Dear Hon. Members of Sen Commerce,

I write to urge you to **support HB649** to eliminate unnecessary vehicle inspections. I am a resident of Amherst, have a PhD in Computational Sciences and Statistics, and have represented Amherst as a Regional Planning Commissioner for about 6 years.

I testify in my personal capacity.

When I first read about a bill to eliminate inspections, I had never questioned whether they make us safer. So I researched it, and was surprised to see that pretty much all of the studies over the past 30 years says the same thing: inspections don't make us safer.

Safety and emissions inspections no longer serve a public purpose for New Hampshire residents.

Eliminating them will not only let us catch up to 39 other states, but also improve the cost of living by returning a minimum of \$44m in costs and 1 million hours to our residents.

Summary:

- 1. Inspections do not improve safety according to multiple studies
- 2. Most other states have eliminated annual inspections
- 3. Significant savings from eliminating inspections
- 4. Conclusions

Appendices addressing concerns raised at the public hearing:

- A) We won't lose our highway funding
- B) Does our lack of an insurance mandate affect inspections?
- C) Other studies
- D) Gordon-Darby Contract

1) Inspections do not improve safety

Vehicles are far more reliable than 94 years ago when our safety inspections began. Fatality rates have drastically reduced from 14.79 per 100 million miles in 1931 to 1.3 in 2022 (NHTSA)¹. Even 1970 had over 3x the rate of fatalities that we have today!

Driving fatalities are now 1/11th of what they were when NH began safety inspections in 1931².

Motor Vehicle Traffic Fatalities and Fatality Rates, 1899-2022, National Highway Traffic Safety Administration. https://cdan.dot.gov/tsftables/Fatalities%20and%20Fatality%20Rates.pdf

^{2 1931} is an estimate of when NH inspections began based on the oldest date found in the footnotes of RSA 266:1.

Given our safer cars and roadways, and the fact that <u>only 2% of crashes are equipment-related</u>¹, even if safety inspections helped, they would very little difference.

But studies have not found evidence that inspections help in the first place.

In 2015, the US Federal Government Accountability Office reviewed the studies available at the time and evaluated crash rates related to car failure from 2009-2013². This included 6 comprehensive studies, 3 covering all 50 states, and 3 international, and none found an association between safety inspections and fatalities or accident rates. <u>They concluded</u>:

Studies GAO reviewed and GAO's analysis of state data examined the effect of inspection programs on crash rates related to vehicle component failure, but showed no clear influence.

A <u>2018 peer reviewed study</u>³ compared New Jersey traffic safety before and after they eliminated inspections in 2010 using a differences-in-differences model⁴. They concluded:

removing the [inspection] requirements resulted in no significant increases in any of traffic fatalities per capita, traffic fatalities due specifically to car failure per capita, or the frequency of accidents due to car failure.

Closer to home, the experts at the New Hampshire Office of Highway Safety write a plan every few years where they document driving safety issues and how we plan to address them. The current plan⁵ never once mentions vehicle equipment or inspections, instead focusing on documented problems like distracted driving, impaired driving, and speed. **Equipment failure isn't a major issue in NH.**

In case one might assume that equipment failure isn't a major issue in our state because of our inspections, the latest Highway Safety Plan for Minnesota⁶ (a larger-population, cold-weather state that never had safety inspections and has lower fatalities), also makes no mention of equipment failure.

2) Most other states have eliminated (or never had) annual inspections

New Hampshire is in a tiny minority of states that still require annual safety inspections. Over 3/4s of other states have looked at the data and concluded that since safety inspections like ours don't save lives, they are not worth the time and expense for their residents.

^{1 &}quot;In about 2 percent (±0.7%) of the crashes, the critical reason was assigned to a vehicle component's failure or degradation". Critical Reasons for Crashes Investigated in the National Motor Vehicle Crash Causation Survey.

National Highway Traffic Safety Administration. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812115

² VEHICLE SAFETY INSPECTIONS. United States Government Accountability Office. 2015. https://www.gao.gov/assets/gao-15-705.pdf

³ IT'S NO ACCIDENT: EVALUATING THE EFFECTIVENESS OF VEHICLE SAFETY INSPECTIONS. Contemporary Economic Policy. https://alex-hoagland.github.io/files/NoAccident_PublishedVersion.pdf

⁴ Differences-in-differences models are considered the gold standard in policy analysis, as they compare a jurisdiction before and after a policy change has taken place while controlling for changes due to unrelated factors.

⁵ NEW HAMPSHIRE OFFICE OF HIGHWAY SAFETY TRIENNIAL HIGHWAY SAFETY PLAN 2024-2026. https://www.nhtsa.gov/sites/nhtsa.gov/files/2024-01/NH FY24-26HSP-tag.pdf

⁶ Minnesota Strategic Highway Safety Plan 2020-2024. https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=26391033

This includes many states with winters that are as harsh or harsher than New Hampshire's, including: Alaska, Connecticut, Iowa, Montana, Minnesota, Michigan, North & South Dakota, and Wyoming.

While <u>31 states required annual inspections</u>¹ at the peak in the 70s, <u>only 11 states do now</u>² ³.

No state has instituted safety inspections since 1969 (when the federal govt required them), or reintroduced them after states started repealing inspections in 1976!⁴

3) NH can realize significant cost savings & improve the cost of living by eliminating unnecessary inspections

A conservative estimate is that auto inspections cost NH residents about 1 million hours⁵ of time and \$44m in money⁶ every year; likely much more. Think of your constituents, including families juggling jobs, child and elder-care responsibilities, and the rising costs in housing, healthcare and food, who are forced to choose between necessities like rent and food and unnecessary repairs just to pass inspections.

A number of them are living paycheck to paycheck, and we are forcing them to spend tens of millions of dollars and over 1 million hours of their time on a forced inspection. Why not let them decide whether it's worth it?

If you keep inspections on the books, you are requiring them to spend their limited time and money on a forced inspection EVERY YEAR with no clear public benefit.

To put 1 million hours in perspective, required inspections are like having 500 people employed full-time without vacations. How is that moral or reflect the Live Free or Die attitude?

Show constituents that you value their time and your own by voting to eliminate auto inspections.

Conclusions

The best science we have says that these inspections no longer help because cars and roadways are now built to be safer than they were even 50 years ago. Most people will not drive a car that has major safety problems out of self-preservation.

¹ https://www.gao.gov/assets/gao-15-705.pdf

² https://www.thezebra.com/auto-insurance/insurance-guide/failed-inspection-auto-insurance/

³ Texas ended safety inspections starting in 2025. https://www.kxan.com/news/texas/mandatory-texas-vehicle-safety-inspections-end-in-six-months/

^{4 &}lt;u>VEHICLE SAFETY INSPECTIONS</u> pg 27. United States Government Accountability Office. 2015.

Assumes each inspection takes an hour of waiting/driving. Estimate of 1,050,000 inspections per year from Fiscal Note. Estimate doesn't include time spent dealing with repairs that don't improve safety.

The state spends at least \$1.3m/year on administering inspections (2025 House Finance budget, acct 02-23-23-234015-2305), not including enforcement or complaints to DOJ. Average cost of an inspection in NH is \$44, meaning that approximately \$46m is spent on inspections not counting repairs that don't improve safety. Minus Avg inspection price calculated from https://nhinspect.com/entire-state/. Estimate of \$3.4m in lost revenue and 1,050,000 inspections/year from Fiscal Note.

Since we have so many freedoms in New Hampshire, we should also have the freedom to manage our vehicles the way we see fit. Forcing Granite Staters every year to spend \$44m and 1 million hours with little proven benefit is too high a price and not in the public interest.

Eliminating unnecessary inspections will allow New Hampshire to catch up to over 75% of the country, and will help address a top concern of NH residents: the high cost of living.

Please pass HB649 so we can move on.

Respectfully, Jason Hennessey, PhD Amherst, NH

Concern A) We won't lose our highway funding – the air is cleaner

One concern is that if NH eliminated emissions inspections, we may jeopardize our highway funding. This is highly unlikely, as cars today are not only safer, but they emit less pollution.

In the 1990s, NH did have a pollution problem, and agreed to a plan with the EPA for improvement that included emissions testing. That plan expired 4 years ago according to the Transportation Improvement Plans covering the Manchester¹ and Nashua² regions.

On top of that, the EPA itself says that NH has not violated any National Ambient Air Quality Standards (NAAQS) criteria (what they call "nonattainment") for the past 6 years³. NH DES confirms that we are in compliance⁴.

Therefore, if we were to be designated with nonattainment in the future for a pollutant, and the EPA pursued enforcement, then the state would have 18-36 months to develop a State Improvement Plan⁵, same as we did in the 90s. These plans cover all pollution sources (including industrial), and there are many possible improvements we could propose that don't involve bringing back an inspection program (like encouraging carpooling). Furthermore, because cars emit far less pollutants these days, emissions inspections would be unlikely to help much.

Finally, if after all that we really did need to bring back emissions inspections, there would be plenty of time for the legislature to do so like we did before.

^{1 &}quot;The 20-year maintenance period for the City of Manchester CO maintenance area expired on January 29, 2021. Therefore, the SNHPC is no longer required to demonstrate transportation conformity for the City of Manchester CO maintenance area."

Southern New Hampshire Regional Planning Commission FY2023-2026 Transportation Improvement Plan pg 24. https://www.snhpc.org/sites/g/files/vyhlif5006/f/uploads/snhpc tip finaldocument 0.pdf

^{2 &}quot;The 20-year maintenance period for the Nashua and Manchester CO maintenance areas expired on January 29, 2021. The Nashua MPO is therefore no longer required to demonstrate transportation conformity for the CO maintenance area". Nashua Metropolitan Planning Organization Transportation Improvement Program 2023-2026 pg 20 https://cms5.revize.com/revize/nrpc/NRPC%20MPO%20FY%202023-2026%20TIP%20FNL%2003.06.2023%20with%20self-certification.pdf

³ New Hampshire Whole or Part County Nonattainment Status by Year Since 1992 for all Criteria Pollutants. EPA. https://www3.epa.gov/airquality/greenbook/phistory nh.html

⁴ NH DES. https://www.des.nh.gov/air/state-implementation-plans/criteria-pollutants

⁵ NH DES. https://www.des.nh.gov/air/state-implementation-plans

States in similar situations have successfully ended their emissions inspections program, like Minnesota¹, and Florida².

Concern B) Lack of insurance mandate

Another concern is that the multiple studies that have shown no detectable improvement in safety from safety inspections didn't take into consideration NH's lack of requirement to purchase auto insurance. This is unlikely to make a difference for several reasons:

- 1) Despite no insurance mandate, New Hampshire has the 5th highest rate of insured drivers³. It's not clear how either a lack of insurance mandate or having so few uninsured drivers could a difference from the substantial studies out there.
- 2) Over half of US states (about 32) do not strictly require insurance either, instead allowing a driver to purchase a surety bond instead⁴. These include several states with harsh winters that do not require safety inspections, like Idaho, Montana, South Dakota, and Wyoming.
- 3) To the contrary, if safety inspections significantly reduced collisions, then auto insurance companies would likely offer discounts for them due to the significant expense. As far as I can tell with Internet searches, they don't.

Concern C) Other studies mentioned at the hearing

During the public hearing in the Senate on April 1, 2 studies were cited by proponents of keeping inspections.

The NH Auto Dealers Association cited a 2023 study⁵ that looked at crashes from 1975 to 2018 and claimed that safety inspections do improve safety. As a statistician, I believe this study has several problems that could easily have affected their conclusion, including:

- 1. The study tests whether inspections are effective over the entire period as a whole (which includes the more dangerous 70s and 80s), ignoring any changes in the effectiveness of auto inspections within the study period.
- 2. The study then gives more weight to the more dangerous earlier decades due to there being relatively more crashes that are counted. This will cause the model to reflect the 70s and 80s more than the safer decades of the 2000s and 2010s. It's quite easy to imagine that safety inspections contributed to safety 50 years ago.

¹ https://www.msn.com/en-us/autos/news/why-doesn-t-minnesota-require-emissions-testing-for-cars-anymore/ar-AA1mvpwg

² https://www.miamiherald.com/news/state/florida/article232821422.html

^{3 &}lt;a href="https://www.iii.org/fact-statistic/facts-statistics-uninsured-motorists">https://www.iii.org/fact-statistic/facts-statistics-uninsured-motorists

⁴ Surety Bonds as an Alternative to Auto Insurance. https://www.autoinsuresavings.org/surety-bonds-auto-insurance/

The Impact of Periodic Passenger Vehicle Safety Inspection Programs on Roadway Fatalities: Evidence from US States Using Panel Data. 2023. https://ascelibrary.org/doi/10.1061/JTEPBS.TEENG-7320

On top of that, the study received funding from companies that profit from vehicle inspections¹, calling into question its impartiality.

Another person cited a CMU study² that examined inspection failure rates in the state of Pennsylvania as a metric. Because it did not examine actual safety outcomes like fatalities or accidents caused by equipment failure, it is not relevant.

Concern D) Gordon-Darby Contract

A concern was raised about how passage of HB649 would affect the Gordon-Darby contract³. While I am not a lawyer, my understanding is that:

- 1) The Termination for Convenience clause (section 13.2, pg 45) means that only 30 days notice must be provided to terminate the contract.
- 2) If HB649 passes, the Dept of Safety could continue to use the inspection station system for the state's 3500 school buses, many of which are inspected twice a year. They can do this with their current rule-making authorities under RSAs 266:7 and 21-P:14, V. Doing this would also address State Trooper Conlon's concern about needing more troopers to perform those inspections.

¹ International Motor Vehicle Inspection Committee. https://citainsp.org/about-us/

² Failure rates and data driven policies for vehicle safety inspections in Pennsylvania, 2015. https://www.sciencedirect.com/science/article/pii/S096585641500141X

³ Gordon-Darby Contract https://media.sos.nh.gov/govcouncil/2024/1113/005O%20GC%20Agenda%20111324.pdf