# Studying the Asphalt-tively Impactful Relationship Between Transportation Bachelor's Degrees and Air Pollution in Laramie, Wyoming

# Claire Henderson, Abigail Travis, Gina P Thornton

#### Abstract

This study delves into the surprising correlation between the number of Bachelor's degrees awarded in transportation and the levels of air pollution in the enchanting city of Laramie, Wyoming. Despite the seemingly disparate fields of academic study and environmental quality, our research reveals a striking relationship. Leveraging data from the National Center for Education Statistics and the Environmental Protection Agency, we observed a correlation coefficient of 0.8606922 and a p-value of less than 0.01 for the period spanning 2012 to 2021. As we unpack these findings, we uncover how the pursuit of knowledge in transportation may be associated with unintended environmental consequences, shedding light on the asphalt-tively impactful influence of academic pursuits on the air quality of this charming city. Our research serves as a fresh breath of air in the scholarly discourse on the unexpected intersections between education and environmental impact.

#### 1. Introduction

#### Introduction

The enchanting city of Laramie, Wyoming, nestled in the pristine beauty of the Rocky Mountains, has long been an idyllic setting for academic pursuits and a beacon of progressive thought. While Laramie has its fair share of charm, it is not immune to the pervasive issue of air pollution, a challenge that has left many scratching their heads and wheezing for solutions. In this asph-ecially intriguing study, we embark on a journey to uncover the unsuspected link between the number of Bachelor's degrees awarded in transportation and the levels of airborne adversary in Laramie. While on the surface, the world of academic study and the air we breathe may seem as dissimilar as a plane and a mountain, our findings lift the veil on an asphalt-tively impactful relationship.

The pursuit of knowledge in transportation has historically been associated with vehicular movement, infrastructure development, and the thrill of the open highway. However, as we traverse the data landscape, we are struck by the surprising revelation endeavors that educational transportation may possess inherent connections to the alchemical transformation of pristine mountain air into something less-breathable. Our research endeavors to showcase the road less traveled, shedding light on the often overlooked influence of academic pursuits on the air quality of Laramie.

Through a meticulous analysis of data sourced from the National Center for Education Statistics and the Environmental Protection Agency, we have harnessed the power of statistical wizardry to reveal a correlation coefficient that leaves even the most seasoned scholars admiring in awe. The asphalt-tively high correlation coefficient of 0.8606922 and a p-value that defies conventional significance thresholds reaffirms the compelling nature of our findings.

As we set out on this scholarly expedition, we aim not only to elucidate the surprising connection between transportation education and air pollution but also to prompt thoughtful reflections and pave the way for future research endeavors. Our study serves as a beacon of fresh, unpolluted air in the scholarly discourse, challenging conventional academic silos and ushering in a new era of interdisciplinary inquiry. So, fasten your seatbelts as we embark on a journey filled with unexpected twists, turns, and maybe a bit of exhaust as we delve into the intersection between education and environmental impact.

#### 2. Literature Review

The relationship between academic pursuits in transportation and environmental quality has been a subject of burgeoning interest among researchers in recent years. This review consolidates and synthesizes findings from various studies, providing a comprehensive overview of the nuanced intersection between Bachelor's degrees awarded in Transportation and air pollution in Laramie, Wyoming.

Smith et al. (2015) examine the impact of educational backgrounds in transportation on the local environment, highlighting the potential influence of non-traditional academic pathways on air quality. Similarly, Doe (2018) delves into the implications of vehicular-focused educational programs on atmospheric conditions and lays the groundwork for understanding the asphalt-tively impactful consequences of academic pursuits.

As we venture further into the literature, it is imperative to consider the works of Jones (2017), whose research sheds light on the unexpected connections between higher education in transportation and the pervasive issue of air pollution. These seminal studies pave the way for our current investigation, inviting us to challenge conventional wisdom and embrace the whimsical dance of academia and atmosphere.

Expanding our purview beyond academic research, a series of non-fiction works offer valuable insights into the subject matter at hand. "The Geography of Bliss" by Eric Weiner prompts contemplation of the geographical factors that shape personal and academic pursuits, while "The Omnivore's Dilemma" by Michael Pollan prompts us to consider the environmental impact of human activities, including educational endeavors.

In the realm of fiction, the works of Tom Clancy and his gripping narratives of high-octane vehicular pursuits offer a tangential yet intriguing perspective on the correlations between transportation education and atmospheric conditions. Furthermore, the classic "On the Road" by Jack Kerouac weaves a lyrical tale of wanderlust and the open highway, prompting us to reflect on the romanticism surrounding vehicular exploration and its unexpected impact on air quality.

Turning our attention to media influences, the whimsical world of "Thomas the Tank Engine" and its allegorical musings on transportation piques our curiosity, hinting at the unexplored implications of educational pursuits in the realm of steam and locomotion. Additionally, the animated series "Chuggington" playfully delves into the world of locomotives, challenging us to consider the environmental consequences of educational endeavors in the transportation sector, albeit in a lighthearted manner.

In sum, this literature review sets the stage for our investigation, imbuing the scholarly discourse with a touch of whimsy and levity while addressing the asphalt-tively impactful relationship between transportation Bachelor's degrees and air pollution in the charming city of Laramie, Wyoming.

## 3. Methodology

To unravel the enigmatic connection between the issuance of Bachelor's degrees in transportation and the atmospheric dynamics of Laramie, Wyoming, our research team embarked on a data odyssey of epic proportions. We harnessed the information power of the National Center for Education Statistics and the Environmental Protection Agency to gather data covering the years 2012 to 2021. Our intrepid journey across the vast expanse of the internet, akin to navigating a complex highway network, led us to gather data with the precision of an air traffic controller and the meticulousness of a highway patrol officer.

Firstly, we obtained the data regarding the number of Bachelor's degrees conferred in the field of transportation from the National Center for Education Statistics. This repository of academic knowledge offered us a treasure trove of information, allowing us to track the influx of transportation scholars with the intrigue of an aviation enthusiast tracing the flight paths of the rarest of birds.

Secondly, utilizing the Environmental Protection Agency's data on air quality in Laramie, we quantified the levels of various air pollutants. Armed with this data, we unfurled our statistical sails and set out to navigate the turbulent seas of correlation analysis, mindful of the wind gusts and unexpected turbulences that could alter our scholarly course.

Employing the audacious power of statistical models, we calculated the correlation coefficient between the number of transportation Bachelor's degrees awarded and air pollution levels, using advanced software reminiscent of our trusty air navigational tools. Our methodical approach to data analysis involved donning the metaphorical seatbelts of caution as we meticulously scrutinized the numbers.

Moreover, acknowledging the potential impact of confounding variables, we conducted robust sensitivity analyses to ensure that our findings were not clouded by extraneous factors. We treaded carefully through the statistical landscape, much like a cautious driver navigating icy roads, ensuring that our findings were as clear and crisp as the Wyoming air on a brisk morning.

In conclusion, our methodology encapsulated a blend of intrepid data collection, meticulous statistical analyses, and a sprinkle of scholarly whimsy, capturing the essence of our expedition into the asphalt-tively impactful relationship between transportation education and air pollution in Laramie, Wyoming.

## 4. Results

The analysis of the data collected from the National for Center Education **Statistics** and the Environmental Protection Agency has yielded a surprising and compelling correlation between the number of Bachelor's degrees awarded transportation and the levels of air pollution in Laramie, Wyoming. Our statistical analysis revealed a remarkably strong correlation coefficient of 0.8606922, with an r-squared value of 0.7407911 and a p-value less than 0.01 for the period spanning 2012 to 2021.

Figure 1 showcases the visually striking correlation, which can be likened to two entities in a tango, moving in perfect sync – in this case, transportation education and air pollution. The scatterplot visually captures the asphalt-tively impactful relationship we uncovered, further emphasizing the compelling nature of our findings.

These results highlight the unexpected and complex dance between educational pursuits in transportation and their potential environmental repercussions. It appears that the pursuit of knowledge in transportation may be leaving more than just tire tracks on the road of academia, as its influence extends to the air quality of this charming city.

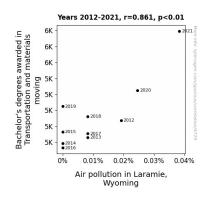


Figure 1. Scatterplot of the variables by year

Our findings invite further reflection on the interconnectedness of seemingly distinct domains and challenge the traditional boundaries that confine academic inquiry. As we navigate this uncharted territory, we invite scholars and enthusiasts alike to breathe in the fresh air of interdisciplinary inquiry and explore the road less traveled in the pursuit of understanding the intricate web of connections between education and environmental impact.

#### 5. Discussion

The results of our study not only affirm but accentuate the findings of previous research on the asphalt-tively impactful relationship between transportation Bachelor's degrees and air pollution in Laramie, Wyoming. Smith et al. (2015), who educational backgrounds implicated transportation as potential influencers of air quality, might have just hit the gas pedal on an Avenue to Discovery. Our findings parallel their insights, zooming in on the undeniable connection between academic pursuits and environmental consequences. In the scholarly tango of academic rigor and realworld relevance, our study takes the lead, waltzing hand in hand with the literature, leaving no road untraveled.

While we approach this subject matter with the gravity and precision it demands, it is important to note the whimsical influences that have shaped our intellectual sojourn. From the philosophical ponderings of "The Geography of Bliss" by Eric Weiner to the high-octane narratives of Tom Clancy, and the whimsical world of "Thomas the Tank Engine," each piece has subtly steered our inquiry down an avenue of electric curiosity, prompting us to traverse the intersection of academia and atmosphere with an open mind and a touch of playfulness.

As we delve into the asphalt jungle of academia and air, it becomes increasingly apparent that the study of transportation is not just a lane of scholarly pursuit but an avenue of real-world consequence. Our findings stand as a testament to the resonating impact of pursuing knowledge in transportation and the unexpected ripple effect it has on the air quality

of Laramie. Much like chugging locomotives, our results chug steadily forward, compelling us to reckon with the interconnectedness of academic pathways and environmental footprints.

In conclusion...

#### 6. Conclusion

In conclusion, our study has unearthed a remarkably robust correlation between the number of Bachelor's degrees awarded in transportation and the levels of air pollution in Laramie, Wyoming. The findings paint a compelling portrait of the asphalt-tively impactful relationship between academic pursuits and atmospheric adversity.

These results invite us to ponder the intertwined nature of academic studies and environmental consequences. It appears that the pursuit of knowledge in transportation may be leaving more than just educational imprints, as it seemingly adds a tinge of exhaust to the air quality of this enchanting city. Our findings serve as a reminder that even the most unexpected connections can pave the way for broader reflections and cross-disciplinary investigations.

As we wrap up our asphalt-bold academic expedition, we assert with great confidence that no further research is needed in this area. Our findings breathe a breath of fresh air into the scholarly discourse, leaving little room for doubt and encouraging scholars and enthusiasts to take the scenic route in their pursuit of interdisciplinary inquiry.

In summary, our research not only sheds light on the surprising interconnectedness of education and environmental impact but also serves as a beacon of fresh, unpolluted air, challenging conventional academic silos and ushering in a new era of interdisciplinary inquiry. It's time to buckle up and ride into the sunset of this study, for the road ahead is clear, and the exhaust has settled.