A Preferable Alternative For The Entrance To Aspen

This was originally a memo to The Aspen Institute Community Task Force on Transportation and Mobility and was submitted 8/11/17, subsequent to the task force's final report, which cites the flawed concept of induced traffic 22 times. Last updated 1/10/24. This is downloadable from https://lauderpartners.com/aspen. By Gary Lauder Gary@LauderPartners.com/aspen.

I have been learning and thinking about traffic congestion for most of my life. For example, in 1984, I wrote Mayor Bill Stirling a letter suggesting a way of alleviating the congestion at the entrance to Aspen. This is not that suggestion.

It is appalling to me that the city of Aspen has allowed this issue to languish for <u>55+</u> <u>years</u>, causing over 2 million person-hours per year to be wasted in traffic jams. This betrays a lack of empathy for which the city leadership and voters should be ashamed. I am rarely directly affected by this jam, but I sympathize with the many who are.

In addition to wasting drivers' time, it is causing unnecessary pollution, more car accidents, reduced tourism, lower quality of life for everyone and increased stress levels, which have many adverse health effects.

The straightforward solution of adding a lane in each direction has several criticisms that I believe are invalid. The main one is that doubling the number of lanes into Aspen will induce dramatically more people to drive, and that that would be worse than what we have now. I have written a separate 6-page critique of this induced demand/induced traffic philosophy (posted on the <u>same website</u> as this), but a short summary is that studies have shown that the increased trips are only about 20%, not 100% as most believe.

Adding a lane (that is open to single-occupancy vehicles) in each direction, and eliminating the traffic lights that stop the flow are the only solutions that would alleviate most of the traffic. There are other approaches that can help on the margin, but not in a way that substantially improves life for the thousands of people affected each day.

If there is concern that that would bring too many people to park in Aspen, then underground lots could be built under Wagner Park and perhaps also Paepcke Park. The parking fees would make these self-financing. Those should be built anyway now that outdoor sidewalk dining is preferred to street parking. If you hate cars everywhere, this is the best way to make them disappear.

Those who claim that doing this would "ruin Aspen" are bizarrely ignoring that the existing traffic congestion is what is ruining Aspen far more than anything else. Keeping the congestion in order to prevent congestion is circular illogic.

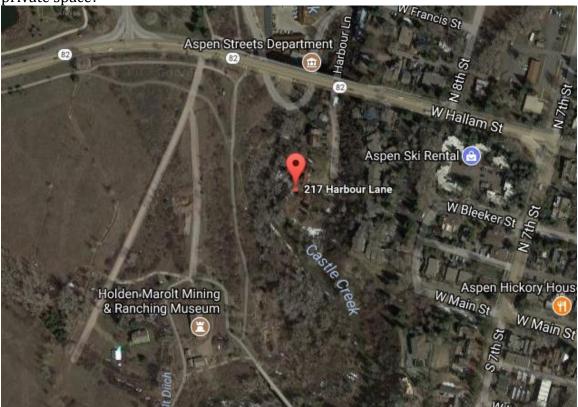
After doing that, if more congestion relief is needed, further reductions in incremental trips could be achieved by imposing a congestion pricing fee similar to London's and Singapore's. Incentives can be created to car pool/ride-share. A toll that uses license plate readers could even be placed at the ETA, and the toll could be refunded for those just passing through or staying briefly.

If the concern is particulate matter pollution (e.g. PM10 & PM2.5), this can be alleviated by keeping the roads wet with sprinklers. If the PM comes primarily from diesel trucks and busses, reducing congestion will cause less to be emitted.

If the concern is higher CO₂ emissions, such emissions are GREATER due to idling in the present traffic jams than they would be under this scenario, and the savings and profits from this strategy could be used to buy carbon offsets. EV adoption also helps.

If the concern is the loss of open space, then keep a few things in mind:

- 1) There are equities that need to be balanced. The people who presently use the bike paths would still be able to do so. That space has few users as measured by people traversing it. Yes, it's nice to look at, and we all use it that way. What's that worth to people? Is it worth more than the \$1,000,000,000 (that's billion) of people's time that I calculated has been wasted in this particular traffic jam over the past 40 years? If people were not stuck in traffic, they would have less time to appreciate that view. See this TED talk from 2012 for the calculations and other relevant points: "Designing the Future as if Your TIME Mattered" http://bit.ly/GML-TEDx (11 minutes)
- 2) Half of the Marolt Open Space was the Thomas property, which was purchased with transportation funds for transportation purposes.
- 3) Friends of Marolt Park and Open Space is registered to 217 Harbour Lane. Notice that that's a large house located in a place that probably doesn't want to see a straight shot go in. Is their motivation protecting open space or their private space?



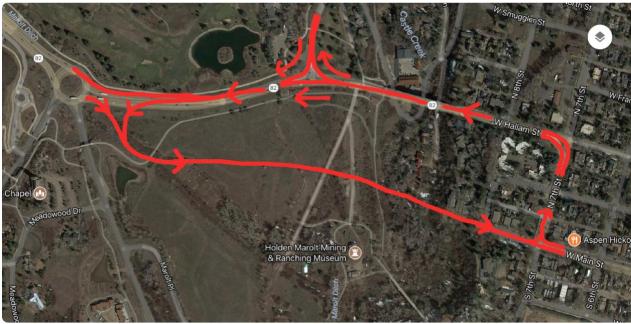
4) The claim that we should not give up the open space are coming several decades too late since CDOT already gave the city and county the 31-acre Mills Ranch at the intersection of the Roaring Fork River and Brush Creek in

- <u>exchange</u> for 8.6 acres of right of way through the open space between Buttermilk to the eastern bank of Castle Creek for the new road(s).
- 5) There would still be plenty of room for paragliders to land.

After reviewing the prior designs¹, there was an opportunity to improve upon them with a less-expensive, lower-impact on open-space and safer design (than the 4 lane designs). This is a variation on the Split-Shot², but does not require an extra roundabout nor an underpass. It would also be easier to bury if there's a tunnel.

Some may think that new alternatives should not be considered due to necessitating a new environmental impact statement (EIS), but the existing one is so old that a new one would be required anyway.

While this may be an improvement, the main reason to revisit this issue is not this design—it's that conditions having changed, and the revelations that many of the counterarguments are flawed. Please forgive my hand drawing:



That approach would require a smaller road across Marolt and a smaller bridge than 4-laning. Traffic lights are a source of congestion/reduced throughput and deadly accidents, so this eliminates the existing light at Cemetery Lane. Cars wishing to travel from eastbound 82 to Cemetery Lane would loop through 7th street, and cars wishing to travel from Cemetery Lane to EB 82 could loop just prior to the roundabout. That loop is optional and the roundabout itself could handle that, but the loop would save some time and unburden the roundabout. I believe that the addition of the new lane in each direction (plus other measures mentioned) would alleviate **all** of the congestion such that it would not be necessary to dedicate a bus lane. If 2 new lanes were built, and were kept exclusive for busses, then the traffic congestion will remain. Alleviating the ETA congestion will reveal other bottlenecks in the system, so the Owl Creek traffic light should be replaced with a 2-lane roundabout. In addition to better throughput

¹ https://www.cityofaspen.com/275/Entrance-to-Aspen

² https://www.cityofaspen.com/DocumentCenter/View/408

than traffic lights, Roundabouts have about 40% the accident rate, ¼ the injury accident rate, and 10% of the fatal accident rate compared to traffic lights.³

The new traffic light at Harmony Rd., is a major source of congestion and could be eliminated by opening a connection to Stage Rd. to allow EB traffic out of it to go via Stage Rd. to Tiehack Rd. to 82. Left turns into it can go either that way or around the proposed new roundabout at Owl Creek and back to Harmony.

If my suggestions were fully implemented, the next bottleneck would be the intersection at the airport/ABC (especially if the Lumberyard is built). This could be mitigated by widening it to have more lanes stacked at the light.

2 lanes w/ shoulders would only be a sliver of <45' of land for the $\frac{1}{2}$ mile = 2.7 acres = 3.3% of the Marolt/Thomas Open Space (i.e. leaving 96.7%). This is probably \leq the amount needed by the 4-lane plan (although I have not done the calcs), but way better. As for whether to bury the road in a tunnel: my opinion is that the open space gained is not worth the loss to the aesthetics of the entry, and the cost. The open space's main value is to be seen, and it can't be seen inside a dark noisy tunnel.

Critics may say that the voters have voted against this, but that would be misleading. The voters have voted many times on many complex scenarios and have voted both for and against various proposals that would have fixed it. The results mostly depended on how the questions were phrased/what choices were put before the voters. They have voted in favor of 4 lanes several times.⁴

Most people are unaware that the current Record of Decision (RoD) "Preferred Alternative" (PA) would not add new lanes for cars and trucks. The new lanes are supposed to only be for public transit. This design was <code>intended</code> to create traffic jams in order to induce people to take public transit. (That is not a conspiracy theory. It's written in the RoD.) The strategy has had limited success and should be abandoned in favor of decongestion by allowing the new lanes to be used by all vehicles. If this design were implemented, it would more than double the peak rate of flow, so it would eliminate the congestion and thus the need for busses to have dedicated lanes.

My design is but one of several add-a-lane proposals which could solve the major queuing problem, but one advantage over the straight shot (PA) is that that would require a traffic light at 7th and Main to accommodate left turns toward Cemetery Lane, and Cemetery Lane traffic intending to head east on 82. A traffic light there would dramatically reduce throughput, worsen congestion and lead to deadly accidents.

The closest design that had been considered in the RoD is the one referred to as "Split Shot: 2 one-way couplets and Cemetery Lane roundabout" which appears on p.32 of this presentation: https://www.codot.gov/projects/archived-project-sites/SH82/documents/ETApresentation.pdf
That has some of the benefits of my design, but not all. I would be fine with it.

³Insurance Institute for Highway Safety cites multiple studies showing that roundabouts sharply reduce crashes, and crash severity: https://www.iihs.org/topics/roundabouts#safety-benefits
Freakonomics Radio 8/10/23 "Should traffic lights be abolished?" https://podcasts.apple.com/us/podcast/freakonomics-radio/ida546685197i=1000623991154

⁴ https://www.codot.gov/projects/archived-project-sites/SH82/documents/votesbyyear.pdf

COVID has reduced the public's willingness to ride public transit and to car-pool with strangers. This change may never completely go away. Congestion as a strategy to get people to take busses will become even less effective with the adoption of **existing** self-driving features (such as the ability of the car to just follow the car ahead and not hit it), since drivers will probably amuse themselves with screens and not be bothered by the congestion (for studies of that, see: http://urbancruiseship.org/solution/cities/cities transpo demand).

The populations of Pitkin & Garfield Counties will continue to grow, especially in the post-COVID world with Zoom and Starlink for remote work. It will probably double within this century. At what point in the future would the town decide that enough is enough? When the queue becomes an hour and backs up to Old Snowmass in the AM, and fills the equivalent space in town in the PM to exit? Why postpone the inevitable?

Speaking of the inevitable, the <u>Castle Creek bridge is approaching the end of its life and needs to be replaced</u> by <u>2036</u>. They can not rebuild the bridge while using it, so the replacement bridge would have to be elsewhere. The only choice is aligning with Main Street, i.e. cutting across the open space. If the city does not choose to do so, CDOT will probably condemn the land to do so. One question is whether that would be the 4-lane plan, or the narrower 2-lane that I propose. After building the inevitable new bridge, a key question would be whether to remove the section of the old 82 between Cemetery Lane and the roundabout (which is the plan under the PA). It would be sensible to try my design before deciding that, since doing so would be inexpensive and logistically easy. After that's done, a referendum could be held as to whether to go back to traffic jams in order to restore a few acres of open space.

For homeowners located on Main St. between 7th & the new bridge, under my plan, using only 2 lanes in the same direction will be much less impactful than the 4-lane method. For homeowners in the rectangle bounded by that new segment, 7th and Hallam (82), it will be easier for cars to merge into my plan's 1-way traffic than 2-way. As pedestrian, it's easier, safer and less stressful to cross 2 lanes of traffic going in the same direction than a 2-way street with one lane in each direction because of the difficulty of looking both ways.

Now that I-70 closures due to mudslides are common, there is another justification for why CDOT might cover some of the cost, but their present position is not to. The IRA funds are already allocated.

In this Op-Ed, Paul Menter makes a persuasive case that Aspen's wealthy white voters disregard for the people who commute into town to serve them is inherently racist.

Most of those who oppose this hate having so many cars in their faces, yet they opt for policies that keep them there due to misunderstanding how to make them disappear. This is like our daughter, when she was four, deciding that she did not like her bangs, so she cut them off because she did not know that the only way was growing them out.

As the weather has gotten hotter and drier, the risk of wildfire has grown. On 12/26/20, some saboteurs shut off the gas for Aspen, which took 3 days to safely restore. As antipathy for the wealthy grows, so does the likelihood of arson—despite the likelihood of harming more locals than glitteratti. Were there to be a wildfire, the existing bridge would be inadequate to rapidly evacuate the town—even if both lanes

were used. Another bridge is needed. The <u>8/23 fire in Maui</u> should be a lesson that we should not wait to address this.

Based on what I have seen, read and heard about the machinations for this decision over the past 40 years, I am reminded of Scott Evil, son of Dr. Evil, referring to Austin Powers: Scott Evil: What? Are you feeding him? Why don't you just kill him? Dr. Evil: I have an even better idea. I'm going to place him in an easily-escapable situation involving an overly elaborate and exotic death. https://youtu.be/5xAMYHJYesM This really does not have to be so complicated.

Thanks for your attention.

-Gary Lauder

PS: Light rail is wildly uneconomic and less efficient per lane than a highway lane. See: http://publicpurpose.com/pp-enr.htm, and best of all, this 1-hour presentation in Wheeler from 1999 that is as true today as it was then: https://youtu.be/GrZCxxZE.og

PPS: As my aforementioned Induced Demand Critique says: "Many cities are facing affordable-housing crises. Historically, cities have grown outwards and added road capacity to enable commute distances to be reasonable. Ever since cities have given up on adding roads and highways, the housing crises have worsened. Improving transportation time enables people to live further away where housing is cheaper. It often costs way less to alleviate bottlenecks that add commute time than it does to subsidize affordable housing. Few recognize how these concepts are interrelated." One who did was California Governor Gavin Newsom, who declared in 2019 that "transportation is housing." This lack of appreciation for transportation's role in substituting for affordable housing is particularly true for Aspen which is contemplating investing \$400M to build 277 units, which would optimistically house 400 workers. Compare that to the addition of a single lane of continuously flowing traffic which can deliver 2,000 cars **PER HOUR!** Lumberyard residents will add to the traffic queues.

PPPS: Can you imagine if people argued against installing the gondola and high-speed quad lifts on Aspen's ski mountains due to how it would change the character and pace of skiing. In the "good old days" many more friendships and relationships resulted from the quality time people spent in the lift lines and on the lifts, and conversations were more private with only two people on the lift. Furthermore, they have resulted in more crowding on slopes, many more collisions and drastically more injuries due to both of those and people becoming more tired due to how many more runs they are making. There are lots of "valid" reasons why it should not have happened, but the main benefit, lift queues becoming drastically shorter, is such that I don't think that anyone regrets the change. If Aspen fixes the ETA in a way that eliminates the bottlenecks, and puts in sufficient underground parking, people will look back on this and say "OMG this is better than I thought! I wish that we did not waste the last 50 years arguing about it."

PPPPS: The most cogent analysis I have seen on this subject, including an extensive history, is at the <u>earlier version</u> of: http://entrancesolution.com/ It reveals how some past studies willfully misled. The <u>current version</u> contains extensive references to historical documents, but less prose explanation.