



## *The Scenario*

We have known for some time that incarceration is not the most effective deterrent to dangerously bad driving. An array of innovative intermediate traffic sanctions (mostly technological) are either possible today, or are on the verge of commercial availability. In-car cameras, GPS tracking devices, in-vehicle breathalyzers,<sup>i</sup> and advanced tests such as tissue spectrometry (which could detect the presence of alcohol by simply grasping the steering wheel)<sup>ii</sup> will soon be linked to ignition-interlock devices, biometric scans,<sup>iii</sup> and facial recognition devices.

In 2006 the National Highway Traffic Safety Administration required that new vehicles be equipped with Event Data Recorders (EDR). Also known as *black boxes*, they can record not only engine conditions,<sup>iv</sup> but can also record time, location (through GPS sensors), speed, throttle changes, direction, airbag deployment, and if the driver was wearing a seat belt.<sup>v</sup> They could soon be connected directly to the vehicle and serve as a governor limiting maximum speed, applying brakes, or signaling lane drift even before a driver has time to react.<sup>vi</sup> *Black boxes* complement the tremendous increase in highway and intersection cameras and vehicle detection devices (e.g., license plate readers).

New York, Michigan, Vermont, and Washington now offer enhanced driver licenses (EDL) that include personal identification information, which provides anti-fraud protections through biometrics. EDLs will be able to support embedded radio frequency identification chips that could communicate directly with the vehicle to determine if the potential driver is allowed to drive the vehicle. The State of Iowa will soon offer driver licenses on individuals' cell phones.<sup>vii</sup> EDLs may soon offer facial recognition technology and Electronic Fingerprint Transmission (EFT) for expedited personal identification. They may even replace passports.

### *Monday Morning, January 6, 2025*

Kelsey, court administrator for a large metropolitan limited jurisdiction court, arrives at her office with coffee in hand. She reviews the court's statistics for the past calendar year, but already knows of the continuing decline in traffic cases, which she has concluded is the result of the numerous (mostly electronic) intermediate traffic sanctions.

Since 2020, all traffic citations are filed in Kelsey's court electronically. Breathalyzer results, blood draw results, proof of traffic school attendance, and counseling session attendance verifications are transmitted electronically and posted to the case management database through the electronic content management system; no original paper exists for these events anymore.

Newer vehicles must have *black boxes*; only vehicles twenty years or older do not have them. They have made personal injury motor vehicle cases a rare event in general jurisdiction courts. The state legislature had the good sense to pass a law making it a misdemeanor to tamper with a vehicle's *black box*. Law enforcement also has sensors to detect if a vehicle has had one disconnected.

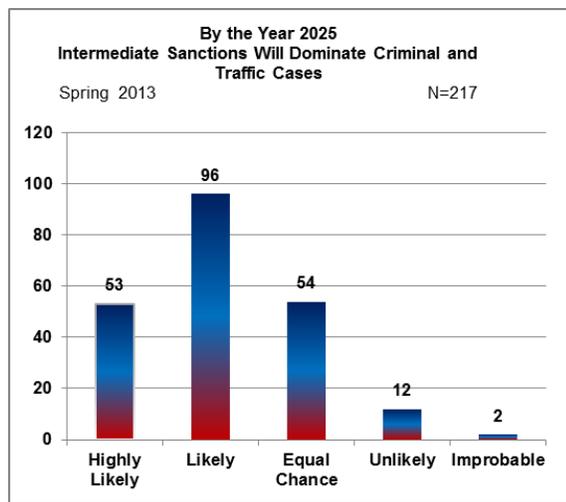
All states but two now require enhanced driver's licenses (EDL) that include an embedded chip. Vehicles are linked to EDLs and start only when an authorized EDL is in the vehicle.

Defendants convicted of drunk driving must now install a combination Ignition Interlock Alcohol Detection and Onboard Camera System (IIADOCS). IIADOCS doesn't allow a vehicle to start unless it verifies who the driver is and confirms that the individual has no appreciable alcohol or illegal drugs in his or her system.

The trend toward "self-driving vehicles," faded due to practical problems, however it did spawn "Self-Managing Vehicles (SMV)." SMVs not only park themselves, but they brake before a driver does if the vehicle is following too closely. Now SMVs even stop the vehicle if it senses that it has turned the wrong way onto a freeway or is traveling at a high rate of speed toward an intersection.

All of these developments have dramatically reduced speeding, drunk driving, and reckless driving. The innovations have saved money and saved lives; as for Kelsey's court, revenue has declined.<sup>viii</sup> Privacy advocates also lament the loss of personal privacy and freedom.

## Court Professionals Say This Scenario is Likely



The Spring 2013 survey canvassed 217 respondents who assessed Intermediate Sanctions as *Likely* with an average of 2.1.<sup>ix</sup> This assessment was basically carried across the age cohorts. *Baby Boomers* assessed it with an average of 2.0; *Millennials* gave it an average assessment of 2.1. *Generation Xers* assessed it as less likely giving it a 2.4.

The various jurisdiction levels were also fairly uniform in their *Likely* assessment. *State General Jurisdiction* respondents assessed it at an average 2.0; *State Administrative Office* respondents assessed it at 2.2; *Limited Jurisdiction* respondents thought it was less likely assessing it at 2.4 average.

## The Respondents

We asked Debi Schaefer, Court Administrator, Tempe Municipal Court in Arizona; Dale Kasperek, Principal Court Management Consultant, Technology Division for the National Center for State Courts; Jeffrey Tsunekawa, Operations Manager for the Seattle Municipal Court; and Jeff Barlow Justice Systems Consultant for ImageSoft, Inc., and Cheryl Stone, Court Administrator for the Municipal Court, City of Eugene, Oregon to comment on the scenario.

## ***Do You See A Different Scenario? If so, what?***

**Seattle Municipal Court electronically accepts certain tickets that automatically feed into the court's case management system. The court accepts intoxilyzer, blood draw, and traffic school attendance results by fax or email, but staff then enter the data in the court's system.**

**Jeffrey Tsunekawa  
Seattle Municipal Court**

Jeff Barlow thought that much of what the scenario described would occur well before 2025. He also offered that *Smart Roads* technology is currently being deployed, which will monitor and link vehicles, roads, signals, along with other infrastructures across the entire time spectrum (past, present, future). "Traffic will tend more toward a coordinated group activity, rather than the result of hundreds or thousands of 'individual' driving decisions."

Jeff did not think "Self-Driving Vehicles" will fade. Rather, drivers of the future will be more like train passengers are now. Even if not widely accepted, some

Self Driving Vehicles will soon become common-place. "I've seen estimates that long-haul trucking, as a career, will not exist in a very few years. The dollars involved are just too great."

According to Jeff the debate will be whether and under what circumstances individuals should be *allowed* to drive their vehicles in some places (e.g., congested urban areas), similar to allowing private planes to land at some airports. He saw that individual traffic citations and sanctions could eventually become a "blue moon" event.

Dale Kasparek agreed that vehicle technology with numerous capabilities may impact courts as the scenario suggested. He disagreed with Jeff in that the scenario (or one similar to it), is more likely to play out over the next 50 years rather than over the next ten.

Dale posed a different potential scenario that would affect court revenue potential. The transfer of non-criminal traffic matters to a state drivers' licensing agency (DMV) is another possibility. If the Executive branch can grant the driving privilege, then it should be able to pass judgment on revoking that privilege. "A non-criminal traffic case would come to court only upon the claim that the Executive branch agency exceeded its authority under state law."

Cheryl Stone thought the scenario could occur within the next ten years, but only if the automotive industry makes the technologies available as standard equipment. Otherwise, it will take much longer to infiltrate the market and overcome some of the privacy concerns. "I would think they would introduce it with new drivers or drivers who are 'at risk,' possibly to reduce insurance rates or under the umbrella of safety. I think a very likely scenario is the use of this technology as probation monitoring in misdemeanor traffic offenses."

## What Drivers are Moving this Scenario to a Reality?

**Tempe Municipal Court accepts electronic ticket data feeds directly to its case management system (CMS). The city manages diversion programs and also feeds compliance results directly to the CMS. Defensive driving schools electronically feed attendance data to the AOC, which in turn transfers it to the CMS.**

**Debi Schaefer  
Tempe Municipal Court**

Both Jeffrey Tsunekawa and Debi Schaefer saw technology as a driver, yet both expressed skepticism. Jeffrey said that funding bodies can often push courts to accept intermediate sanctions. “When technology is introduced and state or local legislators want it, it generally just happens, and courts are left to figure out how to make it work. Red light cameras and enhanced breathalyzer systems are easy examples.”

Debi pointed out that although available technology creates its own interest, some government entities are now moving away from innovations, such as photo enforcement, after evaluating the cost–benefit. Disputes related to the technology such as reliability, and violation

of rights could be a limiting factor. “I don’t believe technology will be a significant or ‘...the most effective deterrent to dangerously bad driving.’”

Cheryl noted that Oregon will soon require cameras to be a component of ignition interlock systems. Prosecutors welcome this technology since it removes excuses about alleged compliance violations. “It was my brother” or “It was the mouthwash” will become non–issues when the camera is present. “I see local jurisdictions move towards technology solutions that help protect public safety as part of probation or diversion programs.”

Dale pointed out that many aspects of the scenario do not really qualify as “sanctions.” The trends in the scenario are mostly preventative technological solutions rather than sanctions. “I don’t have to be under a court’s supervision for my car not to start after I enter it and blow into the ignition system after a court management event! The car does not start if the chip in my license has been recently programmed or is smart enough to know I have not paid my registration or renewed my license when I go to start my car.”

Jeff Barlow pointed out several drivers that could impel the scenario.

- *Cost Savings:* Incarceration is understood to be *the* most expensive option; alternative sanctions will be ever more attractive.
- *Security:* Operating a vehicle on a public roadway carries no inherent right to not have your vehicle tracked. In order to predict when and where things might occur, we will track traffic more of the time. “The classic progression is - 1) We are doing it to fight terrorism; 2) and if we see criminal activity, we will use it to fight that; 3) and if we see something that looks like it could turn into criminal activity, we’ll watch it; 4) and in order to know when and where things we want to know about are liable to occur, we have to watch everyone, all the time.”
- *The Singularity:* This intermediate sanction technology is currently on Smartphones. By 2025, most people will have the technology affixed to or inside their bodies.

- *Growth of Non-Driving:* The "Uber" movement toward alternatives to personal vehicle ownership is tapping into a market, which can eventually make it easier for courts to ban a person from driving altogether.

### ***What Counter Drivers Exist?***

Dale pointed out four counter drivers that might inhibit this scenario from becoming a reality, and ensure that traffic matters continue to be a significant part of court business for years to come.

- Car makers will likely resist implementing these technologies arguing that it will increase new vehicle costs and they will not be able to retrofit older vehicles.
- Some of these technologies are dependent on connectivity. A device cannot be a proactive inhibitor or enabler if the device is not connected to the internet in real time to check driver or vehicle status. Will this connection be included in the purchase price of a vehicle or a subscription option?
- There will inevitably be “dead spots” in urban areas, many suburban areas, and often in rural areas that lack the needed infrastructure. “Recently, Verizon just sold off land line assets in rural America. A company bought those assets because rural Americans still depend upon them.”
- “Never underestimate the ingenuity of people who need to operate a vehicle.” Although courts and state drivers licensing agencies suspend, revoke and take custody of licenses, the U. S. Department of Transportation data shows that significant numbers of persons continue to drive without the credentials. Illicit technologies and black market service markets will enable people to operate the vehicles of the future.

Debi remarked that public concerns over privacy, Constitutional rights, and return on investment will continue to pressure governments to critically evaluate whether these innovations make sense.

Jeffrey Tsunekawa thought that data exchange is a huge challenge. “There are security concerns amongst how big businesses guard private information, and the public sector is not immune from those same concerns.” He shared Cheryl and Debi’s concern that privacy will remain a major concern. “None of these technologies pass through easily without making its way through the privacy concern filter.”

There is also an expectation that court systems using old technology, will be able to talk easily with newer technology. Jeffrey thought that this was an unrealistic expectation.

Cheryl commented that much will depend on marketing. “If they are marketed as safety products or ways to reduce insurance rates, then many of the tools could become standard. Integrating them with public safety systems may be the more challenging aspect due to lack of functionality in off-the-shelf case management systems.” The public could favor some safety related technology (e.g., lane drift, seatbelt, etc.), but other technology that might raise personal liberty concerns may lead the public to only have it used as a sanction for offenders.

## ***What Should Courts Be Doing Now?***

Cheryl encouraged flexibility, forward thinking, and innovative technology in RFP requirements. Courts should advocate for a single source depository for data that can be disseminated to appropriate agencies for different uses. “Engage in discussions with a variety of innovative people, organizations, and industries to stay abreast of trending technology and future strategies. Continued use of environmental scans to stay up to date on emerging thoughts about where we are and where we are headed.”

Dale urged courts to work with law enforcement, prosecutors, defense counsel, and DMVs to embrace *real* e-citation processes. Law enforcement should be able to swipe a license on a handheld reader, and pull the data from the DMV into the data of the citation right on the side of the road. The reader should do validation checks on the officer entry of state codes and violations, then transmit the data to the court, the prosecutor and the DMV, and finally provide paper only to the driver and an e-delivery of the paper to the driver’s cell phone or email. “If we are still writing a paper ticket or transmitting a replica rather than data, the stakeholders will not be ready for any of the technologies mentioned in the scenario.”

Jeff Barlow advised traffic courts to prepare for a potentially radical future. He counselled that the “traffic” component within the court organization be a clearly delineated and severable department. “Make sure that budget and resource allocation (judges, clerks, courtrooms, technology systems, facilities, floor space) all have minimal impact on and draw minimal resources from other sections of the court. That way, that section can be downsized and, if necessary, shut down, outsourced, or merged to another court or courts with minimal dislocation of the rest of the court.” He thought that to the extent traffic revenue (budget and fines) supports non-related court functions, start to consider that an existential threat. “Start working on alternative business models for the court.”

Jeffrey was less convinced in the possibility of a traffic court “sea change.” He asked what is the cost of this new technology to the court and/or to the customer? “Do these things really provide more safety, or more opportunities for rules to be broken and more complicated legal issues to arise? Courts should always, if they aren’t already, keep close watch on bills that float through the legislature, and watch for emerging trends in their state.”

## ***We Want to Hear from You!***

Write to us at the following email address for a copy of the entire combined list of survey results and send us your comments to: [pkiefer@superiorcourt.maricopa.gov](mailto:pkiefer@superiorcourt.maricopa.gov)

Phillip Knox & Peter C. Kiefer  
March 23, 2015

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<sup>i</sup> B.E.S.T. Labs Inc. holds the patent

<sup>ii</sup> American Beverage Institute, Alcohol Detection Technologies: Present and Future

<sup>iii</sup> Ronald Weiss holds the patent

<sup>iv</sup> Darlene Storm, May 1, 2012

<sup>v</sup> Tim Evans, “Black Boxes for Cars Raise Privacy Concerns,” USA Today, May 25, 2014

<sup>vi</sup> Craig Kaplan holds the patent

<sup>vii</sup> Des Moines Register, December 10, 2014.

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<sup>viii</sup>Norman Meyer and pointed out that reduced traffic court revenue is occurring today, not 10 years from now. Niraj Chokshi, “The Chief Justice of Nevada’s Supreme Court Says a Decline in Traffic Tickets is Starving His Budget,” *The Washington Post*, March 23, 2015.

Victor Flango and Dale Kasperek discuss that court may not even be the best venue for commercial driving cases and by inference traffic overall. Victor E. Flango, & F. Dale Kasperek, Jr., “Which Commercial Driving Cases Should Go to Court?”, *Trends in State Courts*, 2013, National Center for State Courts.

<sup>ix</sup>In the three surveys we asked respondents to assess scenarios using a 1 to 5 scale(1: highly likely, 2: Likely, 3: Maybe (50-50 Chance, 4: Unlikely, 5: Improbable ). The probability labels are bases on averages of the responses: (1.0–1.9: Highly Likely, 2.0–2.4: Likely, 2.5–2.9: Maybe (50–50 Chance, 3.0–3.4: Unlikely, Above 3.4: Improbable).