

2023 IL 127854

**IN THE
SUPREME COURT
OF
THE STATE OF ILLINOIS**

(Docket No. 127854)

THE PEOPLE OF THE STATE OF ILLINOIS, Appellee, v.
RYAN J. HEINEMAN, Appellant.

Opinion filed January 20, 2023.

JUSTICE OVERSTREET delivered the judgment of the court, with opinion.

Chief Justice Theis and Justices Neville, Holder White, and Cunningham, concurred in the judgment and opinion.

Justices Rochford and O'Brien took no part in the decision.

OPINION

¶ 1

Defendant, Ryan J. Heineman, was the driver in a single-vehicle accident that resulted in the death of his passenger, Tanya McDonough. Following a jury trial in the circuit court of McHenry County, defendant was convicted of two counts of aggravated driving under the influence of alcohol (aggravated DUI) (625 ILCS

5/11-501(a)(1), (2), (d)(1)(F) (West 2016)). The circuit court merged the aggravated DUI counts and sentenced defendant to six years in the Illinois Department of Corrections.

¶ 2 At defendant’s trial, Marc Fisher—one of the officers who investigated defendant’s case—testified that he was familiar with Title 20, section 1286.40, of the Illinois Administrative Code (Administrative Code) (20 Ill. Adm. Code 1286.40 (2015)) and had received training on that section throughout the years. Fisher explained that section 1286.40 provides a mathematical formula for converting blood serum alcohol concentration into a whole blood equivalent. Fisher testified—over objection—that he learned of defendant’s blood serum alcohol concentration test results and could apply section 1286.40’s conversion formula to those results. He explained that, to do this, “[y]ou would divide the blood serum level, which in this case is .155, by 1.18 to get a [whole blood alcohol concentration of] [.]131,” which Fisher confirmed exceeds the legal limit for DUI in Illinois.

¶ 3 On appeal, defendant maintained, *inter alia*, that the State failed to prove his whole blood alcohol concentration was at or above 0.08 grams per 100 milliliters of blood because it relied on Fisher’s lay testimony concerning the conversion factor in section 1286.40 to convert the results of his blood serum alcohol concentration test into its whole blood equivalent. 2021 IL App (2d) 190689, ¶ 1. The appellate court concluded that the circuit court did not abuse its discretion by allowing Fisher to testify about his training and experience with the conversion factor and its application to convert defendant’s blood serum alcohol concentration into a whole blood equivalent. *Id.* Accordingly, the appellate court affirmed defendant’s conviction, but it found the circuit court abused its discretion in denying defendant’s posttrial motion to substitute counsel and, thus, vacated defendant’s sentence and remanded for new posttrial proceedings including, if necessary, sentencing. *Id.* We now affirm in part and reverse in part the judgment of the appellate court.

¶ 4

BACKGROUND

¶ 5

On August 11, 2016, defendant was charged, by indictment, with two counts of aggravated DUI (625 ILCS 5/11-501(a)(1), (2), (d)(1)(F) (West 2016)). Count I alleged that on or about June 26, 2016, defendant committed the offense of

aggravated DUI by knowingly driving a motor vehicle while the alcohol concentration in his blood was 0.08 or more, in violation of section 11-501(a)(1) of the Illinois Vehicle Code (Vehicle Code) (*id.* § 11-501(a)(1)) and, while doing so, was involved in a motor vehicle accident that proximately caused Tanya's death, in violation of section 11-501(d)(1)(F) of the Vehicle Code (*id.* § 11-501(d)(1)(F)). Count II alleged that on or about June 26, 2016, defendant committed the offense of aggravated DUI by knowingly driving a motor vehicle while under the influence of alcohol, in violation of section 11-501(a)(2) of the Vehicle Code (*id.* § 11-501(a)(2)) and, while doing so, was involved in a motor vehicle accident that proximately caused Tanya's death, in violation of section 11-501(d)(1)(F) of the Vehicle Code (*id.* § 11-501(d)(1)(F)).

¶ 6

Jury Trial

¶ 7

The matter proceeded to a jury trial. We limit our discussion of the testimony and evidence to that which is relevant to the issues on appeal. Testimony established that defendant and Tanya were neighbors and longtime friends. On the evening of June 25, 2016, through the early morning of June 26, 2016, defendant and Tanya hosted a birthday party for Tanya at both of their homes. Guests in attendance visited back and forth between the two homes.

¶ 8

Justin Moberg testified that Tanya was his aunt and he became acquainted with defendant when he visited Tanya's home on past occasions. Justin and his friend, Zach, attended Tanya's birthday party on the dates in question. More than 20 guests attended, and all the adults were drinking alcohol. Justin testified that neither he nor Zach drank at the party because they were both minors. At the party, Justin observed defendant drinking "decent size[d] cups" of Jack Daniels mixed with Coke. Justin testified that defendant was drinking all day and he observed defendant "pour more than one drink of a very tall glass of *** Jack and Coke."

¶ 9

Justin testified that at some point during the party, Tanya had an argument with her fiancé, Thomas Rice. Tanya was agitated after the argument and left the party on foot. Justin and Zach went after Tanya because she had been drinking. Justin testified that they found her lying in a ditch along State Park Road and they helped her to her feet. Subsequently, defendant arrived in his Jeep and drove into the ditch. Justin testified that Tanya got into the Jeep and defendant pulled forward and ran

over two “decent size[d] trees.” Justin told defendant that they should not be driving because they had been drinking. Justin confirmed that defendant was driving and Tanya was in the passenger seat. Justin testified that defendant drove back to the party with Tanya in the Jeep, but he and Zach walked back “because we weren’t getting in the vehicle because they had been drinking and we knew it wasn’t safe.”

¶ 10 Justin testified that, when he and Zach returned to the party, he saw defendant and Tanya leave in the Jeep once again with defendant driving and Tanya in the passenger seat. Justin did not recall representing in his statement to police that defendant and Tanya had already left by the time he and Zach returned to the party. Justin clarified that, if he did make that statement, “it was a mistake because I did see them leave.”

¶ 11 Justin testified that, after defendant and Tanya left, efforts were made to call them to determine their whereabouts, but they did not answer their phones initially. Defendant eventually called back, indicating that there was an accident and he “was pinned behind the wheel and he could hear somebody screaming, but he didn’t know who it was.” Justin explained that defendant “had no remembrance of who was in the car with him” and that Justin’s mother, Michelle, had to remind defendant that it was Tanya. Justin testified that he and Michelle attempted, unsuccessfully, to locate defendant and Tanya. While driving home the next morning, Michelle and Justin discovered a roadblock, and officers confirmed that defendant’s Jeep had been in an accident.

¶ 12 Michelle Moberg testified that she is Justin’s mother and Tanya’s aunt. Michelle previously worked as an event coordinator and had 20 years of experience as a bartender. Michelle testified she arrived at Tanya’s birthday party around 12:30 a.m. on June 26, 2016, and observed defendant drinking a large tumbler— “[a]bout three times the size” of an average beer—containing “[a]bout a 50-50 mix” of Jack Daniels and Coke. Michelle reported that defendant “drank the one when he made me mine, and then he was pouring himself another one.” Michelle also saw defendant consume two Jell-O shots, made of Jell-O, water, and vodka combined to make alcoholic Jell-O.

¶ 13 Michelle—who observed drunk people at her job on a daily basis—opined that defendant was drunk at the party. She explained that defendant is “pretty quiet” and

“not very outspoken,” but, at the party, “[h]is eyes were glassy. He was very outgoing. Very bouncy. Very alert. Just more talkative than he normally would be.”

¶ 14 Michelle confirmed that Tanya left the party on foot around 1 a.m. after arguing with Thomas. Michelle began pursuing Tanya but gave up and returned to the party because she was tired and sore from spending the previous day packing and moving. Michelle confirmed that Justin and Zach went after Tanya, as neither of them had consumed alcohol. Michelle testified that after Justin and Zach started after Tanya, defendant said, “I’ll go.” Michelle observed defendant walk out the door, but she did not see him get into his vehicle.

¶ 15 Michelle testified that she was in the house with Thomas when Justin and Zach returned and reported that defendant and Tanya had left again. Evidence established that Michelle called defendant on his cell phone at 2:45 a.m. but he did not answer. Defendant returned Michelle’s phone call at 2:53 a.m. and told her “that they had been in an accident. He was upside down in his car. He was trapped behind the steering wheel in his seat belt and he heard a woman screaming, but there was nobody in his car so he didn’t know who it was.” Michelle testified that she told defendant that it was Tanya and, when defendant told Tanya who he was talking to, “[s]he started screaming. *** She was screaming my name. She was screaming, [‘]Sean.[’]” Michelle explained that the name “could have just been mine because the way she normally talks to me. She normally calls me Shell” and “Shell and Sean sound alike.”

¶ 16 Michelle testified that she asked defendant where they were but he did not know. Accordingly, Michelle urged defendant to get out of the Jeep and walk to a road so she could try to find them. Michelle testified that she and Thomas rode the four-wheeler up and down the road for about an hour looking for them. She also drove around the area with Justin and Zach, searching for defendant and Tanya. During the phone call with defendant, Justin instructed defendant to activate the locator on his phone so the police could ping the location. Michelle testified that defendant “must have grabbed his phone,” and he told them, “The only thing I can see on my phone is porn.” Michelle testified that it was between 3 and 4 a.m. at that point and “[w]e couldn’t look anymore. We had gone everywhere we could. *** We looked everywhere. We called the police.”

¶ 17 Michelle testified that around 5 a.m., “I had to get Justin home, so I went to go home.” En route to her home, Michelle approached Fox Lake Road and discovered a roadblock. Officers confirmed the accident and reported that defendant was transported to the hospital and Tanya had passed away. After giving statements at the police department, Michelle and Justin returned to defendant’s house. Michelle testified that defendant was “released from the hospital and had been taken to jail.” Michelle testified that, “when [defendant] came back to the house with his mom after she picked him up from jail,” he “gave me a hug and said he was sorry. He didn’t mean to.”

¶ 18 Michelle was certain that defendant was the driver of the Jeep during the accident because Tanya did not have a driver’s license. Michelle emphasized that Tanya did not drive because “[s]he doesn’t know how. She is afraid to. She would have never made it around the corner from the house.”

¶ 19 Lynette Courtney testified that she and Tanya were friends for 10 or 15 years. Lynette attended Tanya’s birthday party and observed everyone drinking at the party, including defendant and Tanya. Lynette confirmed that Tanya did not drive because “[s]he was terrified of it and didn’t have a license.”

¶ 20 Thomas testified that Tanya was his fiancée, they had been in a relationship for nine years, and they had an eight-year-old child together. Thomas confirmed that Tanya did not drive and did not have a driver’s license because “[s]he had bad anxiety when—even just the thought of driving.” Thomas testified that he and Tanya resided together, defendant lived nearby, and Tanya’s birthday party was “back and forth between our house and [defendant’s] house.” Thomas reported that he, Tanya, and defendant were drinking alcohol at the party and that Tanya and defendant were both intoxicated.

¶ 21 Thomas witnessed Tanya and defendant leave the party and saw “[defendant’s] Jeep drive past the house” around midnight or 1 a.m. Thomas attempted to call Tanya, but she did not answer. Thomas testified that defendant answered his phone around 2 a.m. and he was “joking around like nothing was happening. And I was thinking like, okay, he’s drunk, so he’s not himself.” Thomas testified that he attempted to obtain the location of defendant’s phone, “[b]ut he was joking around saying, [‘]Oh, I can look at porn on my phone.[’]” Thomas testified that defendant “said something about being in a ditch, and I tried to get him to say where they’re

at, and he still kept on joking around.” Thomas ended the phone call at that point and called 911.

¶ 22 Theresa Valez testified that she and Tanya were best friends for nearly 30 years. Theresa attended Tanya’s birthday party and confirmed that everyone at the party was drinking. Theresa testified that she knew defendant for a few years prior to the party and “it was a couple times a week we hung out.” Theresa saw defendant on occasions before the party when she believed he was under the influence of alcohol and on other occasions when he was not. Theresa testified that, when she spoke to defendant at the party, his speech was not slurred and he was acting normal. She emphasized, however, that everyone at the party—including defendant—was under the influence of alcohol. Theresa confirmed that Tanya did not have a driver’s license and Theresa drove when she and Tanya were together.

¶ 23 Steve Holtz testified that he is employed as a lieutenant firefighter paramedic for Libertyville Fire Department. At around 6 a.m. on June 26, 2016, Holtz was driving to work on Route 12 when he observed a male—later learned to be defendant—standing on “the side of the road ditch area.” Holtz reduced his speed to determine if there was a vehicle accident but, seeing none, proceeded down Route 12. Holtz testified that “a little bit up the road” he observed a body lying in the ditch alongside the road.

¶ 24 Holtz testified that he called 911 and encountered defendant, who “was confused” and responded “I don’t know” to Holtz’s questions. Holtz observed a vehicle “almost directly behind us up in a tree.” When he asked defendant where they had been, defendant replied, “A party.” Holtz testified that defendant said “that he did not know why they were out there. That they shouldn’t have left—didn’t have a reason for leaving.” Holtz testified that, by the time officers arrived, defendant had been walking and talking and “appeared to be okay at that point.”

¶ 25 Holtz testified on cross-examination that he did not observe any signs of alcohol or any problems with defendant’s speech but noticed “a little confusion. When I asked him questions, he said he didn’t know.” Holtz did not know who was driving the vehicle when the accident occurred.

¶ 26 Patrol Sergeant Jason Hintz testified that he was dispatched to the accident scene at approximately 6 a.m. in response to a report of someone lying in a ditch.

Upon arrival, Hintz observed defendant sitting on the shoulder of the roadway. Defendant told Hintz that he did not know what happened or how he got there. Hintz testified that defendant “just repeated himself stating that he did not know who was driving and basically stated that nobody should have been driving.” Hintz did not crouch down to speak eye-to-eye with defendant, and he did not detect an odor of alcohol as they spoke. Hintz described his conversation with defendant as “very limited,” and he did not detect any slurred speech “with the minimal that he said.”

¶ 27 Hintz testified that paramedics arrived and treated defendant in the ambulance. Hintz set up a roadblock and asked defendant if he had made any phone calls. Defendant retrieved his phone from his pocket and handed it to Hintz, indicating that he could not recall making or receiving any phone calls. Hintz later obtained a search warrant for defendant’s cell phone, but he could not access the phone’s records because the passcodes defendant provided did not unlock the phone.

¶ 28 Firefighter paramedic Lawrence VanHoorelbek testified that, when he arrived at the scene at 6:20 a.m., he observed defendant sitting in the ditch beside Tanya’s body. He asked what happened, but defendant could not recall. VanHoorelbek testified that defendant did not want to leave Tanya but that he eventually entered the ambulance and was transported to the hospital. VanHoorelbek observed redness on defendant’s left shoulder and abrasions on his lower right abdomen above the hip, which VanHoorelbek indicated were consistent with driver’s side seat belt injuries.

¶ 29 Firefighter paramedic Nicole McDevitt testified that she was dispatched to the scene with VanHoorelbek. Upon arrival, McDevitt observed Tanya’s body in the ditch. McDevitt did not see the Jeep at first but later observed it “up on a berm probably about 15 feet away from” Tanya. McDevitt noted that Tanya had no pulse, no signs of life, and was very cold to the touch, indicating no circulation “for quite some time.”

¶ 30 Nurse Kathleen Bolanowski testified that on June 26, 2016, she treated defendant in the emergency room of McHenry Hospital. Bolanowski observed bruises on defendant’s left shoulder and right hip, which she explained were consistent with a “seat belt mark.” She smelled alcohol on defendant but described him as awake, alert, cooperative, and speaking clearly. Bolanowski confirmed that

defendant was diagnosed with a concussion and he “couldn’t really recall what happened.”

¶ 31 Bolanowski testified that defendant arrived at the emergency room at approximately 7 a.m. and Dr. Reddy—the attending physician—ordered a blood draw at approximately 7:17 a.m. to test for alcohol. Bolanowski collected defendant’s blood for the test. People’s exhibit 13 was introduced, which Bolanowski identified as a printout of the serum alcohol test reflecting a result of 155 milligrams per deciliter of alcohol. Bolanowski indicated that “the legal range of intoxication is greater than 80.”

¶ 32 Physician Archana Reddy testified that she treated defendant in the emergency room on June 26, 2016. Dr. Reddy ordered a blood test to determine if defendant was “above the legal limit for driving” because he reported that he was not sure if he was the driver in the accident and he “appeared intoxicated.” Dr. Reddy confirmed that the blood test established defendant’s serum alcohol level was 155, which she described as “an elevated level” and, based on her training and experience, the result demonstrated that defendant was intoxicated. Dr. Reddy testified that conversions to whole blood are not conducted at the hospital. She clarified that “we always order serum,” as opposed to whole blood alcohol tests. Dr. Reddy confirmed that defendant sustained a concussion in the accident.

¶ 33 Officer Jack Zumwalt of the McHenry Police Department testified that he interviewed defendant in the emergency room at approximately 8:16 a.m. Zumwalt described defendant’s eyes as glassy and bloodshot and indicated that he “seemed thick-tongued. Not slurred necessarily, but cotton mouth of sorts.” Defendant informed Zumwalt that he attended a party the night before and he hid his keys “so that nobody could get to them.” Defendant told Zumwalt that “nobody drives his Jeep specifically because it’s some kind of special diesel Jeep, so only he drives it.” On cross-examination, Zumwalt confirmed that his report reflected that defendant had allowed others to drive his Jeep in the past, but defendant specified that Tanya had not driven it.

¶ 34 Defendant informed Zumwalt that he consumed Jell-O shots at the party and “about three to four glasses of Jack and Coke,” which he kept spilling, so he did not drink the full amounts. The last thing defendant remembered before the accident was a large bonfire at the party. The next thing he recalled was waking up in a ditch.

¶ 35 Marc Fisher testified that he had been employed as an officer with the McHenry Police Department for approximately 19 years and was one of the officers who investigated defendant's case. Fisher testified that he had received training on and was familiar with Title 20, section 1286.40, of the Administrative Code (20 Ill. Adm. Code 1286.40 (2015)) and the mathematical formula therein for converting blood plasma alcohol concentration to a whole blood equivalent.

¶ 36 Defense counsel objected on the grounds that Fisher was not an expert in toxicology. Outside the presence of the jury, in response to defendant's objection, the State argued that *People v. Stipp*, 349 Ill. App. 3d 955 (2004), held that it is no longer necessary for an expert to testify about the conversion factor so long as a foundation is established. The State asserted that, here, a foundation for defendant's serum alcohol concentration was established by the testimony of the emergency room nurse and physician and defendant's serum alcohol test results had been admitted with no objection. The State indicated that the conversion factor is codified in section 1286.40 and "it's a mathematical equation" that "[a]nybody with a calculator could do" because "[i]t's simple math."

¶ 37 Defense counsel distinguished *Stipp*, in which the parties agreed before the trial to apply the conversion factor. In contrast, here, the conversion factor was not agreed to, or even discussed, before trial. Defense counsel added that Fisher could not be meaningfully cross-examined because "he's not going to know anything about what could possibly affect or impact that conversion. He is just going to say, a mathematical equation, and I can't cross examine the equation." Defense counsel cited *People v. Love*, 2013 IL App (3d) 120113, which held that there may be a special cautionary instruction to advise the jury that it is not mandatory to accept the conversion factor. The trial court overruled defendant's objection on the basis of *Stipp* and stated that it would revisit the jury instruction issue.

¶ 38 Fisher returned to the witness stand and testified that, applying the conversion formula here, "[y]ou would divide the blood serum level, which in this case is .155, by 1.18 to get a [whole blood alcohol concentration of] [.1131," which Fisher agreed exceeded the legal limit of 0.08 for DUI in Illinois.

¶ 39

Jury Instruction Conference

¶ 40

At the jury instruction conference, defense counsel tendered a non-Illinois Pattern Jury Instruction (non-IPI). The instruction was modeled after Illinois Pattern Jury Instructions, Criminal, No. 23.30A (4th ed. 2000), but it was a non-IPI because, based on *Love*, it cautioned the jury that it was not required to accept the conversion factor set forth in section 1286.40 of Title 20 of the Administrative Code. The State objected to using the instruction, indicating that in *Love*, the circuit court took judicial notice of the conversion factor but here, the conversion factor was introduced through Fisher’s testimony, which was subject to cross-examination.

¶ 41

The circuit court refused to admit the jury instruction. It distinguished *Love* because the court in that case took judicial notice of the Administrative Code so that under Illinois Rule of Evidence 201(g) (eff. Jan. 1, 2011), the court was required to caution the jury that it was not mandated to accept the conversion factor as a conclusive fact. The circuit court emphasized that, here, the conversion factor was not judicially noticed but was introduced by Fisher, who testified that he was familiar with it and had received training on it. The circuit court reasoned that a limiting instruction was not necessary because, just as with any other witness, the jury was free to accept or reject Fisher’s testimony.

¶ 42

Citing *Stipp*, the circuit court agreed that the conversion factor did not need to be introduced by expert testimony because it “is a mathematical equation. It is not something that the jury would need an expert to explain to them or is something out of the ordinary knowledge that the jury would possess. The jurors can apply the conversion rate by themselves without having an expert witness [to explain] it.” For those reasons, the circuit court sustained the State’s objection to the jury instruction.

¶ 43

Closing Arguments, Verdict, and Sentencing

¶ 44

During closing arguments, the State argued that the evidence established the elements of both counts of aggravated DUI. For count I, the State was required to prove defendant’s blood alcohol concentration was 0.08 or greater while driving. The State asserted that defendant’s blood was tested over four hours after the accident and the results established that defendant’s BAC “[wa]s still a .131.

Therefore, you know at the time of the accident he's way over a [0].08." For count II, the State was required to prove that defendant was under the influence of alcohol while driving. The State cited the lengthy list of testimony and evidence in support, including that "[a]t 7:24 in the morning, [defendant] is a .131. *** Of course, at the time of the accident, he was under the influence."

¶ 45 On February 25, 2019, the jury convicted defendant on both counts of aggravated DUI. At sentencing, the circuit court merged count II into count I and sentenced defendant to six years in the Illinois Department of Corrections.

¶ 46 *Appellate Court Majority Opinion*

¶ 47 On appeal, defendant argued that the circuit court abused its discretion by allowing the State to introduce the conversion factor set forth in section 1286.40 via Fisher's testimony, such that the State failed to prove defendant's whole blood alcohol concentration was 0.08 or higher, as required to obtain his conviction on count I. 2021 IL App (2d) 190689, ¶ 49. Citing *People v. Thoman*, 329 Ill. App. 3d 1216 (2002), defendant argued that the State could establish the conversion factor through (1) expert witness testimony or (2) judicial notice of the conversion factor in section 1286.40. 2021 IL App (2d) 190689, ¶ 53. Defendant maintained that Fisher was not an expert in toxicology, he lacked the expertise to inform the jury what factor to use, and he lacked the knowledge of converting blood serum alcohol concentration into whole blood alcohol equivalents. *Id.* ¶ 51.

¶ 48 The appellate court majority disagreed, finding defendant's reading of *Thoman* was too narrow. *Id.* ¶ 60. Observing *Stipp*, in which the section 1286.40 conversion factor was discussed in the lay testimony of a laboratory technician (*id.* ¶¶ 66-67 (citing *Stipp*, 349 Ill. App. 3d at 957-58)), the majority found that *Stipp* undermined defendant's argument that the conversion factor may only be admitted by judicial notice or expert testimony (*id.* ¶ 67). Here, the majority described the conversion as a "simple calculation" and stressed that the figures to calculate the conversion "were facts within Fisher's personal knowledge." *Id.* ¶ 61. It added that Fisher's testimony was predicated on his personal training and experience and did not extend to any areas of scientific knowledge. *Id.* ¶ 75. Accordingly, the majority concluded that judicial notice and expert witness testimony are not the only means to establish the conversion factor. *Id.* ¶ 60.

¶ 49 The majority further noted that the conversion factor was provided in section 1286.40 as a valid exercise of the Department of State Police (ISP) to promulgate standards, to prescribe regulations to implement section 11-501.2 of the Vehicle Code, and to approve methods of analyzing blood—including the authority to provide the conversion factor. *Id.* ¶ 62. It asserted that ISP has the “authority to implement statutory law,” the “Administrative Code has the force and effect of law, and its rules and regulations are presumed valid.” *Id.* The majority concluded on that basis that Fisher’s testimony was admissible to establish the conversion factor. *Id.* ¶ 63.

¶ 50 In addition to the issue of the admissibility of Fisher’s testimony, defendant also argued that the circuit court abused its discretion in denying his posttrial motion to substitute counsel. *Id.* ¶ 49. The appellate court unanimously agreed on this issue, recognizing that a defendant’s sixth amendment right to counsel includes the right to counsel of choice and concluding that the record did not support the circuit court’s finding that the motion was a delaying tactic. *Id.* ¶ 93. Therefore, the appellate court affirmed defendant’s conviction but vacated his sentence and remanded for new posttrial proceedings. *Id.* ¶ 95.

¶ 51 *Appellate Court Dissent*

¶ 52 The dissent disagreed with the majority’s conclusion that a lay witness may testify about the conversion factor simply because the Administrative Code provides the formula. *Id.* ¶ 99 (Brennan, J., dissenting). The dissent emphasized the consensus of the scientific community that the precise conversion factor varies, based on individual differences and the circumstances associated with collecting the blood sample. *Id.* ¶ 100 (citing Carol A. Roehrenbeck & Raymond W. Russell, *Blood Is Thicker Than Water*, 8 Crim. Just. 14, 15 (1993), and *People v. Green*, 294 Ill. App. 3d 139, 146 n.2 (1997)). In other words, the dissent asserted there is no single formula to convert a blood serum alcohol reading to a whole blood alcohol reading. 2021 IL App (2d) 190689, ¶ 100.

¶ 53 The dissent asserted that “ ‘blood serum alcohol concentration test results are often 12% to 20% higher than whole blood alcohol concentration test results, so blood serum alcohol can be divided by a corresponding factor between 1.12 and 1.20 to be converted to whole blood alcohol concentrations.’ ” *Id.* ¶ 102 (quoting

People v. Olsen, 388 Ill. App. 3d 704, 712-13 (2009)). Exemplifying this variance, the dissent indicated that in Illinois, ISP provided the conversion factor of 1.18 in section 1286.40, while West Virginia established its own factor of 1.16. *Id.* ¶ 101.

¶ 54 The dissent took note of *Olsen*, in which the Second District appellate court held that a circuit court may—but is not required to—take judicial notice of the 1.18 conversion factor in section 1286.40. *Id.* ¶ 106 (citing *Olsen*, 388 Ill. App. 3d at 717). The dissent further noted three appellate court districts in Illinois held that the 1.18 conversion factor could be established by judicially noticing section 1286.40 but that, in those cases, the defendants did not directly challenge ISP’s selection of 1.18 as the conversion factor. *Id.* ¶ 103 (citing *People v. Cruz*, 2019 IL App (1st) 170886, *Love*, 2013 IL App (3d) 120113, and *Thoman*, 329 Ill. App. 3d at 1219).

¶ 55 The dissent added that, where a circuit court judicially notices section 1286.40, it must also instruct the jury “that it may, but is not required to, accept as conclusive any fact judicially noticed.” (Internal quotation marks omitted.) *Id.* ¶ 106. The dissent asserted that here, by establishing the conversion factor through Fisher’s testimony, the State avoided the circuit court’s gatekeeping function of judicial notice, as well as the corresponding jury instruction. *Id.* ¶ 107.

¶ 56 The dissent categorized Fisher’s testimony as opinion testimony, which is governed by Illinois Rules of Evidence 701 and 702. *Id.* ¶ 108 (citing Ill. Rs. Evid. 701, 702 (eff. Jan. 1, 2011)). The dissent stressed that, by affirming the admission of Fisher’s testimony, the majority sidestepped the evidentiary limitations of Rule 701 that, if a witness is not an expert, the testimony is limited to opinions or inferences that are (1) rationally based on the witness’s perception; (2) helpful to clearly understand the witness’s testimony or to determine a fact in issue; and (3) not based on technical, scientific, or specialized knowledge within the scope of Rule 702. *Id.* ¶ 109 (citing Ill. R. Evid. 701(c) (eff. Jan. 1, 2011)).

¶ 57 The dissent would have concluded that the conversion factor in section 1286.40 is a scientific fact that may not be established without expert testimony (*id.* ¶ 113) and, as such, Fisher’s lay opinion testimony was improper, as he was not qualified as an expert and his testimony exceeded the scope of the common knowledge of a layperson (*id.* ¶ 111). In sum, the dissent disagreed that section 1286.40 “talismanically changed the process for converting blood serum alcohol

concentration from scientific evidence into evidence upon which any lay person may opine.” *Id.* ¶ 113. Accordingly, the dissent would have reversed defendant’s conviction on count I and remanded for a new trial.¹ *Id.* This court allowed defendant’s petition for leave to appeal. Ill. S. Ct. R. 315(a) (eff. Oct. 1, 2021). Additional facts will be provided as necessary throughout the remainder of this opinion.

¶ 58

ANALYSIS

¶ 59

The issues before this court are (1) whether the circuit court erred by admitting Fisher’s testimony regarding the conversion factor in section 1286.40 of Title 20 of the Administrative Code, such that the State failed to prove defendant’s whole blood alcohol concentration was 0.08 or greater when he drove, as required to secure a conviction on count I (625 ILCS 5/11-501(a)(1) (West 2016)), and (2) whether the admission of Fisher’s testimony regarding the conversion factor in section 1286.40 deprived defendant of a fair trial on count II, in which the State was required to prove defendant was under the influence of alcohol when he drove (*id.* § 11-501.2(b)(3)). Admission of evidence is within the sound discretion of a circuit court, and we will not reverse a decision to admit evidence absent an abuse of that discretion. *People v. Becker*, 239 Ill. 2d 215, 234 (2010). An abuse of discretion occurs where the circuit court’s decision is arbitrary, unreasonable, or fanciful or where no reasonable person would have taken the position adopted by the circuit court. *Id.*

¶ 60

Blood Serum and Whole Blood Alcohol Concentrations

¶ 61

At the outset, we provide a brief review of blood serum and whole blood alcohol concentrations to contextualize the issues on appeal. Blood alcohol concentration is measured by blood serum or whole blood. *Green*, 294 Ill. App. 3d at 147. Blood serum and whole blood are not equal. *Id.* at 144-45. Whole blood is composed primarily of red blood cells and plasma, with traces of white blood cells, platelets, and fibrous proteins. Roehrenbeck, *supra*, at 15. Blood serum is an essential component of whole blood that remains after red and white blood cells and other

¹The dissent made no comment regarding defendant’s conviction on count II.

particulates are removed from a blood specimen. *Green*, 294 Ill. App. 3d at 145 (citing *Stedman's Medical Dictionary* 1278 (24th ed. 1984)). The absence of red and white blood cells and other particulates increases the water percentage of blood serum. *Id.* This results in higher alcohol concentration levels in blood serum as compared to whole blood because alcohol has an affinity for water. *Id.* (citing *Roehrenbeck*, *supra*, at 15).

¶ 62 The volume of red blood cells—known as the hematocrit—is significant because red blood cells fill space that could otherwise be occupied by water and alcohol. *Roehrenbeck*, *supra*, at 15. The hematocrit varies between individuals and genders and changes from moment to moment in the same person. *Id.* at 15, 17. Many factors impact the hematocrit, such as body movement, fever, anemia, dehydration, medication, and even the altitude at which the blood test is conducted. *Id.* at 15. A high hematocrit is indicative of a high level of red blood cells, which in turn signifies lower levels of water and alcohol. *Id.*

¶ 63 Section 11-501.2(a)(5) of the Vehicle Code defines “alcohol concentration” as “grams of alcohol per 100 milliliters of blood or grams of alcohol per 210 liters of breath.” 625 ILCS 5/11-501.2(a)(5) (West 2016). Although the Vehicle Code does not provide a definition for the term “blood,” Illinois courts have established that whole blood is the standard unit required by the Vehicle Code. See *People v. Niemi*, 256 Ill. App. 3d 904, 914 n.2 (1993); *Green*, 294 Ill. App. 3d at 144; *Thoman*, 329 Ill. App. 3d at 1218; *Stipp*, 349 Ill. App. 3d at 958.

¶ 64 Whole blood alcohol concentration is established by either (1) whole blood alcohol concentration test results or (2) blood serum alcohol concentration test results converted into whole blood equivalents. See *Green*, 294 Ill. App. 3d at 147; *Thoman*, 329 Ill. App. 3d at 1218; *Stipp*, 349 Ill. App. 3d at 958. Where a blood serum alcohol concentration test was conducted but a whole blood alcohol concentration test was not, the State must introduce a conversion factor into evidence so the factfinder can convert the blood serum alcohol test result to its whole blood equivalent. See *Olsen*, 388 Ill. App. 3d at 715.

¶ 65 The conversion factor between blood serum and whole blood alcohol concentrations is not the same in every case. Illinois courts have recounted expert testimony to indicate that, because blood serum alcohol concentration may be anywhere between 12% to 20% higher than whole blood alcohol, “blood serum

concentration test results are converted by dividing [the serum test result] by a corresponding factor between 1.12 [and] 1.20.” *Thoman*, 329 Ill. App. 3d at 1218-19; *People v. Menssen*, 263 Ill. App. 3d 946, 953 (1994); see also *Green*, 294 Ill. App. 3d at 146 n.2 (1.16 average is in the scientifically acceptable range). Because each person has a different blood serum to whole blood ratio, the proper conversion formula varies between individuals. Roehrenbeck, *supra*, at 18. Because of these differences, an average conversion factor is arbitrary, and only a scientifically acceptable *range* of conversion factors exists. See *id.* at 17; *Thoman*, 329 Ill. App. 3d at 1218-19; *Menssen*, 263 Ill. App. 3d at 953; *Green*, 294 Ill. App. 3d at 146 n.2.

¶ 66 Applicable to the case at bar, the legislature charged ISP with the duty of promulgating standards for the chemical analyses of “blood, urine, breath, or other bodily substance” and to “prescribe regulations as necessary to implement” section 11-501.2 of the Vehicle Code (625 ILCS 5/11-501.2(a)(1) (West 2016)), which governs DUI offenses in Illinois (see *id.* § 501). Section 1286.40 is part of the regulations prescribed by ISP. See *Petraski v. Thedos*, 382 Ill. App. 3d 22, 29 (2008). Section 1286.40 is titled “Conversion of a Blood Serum or Blood Plasma Alcohol Concentration to a Whole Blood Equivalent” and provides that “[t]he blood serum or blood plasma alcohol concentration result will be divided by 1.18 to obtain a whole blood equivalent.” 20 Ill. Adm. Code 1286.40 (2015).

¶ 67 In promulgating section 1286.40, ISP prescribed a specific conversion factor—1.18—that fell within the scientifically acceptable range of 1.12 to 1.20. See *Thoman*, 329 Ill. App. 3d at 1218-19; *Menssen*, 263 Ill. App. 3d at 953; *Green*, 294 Ill. App. 3d at 146 n.2. The crux of this appeal turns on the propriety of the admission of Fisher’s lay witness testimony to convey this 1.18 conversion factor to the jury.

¶ 68

Count I

¶ 69 Turning to the issues on appeal, we first examine whether the circuit court erred by admitting Fisher’s testimony regarding the conversion factor of 1.18 in section 1286.40 of Title 20 of the Administrative Code, such that the State failed to prove defendant’s whole blood alcohol concentration was 0.08 or greater when he drove, as required by the Vehicle Code to secure a conviction on count I. See 625 ILCS 5/11-501(a)(1) (West 2016).

¶ 70 Before proceeding, we note the State’s claims that defendant “forfeited any challenge to [ISP’s] selection of 1.18 as the applicable conversion factor” and that he forfeited the argument that section 1286.40 creates an unconstitutional mandatory presumption. We find these claims do not accurately state the issue before this court. Defendant does not challenge ISP’s authority to promulgate section 1286.40 or its selection of the 1.18 conversion factor. Nor does he contend that section 1286.40 creates a mandatory presumption. Rather, the issue is whether the circuit court abused its discretion in admitting Fisher’s lay witness testimony to convey the 1.18 conversion factor to the jury. That issue is properly preserved, as defendant raised it in the lower courts. As such, we proceed in our analysis of this issue.

¶ 71 A conversion of defendant’s blood serum alcohol concentration test result was necessary in this case because whole blood is the standard unit required by the Vehicle Code and defendant’s whole blood alcohol concentration was not tested. See *Niemi*, 256 Ill. App. 3d at 914 n.2; *Green*, 294 Ill. App. 3d at 144; *Thoman*, 329 Ill. App. 3d at 1218; *Stipp*, 349 Ill. App. 3d at 958. The 1.18 conversion factor was conveyed to the jury by Fisher’s testimony. Defendant maintains that the circuit court abused its discretion by admitting that testimony, as it was not direct evidence from which a reasonable trier of fact could determine that his whole blood alcohol concentration was 0.08 or greater. Defendant explains that, rather than providing direct evidence, all the State proved was that four hours after the accident defendant’s blood serum alcohol concentration was 0.155 grams per deciliter. The State then called Fisher—a lay witness with no expertise in toxicology—who testified that he was familiar with the conversion formula in section 1286.40 and that, to apply that formula here, “[y]ou would divide the blood serum level [of] .155, by 1.18 to get a [whole blood alcohol concentration of] [0.]131.”

¶ 72 Defendant urges that the conversion factor is a scientific fact that may not be proven by a lay witness testifying to the existence of section 1286.40 of Title 20 of the Administrative Code. Defendant points out that the conversion factor has traditionally been established by experts, as is the usual process of proving a scientific fact. See *Menssen*, 263 Ill. App. 3d at 952-53; *People v. Luth*, 335 Ill. App. 3d 175, 180 (2002); *Petraski*, 382 Ill. App. 3d at 25. Defendant maintains that the conversion factor exists independently of section 1286.40 and a lay witness testifying to his familiarity with a number in that section does not provide the jury

with direct evidence of defendant's whole blood alcohol concentration. As such, defendant requests this court to find that the circuit court abused its discretion in admitting Fisher's lay testimony regarding the existence of section 1286.40 to establish the conversion factor and to reverse his conviction on count I.

¶ 73 The State responds that Fisher's testimony was based entirely on his recollection of section 1286.40, which governed his investigation of defendant's conduct, and lay testimony regarding the content of regulations is commonly admitted in Illinois. The State urges that Fisher had personal knowledge of the conversion factor and the appellate court recognized that his testimony did not assert any opinions (2021 IL App (2d) 190689, ¶ 73 (majority opinion)), nor did it "stray into areas that required any scientific, technical, or other specialized knowledge," such that expert testimony was required (*id.* ¶ 75). The State adds that Fisher did not offer an opinion regarding the accuracy of or the science behind the conversion factor. Accordingly, the State contends that the testimony was properly admitted. We agree with defendant.

¶ 74 Scientific evidence is based on principles that are not within the knowledge or experience of the average juror. See *People v. McKown*, 226 Ill. 2d 245, 256-57 (2007); *People v. Mertz*, 218 Ill. 2d 1, 72 (2005). Such evidence is meaningless to an average juror unless it is accompanied by an explanation provided by an expert witness. *McKown*, 226 Ill. 2d at 257. Here, our cursory review of the scientific principles underlying the formula for converting blood serum to whole blood alcohol concentrations demonstrates that the subject matter is complex and beyond the scope of what the average juror would understand. Thus, we disagree with the appellate court majority that Fisher's testimony did not "stray into areas that required any scientific, technical, or other specialized knowledge," such that expert testimony was required. See 2021 IL App (2d) 190689, ¶ 75.

¶ 75 A lay witness opinion must be based on the witness's personal observations and recollection of concrete facts rather than on specialized knowledge. *People v. Novak*, 163 Ill. 2d 93, 103 (1994); Ill. R. Evid. 701(c) (eff. Jan. 1, 2011). Here, Fisher's testimony was outside the bounds of his personal observations and recollection of concrete facts. Moreover, he testified beyond the common knowledge of a layperson and offered an opinion based on specialized knowledge within the scope of Rule 702 by testifying to the conversion factor, thus violating

the evidentiary limitations of Rule 701. See Ill. R. Evid. 701(c) (eff. Jan. 1, 2011). Fisher's testimony would have been proper if he were otherwise qualified as an expert under Rule 702. See Ill. R. Evid. 702 (eff. Jan. 1, 2011). However, that was not accomplished here, and the circuit court admitted Fisher's testimony over defendant's objection that Fisher was not qualified as an expert.

¶ 76 The State insists that no expert testimony was necessary here because applying the conversion factor requires only a simple division problem that the average juror can calculate. Although we agree that the mathematical problem may be simple, determining the conversion factor is not. Indeed, the conversion factor is a scientific fact originating from a process so complex that it requires an explanation a lay witness is not equipped to provide. See *McKown*, 226 Ill. 2d at 256-57. Accordingly, it was improper to present the conversion factor to the jury by Fisher's testimony, as he was not qualified as an expert and his testimony exceeded the scope of the common knowledge of a layperson. See *id.*; Ill. R. Evid. 701(c) (eff. Jan. 1, 2011).

¶ 77 The State concedes that the conversion factor is derived from scientific studies but urges that the same is true of many testing devices that produce results about which police officers routinely testify. In support, the State cites cases in which police officers provided lay testimony regarding the scientific accuracy and use of a radar gun (*People v. Abdallah*, 82 Ill. App. 2d 312, 317 (1967); *People v. Donohoo*, 54 Ill. App. 3d 375, 377-78 (1977)), the use of a field test to determine the presence of a controlled substance (*People v. Harrison*, 26 Ill. 2d 377, 379-80 (1962); *People v. \$1,002 United States Currency*, 213 Ill. App. 3d 899, 902-04 (1991)), and the administration of a roadside test to judge impairment (*People v. Buening*, 229 Ill. App. 3d 538, 545-46 (1992)).

¶ 78 We find these cases inapposite because, here, the issue does not involve the admissibility of a chemical field test for narcotics or taking judicial notice of the use of tuning forks to confirm the accuracy of a radar device. In this case, no accuracy checks were presented to dispense with the need for expert testimony as to the conversion factor, the circuit court did not judicially notice a scientific fact that has been generally accepted by the scientific community, and, unlike the State's cases, the issue here involves a lay witness testifying to the content of an

Administrative Code provision in an attempt to prove a scientific fact, as discussed in detail, *infra*.

¶ 79 Here, the appellate court majority observed that “[t]he Administrative Code has the force and effect of law, and its rules and regulations are presumed valid.” 2021 IL App (2d) 190689, ¶ 62. It further found that the legislature exercised its “power to prescribe new and alter existing rules of evidence or to prescribe methods of proof” by delegating to ISP “the authority to implement the provision of the [Administrative] Code regarding chemical and other tests, including the authority to provide a fixed conversion factor to convert blood serum alcohol concentration into whole blood equivalents.” *Id.* The majority recognized that Fisher lacked knowledge of the scientific principles underlying the difference between blood serum and whole blood alcohol concentrations but determined it was “unnecessary for him to be an expert in the underlying science in order to testify as to the conversion factor because he had received training on the *** conversion factor.” *Id.* ¶ 63. We disagree.

¶ 80 Fisher’s testimony established that he was familiar with section 1286.40 and that he applied the conversion factor of 1.18 therein as the divisor to defendant’s blood serum alcohol concentration of 0.155, resulting in a quotient of 0.131, which Fisher identified as defendant’s whole blood alcohol concentration. We do not agree that Fisher’s testimony proves what the State intended it to prove. Namely, the testimony does not and cannot definitively prove, *as a fact*, defendant’s whole blood alcohol concentration when he drove.

¶ 81 Administrative regulations have the force and effect of *law*, not *fact*. See *Kean v. Wal-Mart Stores, Inc.*, 235 Ill. 2d 351, 369 (2009). Yet here, Fisher’s testimony regarding section 1286.40 purported to demonstrate a scientific fact. Notwithstanding that the 1.18 conversion factor was promulgated by administrative regulation in section 1286.40, it is nonetheless a scientific fact. As such, we agree with defendant that the appellate court conflated the concepts of fact and law by holding that Fisher could testify to section 1286.40’s conversion factor and the jury could rely on that testimony to conclude that the factor was 1.18 because section 1286.40 has the “force and effect of the law.” 2021 IL App (2d) 190689 ¶¶ 62, 70, 76.

¶ 82 A “fact” is defined as “[s]omething that actually exists; an aspect of reality.” Black’s Law Dictionary (11th ed. 2019). It is the province of the jury to determine the facts of a case by weighing the evidence. *Maple v. Gustafson*, 151 Ill. 2d 445, 452 (1992). A “law” is defined as “[t]he set of rules or principles dealing with a specific area of a legal system.” Black’s Law Dictionary (11th ed. 2019). The jury learns the law by being instructed by the judge. *People v. Bruner*, 343 Ill. 146, 168 (1931). A scientific fact is “the product of scientific tests or studies” and is beyond the ken of the average layperson. *McKown*, 226 Ill. 2d at 254. It is typically proved with evidence that, without explanation from an expert witness, is meaningless to a layperson. *Id.* at 257. The conversion factor here is such a scientific fact.

¶ 83 The State provides no authority revealing that the legislature is authorized to legislate a scientific fact of a case by statute or administrative regulation. The dissenting justice in the appellate court aptly noted that section 1286.40 appears to be the only instance in Illinois law “where scientific evidence has been codified to dispense with the need for expert testimony.” 2021 IL App (2d) 190689, ¶ 113 (Brennan, J., dissenting). Though statutes and administrative regulations do have the force and effect of law (see *Kean*, 235 Ill. 2d at 369), there is no basis for a regulation to provide particular scientific facts in any given case. Yet, that is what occurred here.

¶ 84 Fisher testified to the existence of the conversion factor of 1.18 in section 1286.40 of Title 20 of the Administrative Code, which is a scientific fact produced by a scientific process. Fisher’s testimony was not presented to confirm section 1286.40 as having the force and effect of law but as an attempt to establish—as a fact—that defendant’s whole blood alcohol concentration was 0.131. Yet neither Fisher’s testimony nor the existence of section 1286.40 proves that, as there is no single formula to convert a blood serum alcohol reading to a whole blood alcohol reading. See *Roehrenbeck*, *supra*, at 15; *Green*, 294 Ill. App. 3d at 146 n.2. All that was proven here was that in the emergency room, defendant’s blood serum alcohol concentration was 0.155 grams per deciliter. Fisher’s familiarity with section 1286.40 and the application of the conversion factor therein to defendant’s blood serum alcohol concentration test result in no way proved, as a fact, defendant’s whole blood alcohol concentration.

¶ 85 There is a scientifically acceptable range of possible conversion factors—defined by science and developed by toxicologists—based on a determination of the average amounts of serum and other matter in whole blood. See *Thoman*, 329 Ill. App. 3d at 1218-19; *Menssen*, 263 Ill. App. 3d at 953; *Green*, 294 Ill. App. 3d at 146 n.2; *Luth*, 335 Ill. App. 3d at 180; Roehrenbeck, *supra*, at 14, 18. Because of the scientific process involved, expert witnesses in previous cases testified to establish that scientifically acceptable range (see Roehrenbeck, *supra*, at 14, 18), and we agree with defendant that expert testimony is required to establish that process and to explain how the conversion factor in section 1286.40 is derived from that process and falls within the scientifically acceptable range.

¶ 86 Here, the State did not provide expert testimony to establish the scientifically acceptable range or that the 1.18 conversion factor in section 1286.40 falls within that range. All the jury received here was Fisher’s testimony that section 1286.40 provides the 1.18 factor to convert defendant’s blood serum alcohol concentration test result into its whole blood equivalent, which—when applying that formula here—resulted in a whole blood alcohol concentration of 0.131. We find that testimony is insufficient to prove defendant’s whole blood alcohol concentration and that its admission was in error.

¶ 87 Though the circuit court did not take judicial notice of section 1286.40 in this case—nor was it requested to do so—we yet discuss whether judicial notice of section 1286.40 impacts the need for expert testimony, as the parties assert disparate stances on that issue. To further support its argument that expert testimony was not necessary, the State cites the appellate court majority’s statement that if the dissent was “correct in concluding that establishing the conversion factor requires expert testimony,” a court could never “take judicial notice of section 1286.40 of Title 20 of the Administrative Code because a judicially noticed fact must be ‘capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.’ ” 2021 IL App (2d) 190689, ¶ 75 (majority opinion) (quoting Ill. R. Evid. 201 (eff. Jan. 1, 2011)). On that basis, the majority concluded that Fisher’s testimony was properly admitted because “[t]here is no fact that is susceptible to judicial notice that cannot be introduced through some other means.” *Id.*

¶ 88 The State applies that reasoning here, arguing that Fisher’s testimony was properly admitted because section 1286.40 is susceptible to judicial notice, thereby dispensing with the need for expert testimony. We disagree. Illinois courts have established that, besides expert testimony, section 1286.40 may also be judicially noticed. See, e.g., *Olsen*, 388 Ill. App. 3d at 717; *Thoman*, 329 Ill. App. 3d at 1220. Section 1286.40 is “not subject to reasonable dispute in that” its *existence* is “capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.” See Ill. R. Evid. 201(b) (eff. Jan. 1, 2011). Accordingly, when a court takes judicial notice of section 1286.40, it accepts that section’s *existence* rather than its *truth*. As such, taking judicial notice of section 1286.40 does not violate Rule 201. See *id.*

¶ 89 Notably, though the existence of section 1286.40 is not subject to reasonable dispute, the truth of the 1.18 conversion factor provided in that section is, as summarized by the appellate court dissent’s comment that the “conversion factor is an incomplete picture of the scientific community’s understanding that blood serum alcohol concentration test results are often 12% to 20% higher than whole blood alcohol concentration test results” and “blood serum alcohol concentrations can be divided by a corresponding factor between 1.12 and 1.20 to be converted to whole blood alcohol concentrations.” 2021 IL App (2d) 190689, ¶ 105 (Brennan, J., dissenting).

¶ 90 Therefore, the 1.18 conversion factor set forth in section 1286.40 is not “capable of accurate and ready determination by resort to sources *whose accuracy cannot reasonably be questioned.*” (Emphasis added.) See Ill. R. Evid. 201(b)(2) (eff. Jan. 1, 2011). Accordingly, while a circuit court may take judicial notice of section 1286.40, the application of the 1.18 conversion factor therein is a permissive presumption that the circuit court need not accept. See *Olsen*, 388 Ill. App. 3d at 717. As a further safeguard, when a circuit court takes judicial notice of an adjudicative fact in a criminal proceeding, “the court shall inform the jury that it may, but is not required to, accept as conclusive any fact judicially noticed.” Ill. R. Evid. 201(g) (eff. Jan. 1, 2011). For these reasons, we disagree that section 1286.40 being subject to judicial notice dispenses with the need for expert testimony.

¶ 91 We acknowledge the State’s point that, here, defendant’s blood serum alcohol concentration test result would have converted to a whole blood alcohol

concentration exceeding 0.08 even when applying the highest number of the scientifically acceptable range of conversion factors. However, this is of no consequence because the 1.18 conversion factor was not properly admitted into evidence and, as a result, the State failed to prove defendant guilty beyond a reasonable doubt on count I. See *Thoman*, 329 Ill. App. 3d at 1220 (not harmless error even if applying the highest conversion factor resulted in a whole blood alcohol concentration over 0.08, as State bears the burden of proving guilt beyond a reasonable doubt).

¶ 92 For the foregoing reasons, we conclude that the circuit court abused its discretion by admitting Fisher's testimony regarding the conversion factor in Title 20, section 1286.40, of the Administrative Code, such that the State failed to prove defendant's whole blood alcohol concentration was 0.08 or greater when he drove, as required to secure a conviction on count I. See 625 ILCS 5/11-501(a)(1) (West 2016). Accordingly, we reverse defendant's conviction on count I.²

¶ 93 *Count II*

¶ 94 The second issue on appeal is whether the erroneous admission of Fisher's testimony regarding the conversion factor in section 1286.40 deprived defendant of a fair trial on count II. To secure a conviction under count II, the State was required to prove that defendant was under the influence of alcohol while driving. *Id.* § 501(a)(2). Defendant's whole blood alcohol concentration was relevant to count II, as section 501.2(b)(3) of the Vehicle Code provides that, if it is established that a defendant's blood alcohol concentration level was 0.08 or greater while driving, it shall be presumed that he was under the influence of alcohol. *Id.* § 501.2(b)(3). Accordingly, for purposes of count II, the jury was instructed that it may presume that defendant was under the influence of alcohol if it found beyond a reasonable doubt that, at the time defendant drove the vehicle, the amount of alcohol concentration in defendant's blood was 0.08 or more. The jury was admonished, however, that it was never required to make this presumption, but it was for the jury to determine whether the presumption should be drawn.

²Having found Fisher's testimony inadmissible on this basis, we decline to address defendant's claim that the testimony constituted inadmissible hearsay.

¶ 95 Erroneous admission of evidence is subject to a harmless error analysis. *People v. King*, 2020 IL 123926, ¶ 40. This court has established that a method of determining whether such an error is harmless is whether the remaining evidence in the record overwhelmingly supports the conviction. See *People v. Wilkerson*, 87 Ill. 2d 151, 157 (1981) (error is harmless where other evidence is overwhelming and upholds the conviction); *People v. Nevitt*, 135 Ill. 2d 423, 447 (1990) (evidentiary error is harmless “where there is no reasonable probability that the jury would have acquitted the defendant absent the” error); *People v. Dennis*, 181 Ill. 2d 87, 95-96 (1998) (erroneous admission of evidence harmless where evidence of defendant’s guilt is clear in spite of the error).

¶ 96 In this case, defendant concedes that, besides his whole blood alcohol concentration, the State presented other evidence from which a reasonable trier of fact could conclude that he was driving while under the influence of alcohol and that evidence could sustain his conviction on count II despite any failure to prove his whole blood alcohol concentration. However, defendant maintains that the evidence was closely balanced. He notes that the evidence did not clearly establish the exact time defendant and Tanya left the party nor the exact time of the accident. Moreover, the accident scene was not discovered until 6 a.m., and none of the witnesses who interacted with defendant at the scene testified that he appeared intoxicated or smelled of alcohol. Though the emergency room physician testified that she ordered the blood draw because defendant appeared intoxicated, the emergency room nurse described defendant as “alert and cooperative” and his speech as “clear.” Officer Zumwalt, who interviewed defendant at the hospital described his speech as “thick-tongued” but not necessarily slurred. Defendant stresses that none of the partygoers who testified that he was intoxicated interacted with him even within an hour of the accident. Though defendant acknowledges the testimony that he sounded drunk and behaved inappropriately, he counters that the evidence established that he sustained a concussion in the accident. Thus, defendant asserts that his demeanor was as likely the result of a concussion as it was of any intoxication.

¶ 97 Defendant urges that, taken together, the evidence of his intoxication was closely balanced and, because the evidence regarding his whole blood alcohol content for purposes of count I was such an important part of the State’s case, the erroneous admission of Fisher’s testimony caused him “grave prejudice,” was not

harmless error, and deprived him of a fair trial. As such, defendant requests this court to reverse his conviction on count II and remand for a new trial.

¶ 98 The State responds that any error in admitting Fisher’s testimony would not entitle defendant to a retrial on count II, because other evidence overwhelmingly established that defendant was under the influence of alcohol while he was driving. We agree with the State.

¶ 99 We are mindful of the facts in the record supporting defendant’s argument, yet we do not agree that the evidence was closely balanced. At trial, extensive testimony established that defendant was driving while under the influence of alcohol. Multiple witnesses testified that defendant was drinking heavily at the party. Defendant was observed drinking large glasses of Jack Daniels and Coke, as well as Jell-O shots. One witness testified that defendant was drinking all day. Several witnesses described defendant as intoxicated and/or under the influence of alcohol, indicating that his eyes were glassy and he was very outspoken, bouncy, and giddy, as opposed to his ordinarily quiet demeanor. A witness who worked as a bartender for 20 years opined that defendant was intoxicated at the party.

¶ 100 Testimony further established that, during a phone call, defendant indicated that he was in an accident but he did not know where he was, he joked about watching pornography on his phone while witnesses were making desperate attempts to locate him, he was unable to activate the location feature on his phone, and witnesses had to remind him that Tanya was with him when he heard a woman screaming but did not know who it was.

¶ 101 Emergency personnel testified that defendant appeared confused, responded “I don’t know” to their questions, and could not recall what had happened or how he arrived at the accident scene. Though Officer Hintz did not detect alcohol on defendant’s breath, he did not speak eye to eye with defendant, and he had very limited conversation with him. Defendant also told Hintz that “nobody should have been driving.”

¶ 102 The emergency room physician testified that she ordered the blood draw because defendant was not sure if he was the driver and he appeared, in her clinical opinion, to be intoxicated. Though the emergency room nurse described defendant as alert and cooperative, she testified that she detected alcohol on defendant’s

breath. Moreover, defendant's blood serum alcohol concentration test result was 0.155 grams per deciliter, which the physician and nurse both considered to be an elevated level consistent with intoxication. Officer Zumwalt testified that defendant's speech was not necessarily slurred during the interview at the hospital, yet he described defendant's eyes as glassy and bloodshot and his speech as "thick-tongued." Defendant also told Zumwalt that he consumed Jack Daniels and Coke and Jell-O shots at the party.

¶ 103 Evidence also established that defendant was driving the Jeep when the accident occurred. Defendant was observed driving the Jeep when he and Tanya left the party. Multiple witnesses testified that Tanya did not drive because she did not have a driver's license and she was afraid of driving. Defendant informed Officer Zumwalt that he hid his keys because he did not allow anyone else to drive his Jeep and that Tanya did not drive it. Defendant's injuries also indicated seat belt marks originating from the driver's seat.

¶ 104 Notwithstanding our conclusion that the circuit court abused its discretion in admitting Fisher's testimony—which merited reversal of defendant's conviction on count I—we yet find the erroneous admission of that testimony was harmless error as it pertains to defendant's conviction on count II, as the remaining evidence overwhelmingly supports the conviction independent of the testimony regarding defendant's whole blood alcohol concentration. See *Wilkerson*, 87 Ill. 2d at 157; *Nevitt*, 135 Ill. 2d at 447; *Dennis*, 181 Ill. 2d at 95-96. Accordingly, we affirm defendant's conviction on count II.

¶ 105 As a final note, the appellate court unanimously concluded that the circuit court abused its discretion in denying defendant's posttrial motion to substitute counsel and, on that basis, vacated defendant's sentence and remanded for new posttrial proceedings. 2021 IL App (2d) 190689, ¶¶ 79, 95 (majority opinion). The parties do not dispute that conclusion. Accordingly, we affirm that portion of the appellate court's judgment.

¶ 106

CONCLUSION

¶ 107 For the foregoing reasons, we reverse the portion of the appellate court's judgment affirming defendant's conviction on count I; we affirm the balance of the

appellate court's judgment. The circuit court's judgment as to defendant's conviction on count I is reversed, the circuit court's judgment as to defendant's conviction on count II is affirmed, and the circuit court's judgment denying defendant's posttrial motion to substitute counsel is reversed.

¶ 108 Appellate court judgment affirmed in part and reversed in part.

¶ 109 Circuit court judgment affirmed in part and reversed in part.

¶ 110 Cause remanded.

¶ 111 JUSTICES ROCHFORD and O'BRIEN took no part in the consideration or decision of this case.