In July 2017, the US Department of Transportation submitted a report to Congress on Marijuana-Impaired Driving. The document below summarizes the report’s findings. The link to the full report is: <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf>

The report begins by highlighting the ease that comes with detecting alcohol at a roadside stop. Due to its absorption into the bloodstream and early elimination, it is very easy for a device to find drivers Blood Alcohol content. However, Cannabis is far different in terms of detection. TCH is the compound found in Marijuana that produces its psychoactive effects associated with the drug. With this being said, the detection of THC is essential to determine impairment of a driver. The main problem is that THC is stored in Fat tissue, not into the bloodstream. Many studies show that THC can be released into the blood during fat burning as many as 30 days after initial use (Page 4) without any visual or cognitive sign of impairment. This thusly causes a major problem with detection for Law Enforcement as they can detect THC far after its effects have worn off.

As well, the absorption of THC has an interesting time frame. **Figure 2** of the report (Page 5) shows how peak THC levels are at 10 minutes after ingestion. However, 20 minutes after this peak the THC becomes nearly undetectable in blood (small amounts may be present). This makes it extremely difficult for law enforcement to see large amounts of THC that would signal them to impairment. **Figure 4** (page 7) displays how THC levels detected from testing do not correlate well with Subjective High and Performance.

The current process for collected samples for alleged impaired driving due to Marijuana is done through the Drug Evaluation and Classification Program (DEC). Officers at the scene can request a Drug Recognition Expert. This DRE would then preform a Drug Influence evaluation, where they could discern whether the driver’s impairment was due to drugs (and specifically which drugs) or disease/mental illness. The DRE or on site officer proceeds to collect a urine or blood sample to be sent to the toxicology lab for more study, however toxicology reports cannot be used alone as evidence of impaired driving.

The big question is how does Marijuana impairs a person’s driving. Studies mentioned in the report (page 11-13) highlight how people under the influence of marijuana have increased difficulty staying within their lane, lower mean speeds, and greater following distance. There are also though many studies that show no ***statistical*** significance between driving patterns and marijuana use.

The final piece of this report looks into prevalence of THC detected from roadside drivers. A study done in California (page 22) displayed a 4% increase in THC prevalence in roadside drivers from 8.6% in 2007 to 12.6% in 2014. As well studies have found an albeit small increase in crash risk for users of THC, nevertheless there is an increased crash risk. A study done of all Virginia Car crashes over a recent 20 month period found that 7.6% of drivers that were crash involved had THC detected. This is larger than the contrast. Of the randomly sampled drivers in the state only 6.2% of the drivers had THC detected in their system.

**What does all this mean?** In short, marijuana is hard to detect, and it does impair driving.

**Appendix**

