

## David Cutaia

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**From:** Brian Trautwein <bearnewt@gmail.com>  
**Sent:** Thursday, September 16, 2021 3:05 PM  
**To:** Paula Perotte; James Kyriaco; Kyle Richards; Stuart Kasdin; Roger Aceves; City Clerk Group  
**Subject:** Agenda Item B-3: Road Pavement Rehabilitation Projects: Asphalt Versus Concrete

Date: September 16, 2021

From: Brian Trautwein

To: Mayor perotte and Councilmembers

Re: Road Rehabilitation and New Road Projects: Long Term Costs and Environmental / Climate Change Impacts

Mayor Perotte and City Councilmembers,

Given the interest in rehabilitating our great City's roads, and in light of Tuesday's City Council hearing, it might make sense to consider asking Public Works and Sustainability staff to research the longevity, long term costs, and long term environmental effects of concrete roads when compared to asphalt roads in the context of both road rehabilitation and new/replacement roads.

The replacement value of Goleta's roads is \$221 million making road maintenance and road longevity an important economic issue for the City. (Staff Report at 1)

Research indicates that concrete roads may be expensive in the short term but appear to reduce greenhouse gas emissions, storm water quality impacts, and long term costs compared to asphalt roads and road rehabilitation.

A long term program to incrementally replace asphalt roads with concrete roads may be a feasible way to reduce the long term road rehabilitation costs and/or the cost of new and replacement roads and environmental impacts and reduce the City's carbon footprint.

One study reached this conclusion:

"Conclusion: Determining which type of pavement is more environmentally and cost effective is a difficult process which will never be 100% accurate, due to varying stress loads and environmental damage that will occur over time. However, after considering the step-by-step process lifetime of both concrete and asphalt (From the gathering and manufacturing of raw materials through the end of life/recycling stage) and analyzing the monetary cost and environmental effects of each step, a valid conclusion was constructed that should influence the future of road surfaces. It was found that concrete is a more environmentally friendly and cost efficient surface, due to the reduced values of energy usage and monetary cost, as well as a lower albedo effect and a higher fuel efficiency for drivers. This accumulation of data firmly concludes that concrete is a more environmentally friendly and cost efficient paving and that it should be considered more readily when creating new road surfaces."  
(Emphasis added.)

<https://osf.io/dvscg/download>

Another study finds that stormwater quality runoff is impaired by asphalt roads:

“Flowing over pavement exposes water to pollutants, surface debris and asphalt. This polluted water eventually... empties into lakes, rivers, and streams.” (3 Ways Asphalt and Concrete Are Affecting the Planet)

<https://www.aexcelcorp.com/blog/eco-friendly-traffic-paint/3-ways-asphalt-and-concrete-are-affecting-the-planet#:~:text=Flowing%20over%20pavement%20exposes%20water,lakes%2C%20rivers%2C%20and%20streams.>

Other studies note the lower upfront economic cost of asphalt roads, and the longer term benefits of concrete:

<https://www.ayresassociates.com/asphalt-vs-concrete-not-black-white-choice/>

Finally, asphalt road rehabilitation and new asphalt roads ultimately rely on oil extraction and increase greenhouse gas emissions, making it harder to reach our unique and beautiful City’s climate goals.

Perhaps before the next time a road construction, replacement, or rehabilitation project comes before Council, staff can research and report back on the pros and cons of concrete versus asphalt with respect to new roads and with respect to road rehabilitation projects.

In the future, I hope our City will consider the potential long term lower costs and environmental impacts of paving roads using concrete.

Thank you very much for your commitment to protecting and enhancing the environment and reducing our great City's carbon footprint.

Sincerely,

Brian Trautwein

158 Verona Ave.  
Goleta, CA 93117

## David Cutaia

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**From:** Christie <cdegiacom@cox.net>  
**Sent:** Friday, September 17, 2021 5:06 PM  
**To:** City Clerk Group  
**Subject:** paving

1. Hello, I was reading the paving proposal which is a welcome addition to the City since our roads are crumbling faster than a jackrabbit. I didn't see anything about a warranty. Seems like if a road is paved, then it often falls apart within 5 years or so. When I was a kid, roads would last a lot longer. I feel the projects should come with some type of warranty and that if there are cracks or holes within a certain time frame, then the paver should be responsible for repair.

2. Also I saw the resolution about reproductive rights. I really think you should stay out of it completely. It is not your place as a City Council to weigh in on so many political views. Do your Business to run the City and if you have personal thoughts about something, act on it personally, but stay out of it as a City. It's not your place to take sides. Let private citizens make their own minds. Run this City apolitically. Please!

Thank you,  
Christie DeGiacomi