

# [Urgent Concern on Toxic Silica Dust as Public Health Hazard](#) [Re: Tear-Down and Widening of I-270 and 495 Beltway](#)

*by Byron Bloch, National Vehicle Safety and Crashworthiness Expert*

## [1. Public Health Hazard: Toxic Construction Dust... and Breathing](#)

In the 3 to 5 years of I-270 and 495 road widening and re-building, the road and bridges deconstruction processes will create massive amounts of **toxic crystalline silica construction dust**. Such toxic air pollution will cause respiratory diseases for our kids and grandkids and all of us, especially for those closer to the I-270. The illnesses include asthma, silicosis, chronic obstructive pulmonary disease (COPD), and lung cancer. ***This is certainly an urgent public health issue!*** And it is NOT addressed in the EIS.

According to the National Cancer Institute and OSHA, and various other U.S. and British sources, workers in such environments must wear respiratory protection masks, and other precautions are also required. As the I-270 road and bridge construction persists, with the continuous generation of harmful silica dust, it will become necessary for schools to prohibit outdoor recess, sports events, and all outdoor activities (*no walking, no bicycling*). Some schools may have to shut down, such as Julius West Middle School, Farmland Elementary, Carderock Elementary, and Walter Johnson High. And what about precautions for others, of whatever age, should they also stay indoors and then need to wear respiratory facemasks when they go outside?

The massive and continuous generation of toxic silica dust will require major mitigation measures, such as vacuum systems and watering by tanker trucks which are only marginally effective ... and then there's a disposal issue and its environmental impact. This will require more equipment and workers, and will generate more traffic and pollution (and costs) during the deconstruction phase. *Yet, none of this is covered in the EIS at all.*

## [2. Increase in "Heavy Truck versus Car" Crashes and Fatalities](#)

As a national auto safety expert for 50 years coast-to-coast, I've examined and analyzed many truck-versus-car collision accidents. Well over 95-percent of the severe to fatal injuries occur to the occupants of the passenger cars, vans, and SUVs. With the road widening and toll lanes added to the I-270 and the 495 Beltway, there will be a great increase in such truck-versus-car collisions. These horrific crashes will occur when cars and trucks need to shift from or into toll lanes to get to exits, and also because heavy trucks and tractor-trailers need much greater stopping distances than do cars. If the cars ahead need to suddenly slow or stop, the following trucks may be unable to avoid the crash.



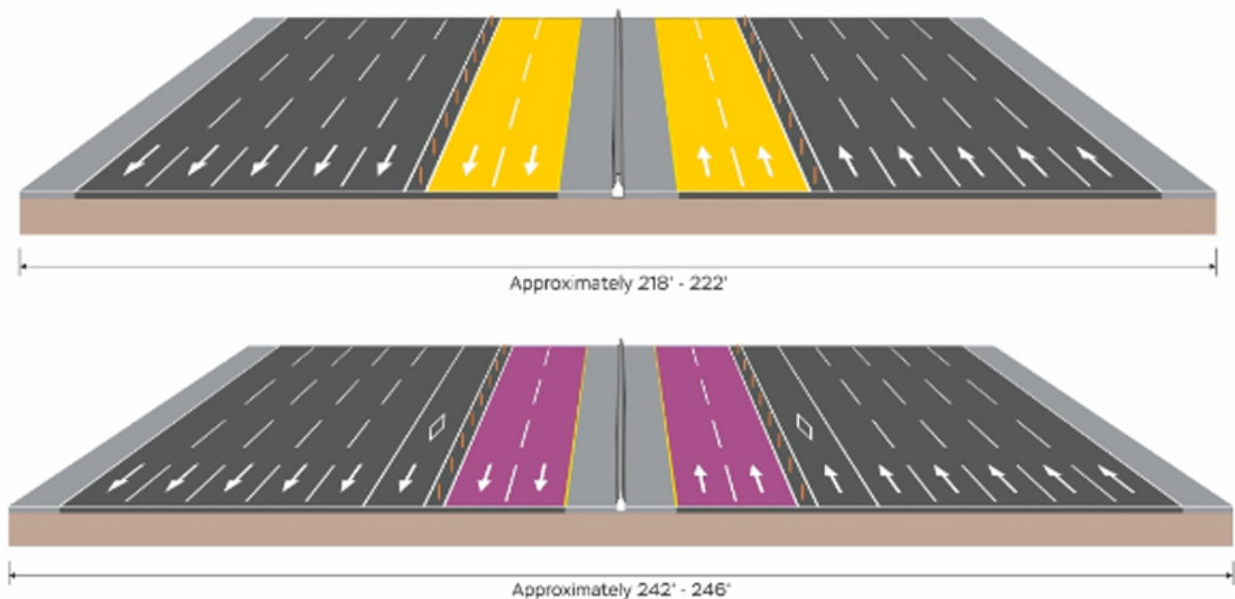
***Truck crashes into rear of car ahead***



***Car underides beneath rear or side of trailer***

The EIS includes **Appendix C - Traffic Analysis Technical Report**, which is merely a statistical review of historic crash data along I-270 and I-495 "*to help identify potential safety impacts*" of the Managed Lane Study. The analysis is sorely lacking in any inputs or insights about how to mitigate or prevent the continuation of such crashes. In the five-year study period of 2012-2016 there were a total of 2,918 crashes along I-270. There was no breakdown of the types of injuries, nor their severity, so there's no appreciation of whether there were many quadriplegics or brain-damaged or burn victims in the mix. Nor was there information about the *mis-match* of large trucks and tractor-trailers impacting into or with passenger vehicles (cars, minivans, SUVs).

Look at the multiple lane designs for 2 of the proposals for the I-270. Design #9 has 7 lanes in each direction, and design #10 has 8 lanes in each direction.



Imagine you're going about 60 mph and you're on a northbound toll lane (yellow), but realize you need to exit fairly soon. But all the adjacent lanes are jammed with vehicles all moving between 45 and 60 mph. How confident are you to make six (6) lane changes through traffic to your right... in a rainstorm on a dark night in October? Oh, and there are quite a few tractor-trailer rigs in the mix.

### **3. Bottlenecks: Traffic will stall and pollute as it funnels down.**

The proposed build-out of the I-270 will expand the road in each direction from the present four lanes to seven or eight lanes, which must then funnel down to four lanes in Gaithersburg and then to two lanes north of Germantown up through Frederick. Those bottlenecks will cause immense backups on the I-270 south of Germantown. *There will be more deadly mismatch crashes between large trucks and cars.*

During the 3 to 5 years (or more) of the de-construction and then construction phase for the I-270 and 495, plus all the bridges and sound-walls, the local traffic will have to be constantly re-routed throughout the surrounding local streets. There will be construction barriers preventing local travel, thus forcing circuitous re-routing that will greatly increase the time and distances that would normally take much less time and distance. Imagine trying to go from the 495 Beltway northbound on the 270 to your home in Frederick... when major portions of the I-270 are missing or constricted to one or two lanes during the 3 to

5 years of de-construction and rebuilding. *Living in Montgomery County will be a traffic nightmare... and what about an emergency requiring paramedics or fire-fighting trucks to get to the crisis as soon as possible.*

## **Summing Up What's Missing from the EIS Report**

- 1. No mention about the serious public health effects of toxic silica dust** causing asthma, silicosis, COPD, and lung cancer to our children and teens and adults.
- 2. No mention of any mitigation measures** about toxic silica dust during road and bridges de-construction... by large vacuum trucks and water tanker trucks, and their crews.
- 3. No discussion about how the existing I-270 will need to be completely busted up and removed**, often leaving gaping holes so there's literally no road for any traffic (or maybe one skinny lane?). How about *two-hours-plus* from the 495 Beltway northward to Frederick... for maybe 3 to 5 years of the teardown and re-build. And then for years thereafter as the 7 or 8 lanes funnel down to just 2, with bottleneck back-ups for miles !
- 4. No discussion of a multi-modal transportation approach** to reduce traffic congestion. What about an electric-train monorail down the middle of the I-270, or extending the METRO rail system, or a reversible-lanes design that gives more lanes as needed for rush-hour traffic southbound and then northbound?
- 5. No mention about the 3-to-5-plus years of local traffic congestion**, including road blockages and re-routing that will add to time delays and pollution in local communities.
- 6. No mention of excessive time delays for paramedics and fire fighting equipment** to somehow get to emergencies through road closures and jammed traffic.
- 7. No mention of how to reduce the deadly intermix of crashes between large trucks versus passenger vehicles** as they shift across lanes to get to exits or onto toll lanes in the center, or to simply shift from slower to faster lanes.
- 8. And who pays the medical bills for the thousands of kids and adults who will get asthma** and COPD and lung cancer from all that silica dust they breathed? And from the increased air pollution (*and adverse affect on our Climate Crisis*) after the road-widening traffic increases? And since now they'll have "*pre-existing*" respiratory issues, they'll be more susceptible to future coronaviruses and other disabilities.
- 9. What happens to Montgomery County as it becomes beyond congested on its local streets, with more daily air pollution that makes our citizens sick. Welcome to Cancer County, Maryland !**

**There are many other serious issues and defects with the proposed Widening and Toll Lanes "Public-Private Partnership" (P3) scheme** for the I-270 and 495 Beltway, and I have here only touched upon a few. I stand ready to assist my fellow Citizens, my Montgomery County, and my State of Maryland in formulating and designing a safer and healthier and more efficient plan for moving ahead.

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August 2020