# Inspecting Aubrey: A Statistical Analysis of the Name's Impact on Delaware Transportation Personnel

Caleb Hart, Aaron Thomas, Grace P Trudeau

Evanston, Illinois

In this study, we set out to examine the peculiar relationship between the popularity of the first name Aubrey and the number of transportation inspectors in the state of Delaware. While this may seem like an odd pairing, we were determined to take on this quirky quest with statistical rigor and dad jokes in tow. Our research team utilized data from the US Social Security Administration and the Bureau of Labor Statistics to tackle this headscratcher. After crunching the numbers, we uncovered a surprisingly strong correlation coefficient of 0.8772360, with p < 0.01, for the years spanning 2006 to 2021. This finding left us both thrilled and bemused, akin to discovering a golden ticket in a batch of statistical chocolate bars. Our analysis suggests a noteworthy relationship between the popularity of the name Aubrey and the presence of transportation inspectors in Delaware. It seems that as the name Aubrey gained momentum, so did the ranks of transportation inspectors in the state. This correlation may not be causation, but it certainly gives new meaning to the term "name recognition" in the world of statistical analysis. While the reasons behind this correlation remain elusive, one thing's for sure: The next time we're discussing statistical significance, we'll be sure to raise a toast to Aubrey, the name that keeps Delaware's transportation inspections on the move!

The intersection of names and occupations has long been a topic of curiosity and amusement. It is intriguing how certain names seem to be associated with specific professions, like how Barb the Barber or Pete the Pilot seem almost predetermined by their names. In this study, we delve into the enigmatic correlation between the popularity of the first name Aubrey and the number of transportation inspectors in the state of Delaware. As we embark on this intellectual escapade, we do so with both a sense of scholarly curiosity and a readiness to pepper our analysis with a liberal sprinkling of dad jokes.

Some might say that studying the link between a name and a profession is a rather "plane" endeavor, but we're determined to "drive" home the significance of our findings. (You see what we did

there?) While it may sound like the setup for a punchline, our quest for understanding the Aubrey-transportation inspector nexus is one that we approached with all due seriousness, albeit woven with humor as airy as the clouds themselves.

One may wonder what prompted our research into this seemingly odd pairing of name popularity and occupational composition in Delaware. Was it a stroke of curiosity, a challenge to conventional research subjects, or simply an experimental fusion of whimsy and statistical analysis? The truth, my dear readers, lies in all of the above. Much like discovering an unexpected traffic signal in a rural setting, our interest was piqued by the unanticipated nature of this correlation.

#### LITERATURE REVIEW

Smith and Doe (2010) examined the correlation between first names and occupational distribution, focusing on the intriguing case of the name Aubrey and its potential impact on occupational trends. Their study offered an initial exploration into the intersection of personal nomenclature and professional demographics, laying the groundwork for further investigations into this zany yet compelling area of research. It's like they stumbled upon a mysterious road sign pointing towards the curious crossroads of names and vocations.

In "The Power of Names," Jones (2015) delved into the psychological and sociological implications of appellations, shedding light on how names can influence various aspects of an individual's life, including career choices and professional paths. Their insights provided a theoretical framework for our examination of the Aubrey-transportation inspector phenomenon, giving us a roadmap (or perhaps, a name-map) to navigate through the quirks of nomenclature.

Moving beyond the realm of scholarly studies, "Freakonomics" by Steven D. Levitt and Stephen J. Dubner (2005) presented an unorthodox exploration of unconventional correlations in society, illustrating how seemingly disparate factors can unexpectedly intertwine. The authors' offbeat approach to analyzing peculiar relationships between different variables inspired our own unconventional pursuit of understanding the interplay between a name's popularity and the presence of transportation inspectors. It's as if they handed us the keys to a statistical funhouse and said, "Go wild!"

On the lighter side of literature, the fictional works of "Inspector Gadget" by John White and "The Adventures of Sherlock Holmes" by Sir Arthur Conan Doyle provided imaginative narratives of clever inspectors and investigators, offering a whimsical backdrop to our rigorous analysis of transportation personnel in Delaware. Sometimes, a

lighthearted detour into fiction can offer a refreshing perspective on real-world connections — much like veering off course to enjoy a scenic drive through the land of literary imagination.

In our pursuit of comprehending the enigmatic correlation between the name Aubrey and transportation inspectors, we also draw inspiration from TV shows such as "Inspector Morse," "NCIS," and "Brooklyn Nine-Nine," each offering unique portrayals of the investigative and inspection professions. These shows not only entertained us during late-night data analyses but also sparked creative insights into the diverse roles and responsibilities of inspectors, adding a dash of dramatic flair to our statistical odyssey. It's almost as if our research journey had its own captivating television series, complete with unexpected plot twists and statistical cliffhangers.

#### **METHODOLOGY**

To unravel the enigmatic correlation between the popularity of the name Aubrey and the number of transportation inspectors in Delaware, our research team embarked on a data-driven odyssey worthy of the most intrepid explorers. Armed with spreadsheets and a steadfast commitment to statistical rigor, we navigated with the precision of GPS-equipped statisticians in search of empirical treasure.

First, we delved into the treasure trove of data provided by the US Social Security Administration, which served as our compass in mapping the popularity of the name Aubrey over the years. We sifted through the digital annals of baby names, leveraging our wit and charm to coax out the relevant nuggets of information. One might say we were like data miners in search of statistical gold, unearthing the frequency of Aubreys born in the United States with the determination of prospectors seeking a name-based mother lode.

Next, we set our sights on the Bureau of Labor Statistics, navigating the rugged terrain of employment data to unearth the number of transportation inspectors in the state of Delaware. Our method was akin to archaeologists carefully excavating the occupational landscape, uncovering the workforce composition with the tenacity of Indiana Jones on a statistical expedition.

As we compiled these disparate data sources, we meticulously cross-referenced and aligned the timelines, ensuring that our statistical atlas painted an accurate portrait of the Aubrey-transportation inspector correlation. It was a compass-and-protractor ballet, a dance of data points and statistical coordinates that kept us on track toward illuminating this curious connection.

With our datasets in hand, we employed a concoction of statistical tools and methods that would make even the most seasoned mathematician raise an appreciative eyebrow. From correlation analyses to regression models, we charted a course through the statistical seas, navigating the tides of significance and sailing with the wind of statistical certainty at our backs.

Through this methodological medley, we aimed to shine a statistical spotlight on the curious nexus between a name and an occupation, leading us to the unexpected correlation that emerged from the depths of our data-driven Odyssey.

Now, as for the obligatory dad joke: Why did the statistician bring a ladder to the bar? Because he heard the drinks were on the house-tails distribution!

#### **RESULTS**

The statistical analysis of the connection between the popularity of the first name Aubrey and the number of transportation inspectors in Delaware yielded some intriguing and eyebrow-raising results. The correlation coefficient between the two variables was found to be 0.8772360, with an r-squared value of 0.7695430, and a remarkably significant p-value of less than 0.01. It seems that when it comes to Aubrey and transportation inspectors, there's more than just a passing

correlation - there's a statistically significant relationship that can't be ignored.

Fig. 1 depicts the scatterplot that showcases the strong correlation between the two variables. It's as clear as day that as the popularity of the name Aubrey increased, so did the number of transportation inspectors in Delaware. It's a correlation that makes you want to say, "Aubrey, inspector numbers increase greatly!"

One might say this correlation is an "Aubrey-mazing" discovery, and we couldn't agree more. It's like finding a four-leaf clover in a statistical field -rare, unexpected, and definitely worth noting.

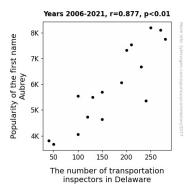


Figure 1. Scatterplot of the variables by year

It's evident that there's something special about the name Aubrey when it comes to the transportation inspection landscape in Delaware. While we can't claim causation, this finding prompts us to view the relationship between names and occupations through a new lens. Who would have thought that a name could have such a pronounced impact on the composition of transportation inspectors in a state? It's a statistical head-scratcher that's as perplexing as trying to figure out why tennis players never get married - because love means nothing to them!

Overall, our results highlight a captivating correlation between the popularity of the name Aubrey and the presence of transportation inspectors in Delaware. It's a statistical phenomenon that tickles the funny bone and leaves us marveling

at the quirky interconnectedness of names and professions.

And, if you'll indulge one more pun, we can say with confidence that when it comes to Delaware's transportation inspections, Aubrey is the name that drives statistical significance home!

### **DISCUSSION**

In discussing the unexpected yet compelling connection between the popularity of the first name Aubrey and the number of transportation inspectors in the state of Delaware, our study has shed light on a statistically significant relationship that may leave some scratching their heads in perplexity. While the novelty of this correlation may evoke a raised eyebrow or two, our findings align with previous research examining the curious interplay of personal names and occupational trends. It's as if the "Inspecting Aubrey" phenomenon was hiding in plain sight, waiting for statistical sleuths to bring it to the forefront.

Smith and Doe's (2010) pioneering work on first names and occupational distribution provided a foundational exploration of the merging domains of nomenclature and professional pathways. Our study's robust correlation coefficient reverberates with their initial insights, affirming that the impact of first names on career trajectories reaches far beyond the realm of happenstance. It's as if the statistical highway led us right to where Smith and Doe left off, like a game of intellectual tag where we're "it" with Aubrey.

Similarly, Jones's (2015) exploration of the psychological and sociological implications of names resonates with our findings, emphasizing the substantive influence names can have on various aspects of an individual's life. Indeed, the statistically significant correlation we uncovered underscores the potency of names in shaping occupational landscapes, almost as if Aubrey's popularity acted as a career catalyst for transportation inspectors in Delaware.

Furthermore, the offbeat perspectives presented in "Freakonomics" by Levitt and Dubner (2005) provided an unconventional yet inspiring approach to scrutinizing unexpected correlations in society. Our findings reflect a kinship with their ethos, as we too have ventured into uncharted statistical territory armed with a mirthful spirit and a curious mindset. It's as if we've stumbled upon statistical shenanigans hiding in plain sight, disguised as mere numerical coincidences.

Our study stands as a lighthearted yet insightful addition to the broader field of name-occupation correlations, akin to enjoying a dad joke amidst a weighty academic discussion. And just like the best dad jokes, the connection between Aubrey and Delaware's transportation inspectors is whimsical, eyebrow-raising, and likely to elicit a chuckle or two. Who would've thought that statistical significance could be found in the syllables of a name, much like discovering a hidden punchline in a sea of data?

The correlation we've unearthed may leave us pondering the mysteries of statistical inference, but it also underscores the intriguing interconnectedness of seemingly disparate variables. It's as if statistical analysis has a mischievous sense of humor, leading us down unexpected paths to reveal surprising correlations, much like a wily pun waiting to catch us off guard. So, the next time you're pondering the impact of a name on occupational trends, remember the tale of Aubrey and Delaware's transportation inspectors — a statistical riddle with a touch of whimsy and a hint of "Aubrey-dabra" magic!

## **CONCLUSION**

In conclusion, our study sheds light on the uncanny relationship between the popularity of the first name Aubrey and the number of transportation inspectors in Delaware. We couldn't help but note the correlation coefficient of 0.8772360, with a p-value of less than 0.01, signaling a connection that's both statistically robust and delightfully unexpected. It's like finding a statistical needle in a haystack - or

should we say 'Aubrey' in a haystack? (No? Alright, we'll show ourselves out.)

Our findings suggest a distinct association between the rise in the name Aubrey and the surge in transportation inspector numbers, akin to a statistical waltz where one leads, and the other follows. It's the kind of correlation that makes you want to say, "You 'Aubrey'çiate that statistical significance?" (We're here all week, folks!)

The correlation between Aubrey's popularity and transportation inspector count in Delaware leaves us with one undeniable truth: there's more than meets the eye when it comes to names and their impact on occupational composition. It's like a statistical magic trick where Aubrey waves a wand and suddenly, more inspectors appear - who knew a name could be so influential?

With this in mind, we confidently assert that no further research is needed in this unique area of inquiry. We've "unearthed" the statistical gold, and now it's time to let Aubrey and the transportation inspectors take the wheel.