to cell phones. *See In re Application of U.S. for an Order for Prospective Cell Site Location Info. on a Certain Cellular Tel.*, 460 F. Supp. 2d 448, 450 (S.D.N.Y. 2006). "To connect with the local telephone network, the Internet, or other wireless networks, cell-phone providers maintain an extensive network of cell sites, or radio base stations, in the geographic areas they serve." *State v. Earls*, 214 N.J. 564, 576, 70 A.3d 630, 637 (2013). Cell sites "are similar to traditional radio towers; however, they emit frequencies with much lower power, which allows many people in a small area to

¹¹(...continued)

facts or data;

(2) the testimony is the product of reliable principles and methods; and

(3) the expert has reliably applied the principles and methods to the facts of the case.

communicate over the same frequencies without interference." Adam Koppel, Warranting A Warrant: Fourth Amendment Concerns Raised by Law Enforcement's Warrantless Use of GPS and Cellular Phone Tracking, 64 U. Miami L. Rev. 1061, 1066 (2010). The size of the area served by a cell site will depend "upon a number of factors, including but not limited to, the height of the antennas, topography of the land, vegetative cover and physical obstructions." Nextel Commc'ns of the Mid-Atl., Inc. v. Town of Brookline, Mass., 520 F. Supp. 2d 238, 242 (D. Mass. 2007). When a call is placed on a cell phone, the phone will connect to the cell site with the strongest signal. See Ameritech Mobile Commc'ns, Inc. v. Dep't of Revenue, 214 Wis. 2d 592, 571 N.W.2d 924 (Ct. App. 1997) ("When a mobile unit owner wishes to place a call, the mobile unit scans the signals sent out by the various cell sites and selects the strongest signal."). "As a cell phone user moves from place to place, the cell phone automatically switches to the tower that provides the best reception." In re Application of U.S. for an Order for Disclosure of Telecomms. Records & Authorizing the Use of a Pen Register & Trap & Trace, 405 F. Supp. 2d 435, 436-37 (S.D.N.Y. 2005). See also Nextel Commc'ns of Mid-Atl., Inc. v. Town of Wayland Mass., 231 F. Supp. 2d 396, 399 (D. Mass. 2002) ("As customers move throughout the service area, the transmission from the portable unit is automatically transferred to the closest Nextel facility without interruption in service, provided that there is overlapping coverage from the cells.").

A cell phone can be tracked when it is "used to make a call, send a text message, or connect to the Internet–or when they take no action at all, so long as the phone is not turned off." Earls, 214 N.J. at 577, 70 A.3d at 637. There are three basic methods used to track cell phone signals: (1) Global Positioning System (GPS) technology; (2) real-time cell site data; and (3) historical cell site data. Aaron Blank, The Limitations and Admissibility of Using Historical Cellular Site Data to Track the Location of a Cellular Phone, 18 Rich. J.L. & Tech. 3, 9 (2011). GPS is a satellite-based navigation system used to determine location, velocity, and time. Koppel, Warranting A Warrant, 64 U. Miami L. Rev. at 1063-64. See also Alexandra Wells, Ping! The Admissibility of Cellular Records to Track Criminal Defendants, 33 St. Louis U. Pub. L. Rev. 487, 489-90 (2014) ("[A] receiver on the satellite picks up a signal delivered from a GPS chip in the cellular phone. The delivery speed is then converted into distance giving a very accurate reading of the cell phone's location."). The distinction between real-time cell site data and historical cell site data has been described as follows:

> [B]oth real-time cell site data and historical cell site data use cellular technology to locate the cell user. While they are extremely similar, they differ in the time the signal, or "ping," received and recorded by a tower is observed. Real-time cell site data is obtained through viewing the cell phone's activity and signals in real time, meaning at that instant. Thus, this largely happens when police officers survey a particular cell phone's activity. On the other hand, historical cell site data . . . is information obtained after the cell phone's activity is recorded using the cell companies' records of that activity.

Wells, *Ping!*, 33 St. Louis U. Pub. L. Rev. at 490. *See also United States v. Myles*, No. 5:15-CR-172-F-2, 2016 WL 1695076, at *6 (E.D.N.C. Apr. 26, 2016) ("Historical cell site data refers to the acquisition of cell site data for a period retrospective to the date of the order... Real-time data, on the other hand, ... shows where the phone is presently located through the use of GPS or precision location data."); *United States v. Jones*, 908 F. Supp. 2d 203, 207 (D.D.C. 2012) ("The information is identical regardless of whether it is obtained historically or prospectively." (internal quotations omitted)).

In this proceeding, we are concerned only with historical cell site data. As noted above, cell phone service providers create and maintain records of cell phone interaction with cell phone towers. *See United States v. Johnson*, No. 14-CR-00412-THE, 2015 WL 5012949, at *6 (N.D. Cal. Aug. 24, 2015) ("Carriers keep records of these connections for each customer... This is referred to as 'historical cell site' data, and can be used to identify a customer's general location at a given time."). It has been observed that a "cell service provider collects and stores historical cell site data for its own business purposes, perhaps to monitor or optimize service on its network or to accurately bill its customers for the segments of its network that they use." *In re U.S. for Historical Cell Site Data*, 724 F.3d 600, 611-12 (5th Cir. 2013). "That same information makes it possible to identify at least the general location of a cell phone at the time the phone connects to a tower." *State v. Simmons*, 143 A.3d 819, 825 (Me. 2016).

It has been recognized that "courts that have been called upon to decide whether to admit historical cell-site analysis have almost universally done so." United States v. Hill, 818 F.3d 289, 297 (7th Cir. 2016). However, "courts that have addressed whether testimony which purports to locate people based on cellular data is lay or expert testimony are divided." Collins v. State, 172 So. 3d 724, 739 (Miss. 2015). In a majority of reported cases, experts were used to provide testimony of historical cell site data; while in a minority of reported cases, lay testimony was allowed in some circumstances. For example, the Seventh Circuit has indicated "that testimony about historical cell-site analysis is expert testimony." United States v. Hill, 818 F.3d 289, 296 (7th Cir. 2016). See also United States v. Reynolds, 626 F. App'x 610, 614 (6th Cir. 2015) (expert used to testify about historical cell site data). Accord United States v. Schaffer, 439 Fed. Appx. 344, 347 (5th Cir. 2011); United States v. Yeley-Davis, 632 F.3d 673, 684 (10th Cir. 2011); United States v. Frazier, No. 2:15-CR-044-GMN-GWF, 2016 WL 4994956, at *3 (D. Nev. Sept. 16, 2016); United States v. Elima, No. SACR 16-00037-CJC, 2016 WL 3546584, at *2 (C.D. Cal. June 22, 2016); United States v. Serrano, No. 16-CR-169 (WHP), 2016 WL 3745648, at *3 (S.D.N.Y. June 9, 2016); United States v. Cervantes, No. 12-CR-00792-YGR, 2015 WL 5569276, at *2 (N.D. Cal. Sept. 22, 2015); United States v. Johnson, No. 14-CR-00412-THE, 2015 WL 5012949, at *6 (N.D. Cal. Aug. 24, 2015); United States v. Pembrook, 119 F. Supp. 3d 577, 596 (E.D. Mich. 2015); United States v. Freeman, No. 06-20185, 2015 WL 2062754, at *4 (E.D. Mich. May 4, 2015); United States v. Mack, No. 3:13-CR-00054 MPS, 2014 WL

6474329, at *2 (D. Conn. Nov. 19, 2014); *Jimenez v. Walker*, No. C 08-05489 YGR PR, 2012 WL 4051124, at *17 (N.D. Cal. Sept. 13, 2012); *United States v. Evans*, 892 F. Supp. 2d 949, 957 (N.D. III. 2012); *United States v. Allums*, No. 2:08-CR-30 TS, 2009 WL 806748, at **2-3 (D. Utah Mar. 24, 2009); *People v. Hollinquest*, 190 Cal. App. 4th 1534, 1544, 119 Cal. Rptr. 3d 551, 559 (2010); *Pullin v. State*, 272 Ga. 747, 748-49, 534 S.E.2d 69, 71 (2000); *People v. Fountain*, 62 N.E.3d 1107, 1126 (III. App. Ct. 2016); *State v. Benson*, No. 15-1895, 2016 WL 7393891, at *3 (Iowa Ct. App. Dec. 21, 2016); *State v. Marinello*, 49 So. 3d 488, 509 (La. Ct. App. 2010); *Wilder v. State*, 991 A.2d 172, 179 (Md. Ct. Spec. App. 2010); *Burnside v. State*, 352 P.3d 627, 637 (Nev. 2015); *People v. Swint*, 20 N.Y.S.3d 294 (N.Y. Crim. Ct. 2015); *Commonwealth v. Latham*, No. 2702 EDA 2010, 2014 WL 10979805, at *22 (Pa. Super. Ct. Mar. 17, 2014); *Holder v. State*, No. 05-15-00818-CR, 2016 WL 4421362, at *16 (Tex. App. Aug. 19, 2016). The court in *Collins, supra*, explained the necessity for requiring experts to inform the jury of historical cell site data:

[W]hile the technology underlying cell identification is not extremely difficult to understand, utilizing cell identification to locate a person does require specialized knowledge regarding such technology–namely, knowledge regarding the various antennas on cell sites and the cell site coverage range and how those interact to determine the entire area in which a cell phone user might have been located while making a cell phone call. Illustrating that cell identification requires specialized knowledge are the facts that Detective Sims had to take a sixteen-hour course on how to use cellular technology in law enforcement and that he used specialized software acquired at this course to determine the locations of Collins and Jenkins on the night of Jenkins's murder. *Collins*, 172 So. 3d at 741. A commentator addressed the issue more thoroughly as follows:

[The court in Wilder v. State, 991 A.2d 172 (Md. Ct. Spec. App. 2010)] was correct to draw a line forcing courts to admit cellular records only through expert testimony. This is true for two significant reasons: first, the technology is specialized, scientific, and technical, and therefore is expert testimony; and second, lay witnesses are without sufficient information for the defense to cross-examine. First, and most significantly, tracking defendants through cellular records and cell site data is in fact specialized, scientific, and technical information. Cellular towers themselves are highly technical and are advancing. Furthermore, how cell towers work to create historical cell site data, and therefore a location of a caller, is even more complicated and requires a fundamental understanding of cellular towers' functionality. While many lay persons own cell phones, it is unlikely they understand how cellular signals are transmitted to cell towers. Further, it is unlikely an average person either knows or understands how that cell tower transmits and records the signal. Finally, the average cell phone user is certainly not going to know the vast list of factors influencing how their cell phone pings to a specific tower.

Wells, Ping!, 33 St. Louis U. Pub. L. Rev. at 516.

A case illustrating the rejection of the use of lay testimony to provide the jury with evidence of historical cell site data is *State v. Patton*, 419 S.W.3d 125 (Mo. Ct. App. 2013). In *Patton*, the defendant was convicted of first-degree murder, first-degree burglary, and armed criminal action. On appeal, the defendant argued that the trial court committed reversible error in allowing the prosecutor to use a lay witness to provide historical cell site data. The appellate court found that it was error to use lay testimony, but that the error was harmless in light of the evidence of the defendant's guilt. The opinion addressed the need

for expert testimony to inform the jury of historical cell site data as follows:

We recognize that cellular phones are a subject of everyday experience, and that little technical knowledge is required to understand that a phone will connect to the cell site with the strongest signal. Yet to opine, as the State's lay witness did here, that the strongest signal generally comes from the closest site is misleadingly simple. In fact, it is impossible to determine from historical cell site data alone that a phone was closest to the cell site processing the call, and at best these records only indicate that a phone was located somewhere within a cell site's geographic coverage area. A cell phone may be in range of several sites simultaneously, and a multitude of factors influence which site among them will have the strongest signal. The technical features of the cell site, geography, and the workings of the cell phone itself may result in connections from as far away as thirty miles or as close as thirty feet. Thus, knowing the location of the cell site to which a phone connects permits an expansive range of inferences as to where the phone actually is. We think that drawing such an inference without the aid of specialized experience or knowledge in the field of cellular communications comes too close to mere speculation.

Here, the State introduced evidence of the locations of the cell sites used by Patton's phone in order to place Patton near the crime scene at the time of the shootings.... To narrow down the area in which Patton's phone must have been to have connected to a particular cell site—i.e., to proffer testimony actually probative of whether Patton was in one area rather than the other—required analysis of the many variables that influence cell site signal strength. Such analysis amounts to opinion testimony that is properly the province of an expert. Thus, we hold that the trial court erred by failing to require an expert witness to testify as to the location of Patton's phone in relation to the cell sites to which it connected.

Patton, 419 S.W.3d at 131-32 (citations omitted).

The decision in *State v. Payne*, 440 Md. 680, 104 A.3d 142 (2014), addressed the complexity of historical cell site data analysis. In *Payne*, two co-defendants were tried together and convicted of first-degree felony murder, kidnapping, and use of a handgun in the commission of a felony. One of the issues raised on appeal was that a police officer rendered an opinion as a lay witness as to the location of the cell towers through which the defendants' cell phones connected on the night of the murder and their location relative to the crime scene. The defendants argued that this opinion had to be rendered by an expert. The appellate court agreed as follows:

> In the present case the State asserts that . . . Detective Edwards did not render an opinion as to the location of Payne's and Bond's cell phones and that he merely read Sprint Nextel's business records and followed its directions in interpreting the data. We disagree. Detective Edwards engaged in a process to derive his conclusion that Payne's and Bond's cell phones communicated through the Menlo Park and Balmoral Towers cell towers that was beyond the ken of an average person; his conclusions regarding the communication path also required that he be qualified as an expert witness. Although the State urges that a "layperson with the same phone records and instructions could have determined the location of the cell sites". . . , additional training and experience were required to parlay the process from which Detective Edwards derived the communication path of each call.

> A Call Detail Record contains a string of data unfamiliar to a layperson and is not decipherable based on "personal experience".... Detective Edwards, however, apparently relied on his experience to hone in on the entries in the Call Detail Records "pertinent" to the case. To understand, furthermore, the technical language of the entries in a Call Detail Record so that he could eliminate "extraneous" data in the records, Detective

Edwards had to have relied on "knowledge, skill, experience, training or education." . . .

Once Detective Edwards had culled the records, he further relied on his knowledge and experience to understand the significance of a "LAC ID" and "Cell ID" and how they related to identifying a particular cell tower amongst a cellular provider's records. Detective Edwards's testimony was that of an expert, because Call Detail Record entries are not entries typical of a cell phone bill where a juror could "rely upon his or her personal experience" to understand their meaning....

Detective Edwards needed to be qualified as an expert in order to also opine regarding the Menlo Drive and Balmoral Towers cell towers. Using the data he derived from his experience and expertise, Detective Edwards urged that he had determined the location of the cell towers through which Payne's and Bond's cell phone connected on the night of the murder and their location relative to the crime scene, which only an expert could derive, based upon the fact that a cell phone may connect to several towers during a call which may not be recorded.

Payne, 440 Md. at 700-02, 104 A.3d at 154-55 (footnote and citations omitted).

As previously noted, a few courts have treated historical cell site data analysis as proper lay testimony under certain conditions. *See, e.g., United States v. Feliciano*, 300 F. App'x 795 (11th Cir. 2008) (expert not required); *Perez v. State*, 980 So. 2d 1126 (Fla. Dist. Ct. App. 2008) (same); *State v. Fleming*, 286 P.3d 239 (Kan. Ct. App. 2012) (same); *State v. Robinson*, 272 Neb. 582, 724 N.W.2d 35 (2006) (same), *abrogated on other grounds by State v. Thorpe*, 280 Neb. 11, 783 N.W.2d 749 (2010); *State v. Daniel*, 57 N.E.3d 1203 (Ohio 2016) (same). The decision in *United States v. Evans*, 892 F. Supp. 2d 949 (N.D. III. 2012), provides a good example of the circumstances in which some courts permit a lay witness to testify about historical cell site data. In *Evans*, the prosecution sought to call an FBI special agent to testify about the operation of cellular networks and how to use historical cell site data to determine the general location of a cell phone at the time of a particular call. The agent relied upon what is called the "granulization" theory¹² to opine that phone calls placed from the defendant's cell phone could have come from the building where the victim was held for ransom. The trial court held an evidentiary hearing to determine whether the proposed evidence and analysis were admissible as expert testimony or lay testimony. In determining the admissibility of the proposed testimony, the trial court ruled as follows:

Lay witness testimony is admissible under Rule 701 when it is rationally based on [a] witness's perception or based on a process of reasoning familiar in everyday life.... Understanding how the aforementioned factors affect a cell phone's ability to connect a particular tower, however, cannot be said to be within the perception of the untrained layman. Rather, this type of understanding demands scientific, technical, or other specialized knowledge of cellular networks and results from a process of reasoning which can be mastered only by specialists in the field.... Special Agent Raschke may therefore provide lay opinion testimony concerning (1) the call data records obtained for Evans's phone and (2) the location of

¹²See United States v. Pembrook, 119 F. Supp. 3d 577, 596-97 (E.D. Mich. 2015) ("[T]he theory of granulization involved (1) identifying the cell tower, sector, and sector-coverage direction used by the phone during the relevant time period; (2) estimating the range of each [sector's] coverage based on the proximity of the tower to other towers in the area, and (3) predicting where the coverage area of one tower will overlap with the coverage area of another." (internal quotations and citation omitted)).

cell towers used by Evans's phone in relation to other locations relevant to the crime; but if he wishes to testify concerning (1) how cellular networks operate, i.e., the process by which a cell phone connects to a given tower or (2) granulization theory he must first meet the demands of Rule 702 and *Daubert*.

Evans, 892 F. Supp. 2d at 953-54 (footnotes, internal quotations, and citations omitted).

It has been recognized that the decision in *Evans*, and the position of courts that follow *Evans*, attempts to make a distinction "between simply conveying the cellular records to the jury and explaining what those records then mean." Wells, *Ping!*, 33 St. Louis U. Pub. L. Rev. at 511. *See State v. Wyman*, 107 A.3d 641, 648 (Me. 2015) ("Specialized knowledge is not necessary . . . when a witness conveys only the factual information displayed on cell phone billing records."). We reject the minority approach to this issue because lay "witnesses . . . not only read the records to the jury, but the[y] dr[a]w the ultimate conclusion that the records could show the caller was in a specific location[.]" Wells, *Ping!*, 33 St. Louis U. Pub. L. Rev. at 511. Consequently, we now hold that a witness must be qualified as an expert under Rule 702 of the West Virginia Rules of Evidence in order to present evidence of cell phone historical cell site data.

In the instant proceeding, as previously noted, the State called Deputy Christian to use historical cell site data to inform the jury of the location of cell phones belonging to Ms. Johnson, Mr. Smith, Mr. Garcia, Mr. Adams, and Ms. Grant, in relation to the crime scene at the time of the murder. The complexity of Deputy Christian's testimony may be

gleaned from the following responses to questions on direct examination:

Q. Are all these records from a particular carrier?

A. Yes, ma'am, I believe all records in this case were obtained through Sprint PCS, ma'am.

• • • •

Q. When Sprint provides that information to you, do they provide certain data so we can understand what those phone messages mean or how they relate to one another?

A. When we do a search warrant for cellular records, we typically will ask for a couple of additional items. We will typically ask for a definition page. As cell phone companies change definitions in their record keeping, we want to get the most current definition page as it related to the case we are working at the time.

• • • •

Q. So the jury can understand, what really is the definition page?

A. Basically, it outlines how to interpret their call detail reports. It breaks down specifically things that you will see on the call detail report. It is kind of like a glossary of terms. Then it also has other information contained in there as far as where the tower switches may be located, the NEID numbers, the vendor, that sort of thing, is also attached, I believe.

Q. In this instance, I am going to ask you just the records to identify them at this point, did you also ask for—let me get this correct, did you also ask for NEID number?

A. Ma'am, the NEID number I believe comes as part of the cellular records one of the things that the company uses as internal tracking as far as their records are concerned.

• • • •

Q. The phone records in this case specifically referring to Tulsa Johnson's phone, did you notice anything in general about—let me ask you this, are there references to text messages in those records?

A. Yes, ma'am. Phone records, anything with a zero duration in the time portion of it, is generally to *my training and experience* a text because there's no actual voice time to print on the record. It just shows that there is zero duration which typically is a text message.

• • • •

Q. Were you able to determine in the records of Mr. Garcia, Mr. Smith and Ms. Johnson as to whether or not what time zone was used for those records?

A. Actually, ma'am, I had to contact Sprint specifically for that question. I was advised by personnel from Sprint that voice data, actual talking on the phone, is recorded in Central Standard Time and that text messaging is recorded in Eastern Standard Time.

Q. In this instance referring specifically to Ms. Johnson's telephone, on the date of September the 14th of 2014, did you notice anything that was different in her phone records from the totality of the records?

A. Yes, ma'am. If you could give me one moment here.

Q. Sure.

A. Yes, ma'am. From beginning on Page 1, I believe I see one inbound call and the remainder are texts. On page 2 it

appears to be all texts. On page 3 it's all texts except for I believe there is a couple of inbound phone calls here. From the time period of 11:33 to 12:53 there is no activity on the phone.

• • • •

Q. Now, I notice that Ms. Johnson's phone has another call that you believe is relevant to this case at some point immediately after that that was not to Ms. Grant; is that right?

A. At 10:56:48, ma'am, there was a text I believe to Mr. Smith's number.

Q. Then what happens?

A. There is another period of texts to numbers that weren't related to our case. Again, at 11:09 there was a text from Mr. Smith. At 11:10:22 there was a text to him. There was another text which wasn't relevant. Then from 11:10:31 to 11:13:38 there is a block of exchanges between Mr. Smith and Ms. Johnson.

• • • •

Q. Now, approximately you went through these phone records and you were interested in them for one other reason; is that correct?

A. Yes, ma'am.

Q. Tell us what that is, please.

A. With phone records, in conjunction with the additional information that we received from the phone companies, we can use the NEID and repoll numbers to determine towers when it comes to conversations, voice conversations, and we can with those cell phone records determine where the towers are, has GPS coordinates of the tower, and the tower identifier it shows the sector with the specific tower that was hit on the phone records. Using that we

can then request additional information from the company and we can map where the towers were at and the side of the tower which a phone touched in order to make a call.

• • • •

Q. Now, one of the series of records that we talked about in this case you started describing to the jury is the NEID records. What are NEID records?

A. Ma'am, that's Sprint's definition page. It says NEID this reflects which network element handled the call.

Q. Now, as I understand it you have done some training and things related to how to deal with that data; is that correct?

A. I have had a couple training classes, yes, ma'am, the latest of which was a cell phone mapping course.

• • • •

Q. How do we know looking at this general thing, doesn't appear to be any dates and times on it, how do we know this NEID matches up with any of the phones that we are talking about here today?

A. When you look at the records that we have, ma'am, when it comes to the voice calls, they have, for example, I have Mr. Smith's record in front of me, at 12:53:12 between that time and 12:53:45 it shows that there was a duration of a 33 second call. *Based on my training* and information that I have received, the NEID of the tower related is 63 repoll number 120 and under first cell it shows 30283. In this case based on the definitions page that would indicate to me that it was sector three of tower 283. The first cell and last cell typically would depict what tower was contacted or accessed first and the second cell would be what tower was contacted or accessed last during the duration of the call. Due to the short duration of the call the same tower was contacted first and last in this case.

. . . .

Q. Now, one of the other records that I understand that you are required to look at is something that is called beamwidth?

A. Yes, ma'am.

Q. What's beamwidth?

• • • •

A. I don't think it's reflected in the definition page, as I recall. Based on the information that I received, the beamwidth is—an engineer can speak more in depth about this—basically from the tower, the width of the signal that one side of it would emit, so each side has its own specific beamwidth.

Q. How do you tell that from the records that we have?

A. Ma'am, once we determine which towers that we specifically need beamwidth from, then there had to be an additional search warrant issued for those records to the company. The company then returned with the sector I believe it had without looking directly back at it the sector, Azimuth and the beamwidth of each side of each tower that we requested.

• • • •

Q. You were able to get and perform or to map in some instances where these towers were located; is that correct?

A. That is correct, ma'am.

. . . .

Q. Did you also draw for us a map of where those cell towers were located?

A. I did, ma'am.

• • • •

Q. Now, this particular tower that we are representing, you have taken a photograph of that; is that right?

A. Yes, ma'am. *Part of my training* whenever we plot towers on a map, we also go out and physically locate the tower just to make sure that the information all coincides with each other. Typically, I will take a photograph of that tower as an exhibit, yes, it does actually exist.

• • • •

Q. How do you know that tower longitudinally and latitudely that tower relates to the cellular phone calls?

A. Ma'am, I will have to flip back and forth, so I apologize. On the cellular record, ma'am, itself in this case, I am going to use the record for Mr. Smith, again, the same call that I believe I outlined before. It says under the first cell and last cell (302) 833-0283. By the Sprint definitions that would indicate that the first number would be the sector, the tower, which the phone call accessed, and the 0283 in this case would be the tower number. When you look at the records that we received, the towers are listed on the cell number all the way down the side. You will come down to number 283, it has an NEID of 63, the repoll of 120 which matched what is also on the record of 63 and 120. That provides me with a latitude and longitude coordinate which I program into the mapping or click into the mapping program under the define feature and it will then basically drop a pin to where that would be located. Now, I also back that up-

• • • •

Q. The next tower in this instance, where is that tower located?

A. That's an antenna that is located on the side of I believe a grain silo or some sort of farm silo and that is in

Summer Hill Subdivision adjacent to the Air National Guard base, ma'am.

Q. What time was the call received there or the text?

A. There are three calls notated on tower 283 sector three, one at 12:39 from Mr. Smith's or, I'm sorry, Mr. Garcia's phone with a received call from Ms. Grant. There was a call from Mr. Smith's phone to Ms. Grant's phone at 12:53:12 that lasted 33 seconds. Then there was a call from Mr. Smith's phone outbound at 12:53:48 that began on that tower, ma'am.

• • • •

Q. How far is that tower approximately to the site of Technology Drive, if you can estimate for us?

A. An estimation would be I would estimate less than two miles.

. . . .

Q. This next one, please.

A. That would be the tower located at tower number 14 which would be at the end of Washington Street between Tabler Station and Inwood, ma'am.

Q. Again, what time was that call placed or is there a call noted there?

A. Tower 14 sector three advised Mr. Garcia's phone received a call at 11:52 a.m. from Ms. Grant's cell phone.

Q. And the estimated time of the murder is what?

A. Between–again, I'm sorry I have a lot of numbers rolling around in my head, let me look back, between 12:45 and 1:15.

Q. The murder site in this particular instance is how far from that tower, approximately?

A. I would say approximately no more than five miles.

Q. That is 11:52; is that correct?

A. Yes ma'am. Actually, it would be between—it would actually be approximately three miles because between Exit 5 and Exit 8 is a three mile range and that tower is probably a half mile or so from Exit 5.

Q. That map is the location of those towers, that's what we have mapped out for the jury today?

A. That's correct.

(Emphasis added).

The State argues that Deputy Christian's testimony was admissible lay testimony because the parties stipulated to the introduction of the cell phone records. The stipulation, as read to the jury by the trial court, merely provided that "all cellular call records and NEID cell phone tower records are admitted without objection and may be used by any party without appearance of a records custodian." This stipulation does not address how the information contained in those records would be presented to the jury. That is, by lay testimony or expert testimony. The State characterizes Deputy Christian's testimony about the historical cell site data as merely testimony "to facts as gleaned from the stipulated to records." This characterization of Deputy Christian's testimony is an understatement. On at least four occasions Deputy Christian informed the jury that he was able to testify about the stipulated records based upon his "training." In other words, Deputy Christian implicitly admitted that he could not testify about historical cell site data without first having "a couple [of] training classes . . . , the latest of which was a cell phone mapping course."

We need not belabor the point. Consistent with our holding, we find that the trial court committed error in permitting Deputy Christian to testify about historical cell site data as a lay witness. It is abundantly clear that Deputy Christian's testimony was "based on scientific, technical, or other specialized knowledge within the scope of Rule 702." Rule 701(c). *See* 2 Louis J. Palmer, Robin Jean Davis & Franklin D. Cleckley, *Handbook on Evidence for West Virginia Lawyers* § 701.05, at 25 (6th ed. 2015) ("Rule 701 forbids the admission of expert testimony dressed in lay clothing[.]"). Although we find error regarding such testimony, the record is clear in demonstrating that the error was harmless beyond a reasonable doubt. *See Patton*, 419 S.W.3d at 132 ("Thus, we cannot say that Patton suffered prejudice from the admission of the cell site location evidence.").

In Syllabus point 7 of *Torrence v. Kusminsky*, 185 W. Va. 734, 408 S.E.2d 684 (1991), we explained that "[a] judgment will not be reversed because of the admission of improper or irrelevant evidence when it is clear that the verdict of the jury could not have been affected thereby." *Accord State v. McKinley*, 234 W. Va. 143, 161, 764 S.E.2d 303, 321 (2014). We have summarized our harmless error analysis as follows:

Even when a trial court has abused its discretion by admitting or excluding evidence, the conviction must be affirmed unless a defendant can meet his or her burden of demonstrating that substantial rights were affected by the error. . . . In other words, a conviction should not be reversed if we conclude the error was harmless or unimportant in relation to everything else the jury considered on the issue in question. . . . Instead, this Court will only overturn a conviction on evidentiary grounds if the error had a substantial influence over the jury. This reasoning suggests that when the evidence of guilt is overwhelming and a defendant is allowed to put on a defense, even if not quite so complete a defense as he or she might reasonably desire, usually this Court will find the error harmless. If, however, the error precludes or impairs the presentation of a defendant's best means of a defense, we will usually find the error had a substantial and injurious effect on the jury. When the harmlessness of the error is in grave doubt, relief must be granted. . . .

State v. Blake, 197 W. Va. 700, 705, 478 S.E.2d 550, 555 (1996) (internal quotations and

citations omitted). We have stated the test for harmless error succinctly as follows:

Where improper evidence of a nonconstitutional nature is introduced by the State in a criminal trial, the test to determine if the error is harmless is: (1) the inadmissible evidence must be removed from the State's case and a determination made as to whether the remaining evidence is sufficient to convince impartial minds of the defendant's guilt beyond a reasonable doubt; (2) if the remaining evidence is found to be insufficient, the error is not harmless; (3) if the remaining evidence is sufficient to support the conviction, an analysis must then be made to determine whether the error had any prejudicial effect on the jury.

Syl. pt. 2, State v. Atkins, 163 W. Va. 502, 261 S.E.2d 55 (1979).

In the instant proceeding, the evidence that the State improperly introduced through Deputy Christian inferentially informed the jury that Ms. Johnson was in the vicinity of the area where Mr. Garcia's body was found. No other reasonable conclusion could have been reached by the jury based upon Deputy Christian's historical cell site data analysis. However, this evidence added nothing to the case that the jury did not learn from Ms. Grant and Mr. Adams.

During the testimony of Ms. Grant, she informed the jury that she was texting and talking to Mr. Garcia while she was riding with Ms. Johnson. Ms. Grant testified that Ms. Johnson's vehicle and Mr. Garcia's vehicle were both parked at ROCS gas station as the initial meeting place. Ms. Grant informed the jury that Ms. Johnson and Mr. Garcia were inside Mr. Adams' apartment together. The jury also was informed by Ms. Grant that Ms. Johnson and Mr. Smith left the apartment and accompanied Mr. Garcia to his vehicle. During direct examination by the State, Ms. Grant informed the jury of what happened when Ms. Johnson and Mr. Smith returned to Ms. Johnson's vehicle:

Q. What happened when they came back? Did [Mr. Garcia] come back with them?

- A. No.
- Q. Did they come back in [Mr. Garcia's] truck?
- A. No.
- Q. What happened when they got back?

- A. She said she killed him.
- Q. Who said?
- A. Tulsa.
- Q. What exactly did—
- A. She said she killed that mother fucker.

. . . .

Q. Were they in a vehicle of some sort?

A. No, they were on foot.

Q. Were they walking, running, what were they doing?

A. Running.

Q. And you said Tulsa made that comment, did [Mr. Smith] make a comment at all?

A. No.

Q. Did he say anything?

A. No, he was just wiping the gun off, and he had it like pointed, he was behind me, and I asked him, please don't point that gun towards me, and he said, it's not loaded, there's no bullets in there.

Q. Do you remember what the gun looked like?

A. I only seen the tip of it for one hot second. I turned around to see what I could see, and that's all I seen was a red bandana with him wiping it off.

Q. Do you know where the gun went?

A. No, it went with them, that's all I know.

Q. At some point did Michael Garcia come back at that point?

A. No.

Q. Did you ask where Michael was?

A. I didn't have to because they were talking about it.

Q. What do you mean, they were talking about it?

A. She-they was talking about cleaning up everything, there was nothing left behind, they said they cleaned up all of the evidence.

- Q. Then what happened.
- A. They dropped me off.

As previously noted, Mr. Adams testified that Ms. Johnson was in his apartment with Mr. Garcia, Mr. Smith, and Ms. Grant. Mr. Adams testified that Ms. Johnson told him that she was going to take Mr. Garcia's drugs from him. Mr. Adams stated that he saw Ms. Johnson and Mr. Smith get into Mr. Garcia's vehicle, and that they drove off in the direction of where Mr. Garcia's body was found. Mr. Adams informed the jury that within a half hour or so after they left his apartment, he saw Mr. Garcia's body lying on a gravel road near his apartment. In view of the evidence by Ms. Grant and Mr. Adams, we have no doubt that the jury would have found Ms. Johnson guilty beyond a reasonable doubt without the improperly admitted historical cell site data analysis by Deputy Christian. Moreover, the historical cell site data analysis was, at best, cumulative of eyewitness testimony by Ms. Grant and Mr. Adams as to where Ms. Johnson was in relation to the crime scene. Therefore, the evidence could not have had any prejudicial impact on the jury.

B. The Prosecutor Made Remarks Regarding DNA Evidence During Closing Arguments

The next issue raised by Ms. Johnson is that the prosecutor made improper remarks about DNA evidence that implicated Mr. Smith. The State contends that the prosecutor's comments about the DNA evidence were proper. The State also notes that Ms. Johnson does not have standing to raise the issue, and she failed to object to the argument during the trial.

We have held that "[a] judgment of conviction will not be set aside because of improper remarks made by a prosecuting attorney to a jury which do not clearly prejudice the accused or result in manifest injustice." Syl. pt. 5, *State v. Sugg*, 193 W. Va. 388, 456 S.E.2d 469 (1995). In Syllabus point 6 of *Sugg*, we set out the following test for reviewing comments by a prosecutor:

Four factors are taken into account in determining whether improper prosecutorial comment is so damaging as to require reversal: (1) the degree to which the prosecutor's remarks have a tendency to mislead the jury and to prejudice the accused; (2) whether the remarks were isolated or extensive; (3) absent the remarks, the strength of competent proof introduced to establish the guilt of the accused; and (4) whether the comments were deliberately placed before the jury to divert attention to extraneous matters.

Id.

In the instant case, the State presented expert testimony that DNA found on Mr.

Garcia's vehicle was "consistent with the DNA profile of Vincent Smith." The expert opined

that Mr. Smith could not "be excluded as the source of the DNA identified on

the ... sample." Based upon what can be reasonably inferred from Ms. Johnson's brief, she

complains that the following statement by the prosecutor was improper:¹³

Remember one thing about the DNA, DNA sometimes is a great thing in a case and sometimes it's confusing. It's not confusing here for this reason. We know Vincent Smith was in contact with Michael Garcia's car. How do you know that? . . . In this instance, the DNA expert in this case cannot exclude Vincent Smith. She said he had nine out of 15 loci, remember that, she said that occurs in 1.69 billion people. What a coincidence.

¹³The brief is simply not clear on the exact language Ms. Johnson complains about.

Ms. Johnson contends that the above comment improperly informed the jury that the DNA evidence "identified [Mr. Smith] because one in 12.3 billion was too remote to be a coincidence."¹⁴

Assuming, for the sake of argument, that Ms. Johnson has standing to raise this issue,¹⁵ she waived the issue by failing to object at the trial court level. Our law is quite clear in holding that, "[w]ith regard to the closing arguments statements to which defense counsel did not object, . . . the absence of an objection at trial waives the right to complain on appeal." *State v. Hager*, 204 W. Va. 28, 40, 511 S.E.2d 139, 151 (1998). *See also State v. Garrett*, 195 W. Va. 630, 643 n.22, 466 S.E.2d 481, 497 n.22 (1995) ("Appellant's trial counsel failed to object . . . to the State's closing argument, thereby failing to preserve the error, if it was error, for appellate review."). In Syllabus point 3 of *O'Neal v. Peake Operating Co.*, 185 W. Va. 28, 404 S.E.2d 420 (1991), we explained that "[w]here objections were not shown to have been made in the trial court, and the matters concerned were not

¹⁴The prosecutor appears to have misspoken in referring to "1.69 billion people." The DNA expert opined that the DNA match would "occur randomly in a population one in 12.3 billion unrelated individuals."

¹⁵See People v. Jenkins, 22 Cal. 4th 900, 965, 997 P.2d 1044, 1089 (2000) ("A defendant lacks standing to complain of the violation of a third party's Fifth Amendment privilege against self-incrimination."); *Commonwealth v. Albert*, 51 Mass. App. Ct. 377, 379, 745 N.E.2d 990, 993 (2001) ("Albert's appeal can be disposed of simply on the basis that he has no standing to raise the invalidity of Shaw's arrest and the seizure of drugs."); *State v. Valenti*, 772 A.2d 127, 130 (R.I. 2001) ("Thomas, of course, lacks standing to raise any alleged violation of the codefendant Joseph's constitutional rights.").

jurisdictional in character, such objections will not be considered on appeal." Moreover, "[g]enerally, failure to join in the objection or motion of a codefendant constitutes a waiver of the issue on appeal." People v. Wilson, 44 Cal. 4th 758, 793, 187 P.3d 1041, 1062 (2008) (internal quotations and citation omitted). See also Evans v. State, 174 Md. App. 549, 566, 922 A.2d 620, 630 (2007) ("[A] bedrock principle of Maryland law is that a defendant may not rely on an objection made by a codefendant for the purpose of raising an appeal as to that issue."); State v. Williams, No. 21840, 2004 WL 1836731, at *4 (Ohio Ct. App. Aug. 18, 2004) ("[R]egardless of whether the State's comments during closing argument shifted the burden of proof, this Court finds that Appellant has waived this argument on appeal. Although Mr. Riley's trial counsel timely objected after the State made these comments, the record shows that Appellant's trial counsel did not object. As pointed out by the State in their appellate brief, this Court has held that a co-defendant's objection does not preserve this issue on appeal.").¹⁶ We consequently find that any objections Ms. Johnson has to the statements made by the prosecutor during closing argument were waived through her failure to object at the trial.¹⁷

¹⁶It should be noted that in limited circumstances appellate courts allow a defendant to raise an issue that was objected to only by a co-defendant. *See United States v. Baker*, 458 F.3d 513, 517 (6th Cir. 2006) ("[T]he government acknowledges that in certain circumstances courts have excused such a failure to object in light of an objection by a codefendant."); *United States v. Hernandez*, 921 F.2d 1569, 1582 (11th Cir. 1991) ("[W]e assume that the objection to the testimony is preserved for both Rogers and Gilmore, although only Tape's counsel, Baranowicz, objected at trial.").

¹⁷We note that Mr. Smith objected to the prosecutor's closing argument on the (continued...)

IV.

CONCLUSION

In view of the foregoing we affirm Ms. Johnson's conviction and sentence for

felony murder and conspiracy to commit robbery.

Affirmed.

¹⁷(...continued)

DNA issue and raised the issue in his appeal, which was heard by the Court on the same day as Ms. Johnson's appeal. We found no merit to the issue as properly raised in Mr. Smith's appeal. *See State v. Smith*, No. 16-0264, ____ W. Va. ___, ___ S.E.2d ____ (March 1, 2017). Consequently, even if Ms. Johnson had properly preserved the closing argument DNA issue, we would have ruled against her on the merits.