

What do driverless cars mean for cities, health and wellbeing?

Angela Curl, Helen Fitt, and *Amy Fletcher

THINK PIECE

Autonomous vehicles and future urban environments:

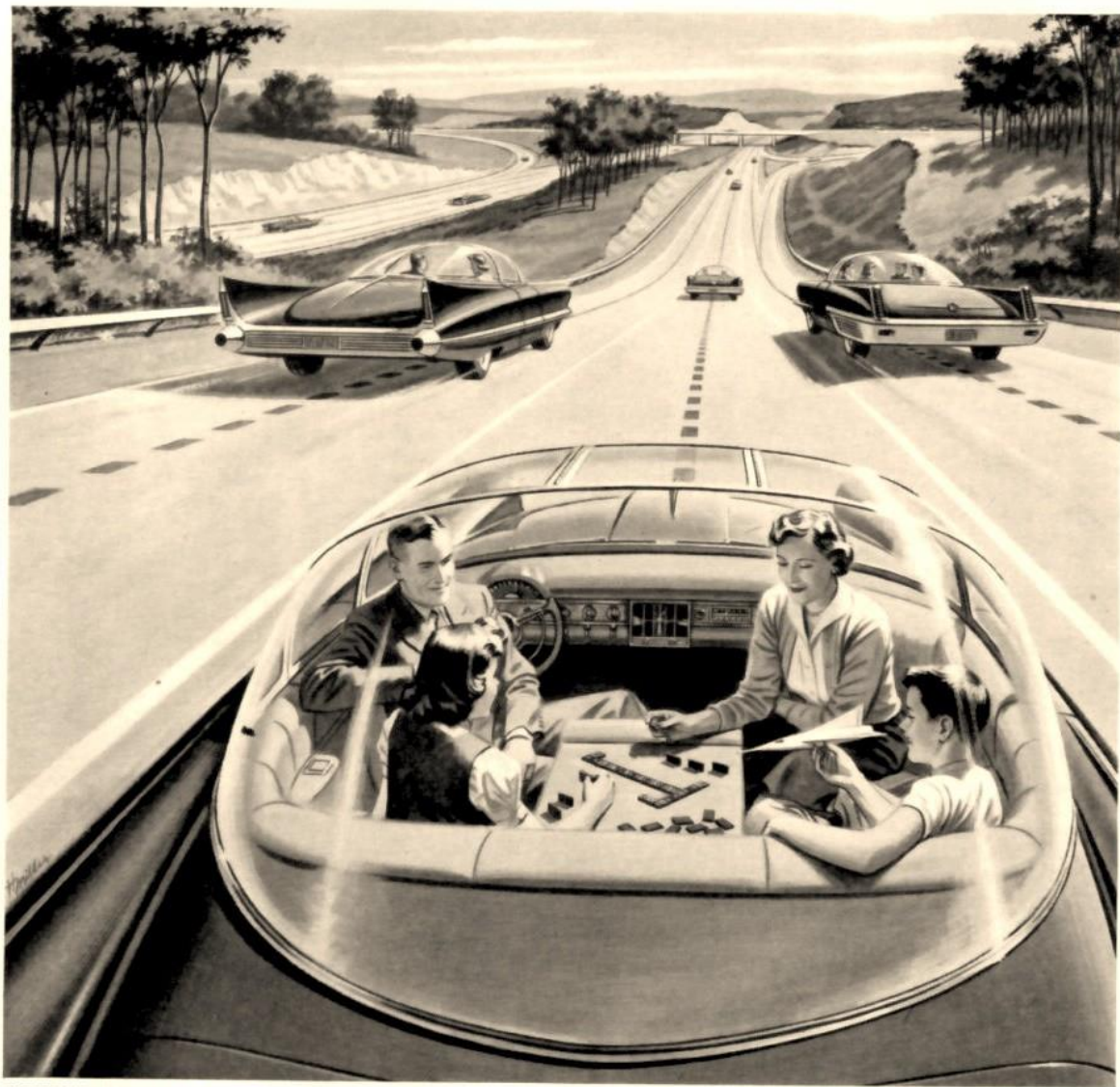
Exploring implications for wellbeing in an ageing society

(Second Edition)



Helen Fitt, Angela Curl, Rita Dionisio-McHugh, Amy Fletcher, Bob Frame, Annabel Ahuriri-Driscoll

14 May 2018



ELECTRICITY MAY BE THE DRIVER. One day your car may speed along an electric super-highway, its speed and steering automatically controlled by

electronic devices embedded in the road. Highways will be made safe—by electricity! No traffic jams . . . no collisions . . . no driver fatigue.



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Self-Driving Cars Will Be Ready Before Our Laws Are

Putting autonomous vehicles on the road isn't just a matter of fine-tuning the technology

By **Nathan A. Greenblatt**



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Controversy

Autonomous vehicles will be moving brothels in no time, researchers predict

Feels on wheels



Alan Martin

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09 November 2018



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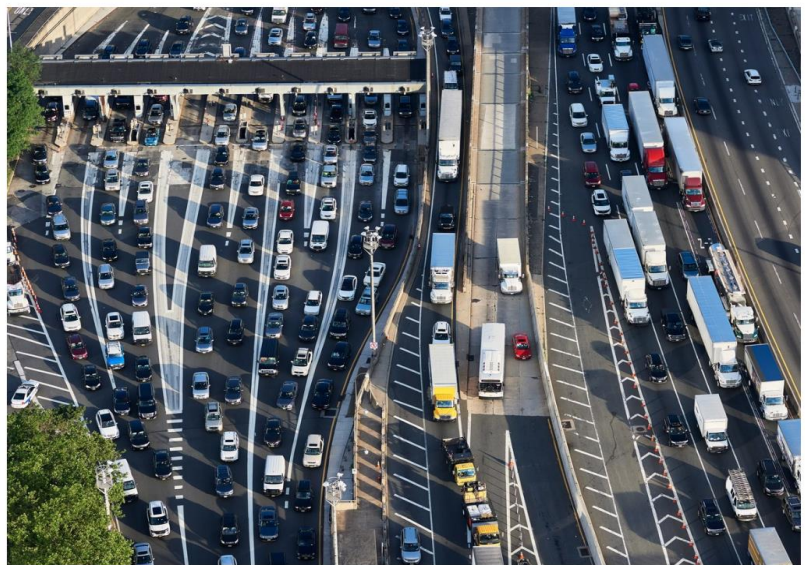
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NICK STOCKTON TRANSPORTATION 10.11.18 06:00 AM

SO, SELF-DRIVING CARS COULD MAKE HUMANS UNHEALTHIER THAN EVER



The only way to ensure the chauffeured masses don't reach their final destinations far too soon is to address the automobile era's original sins. Sins that aren't rooted in who's working the pedals. GETTY IMAGES

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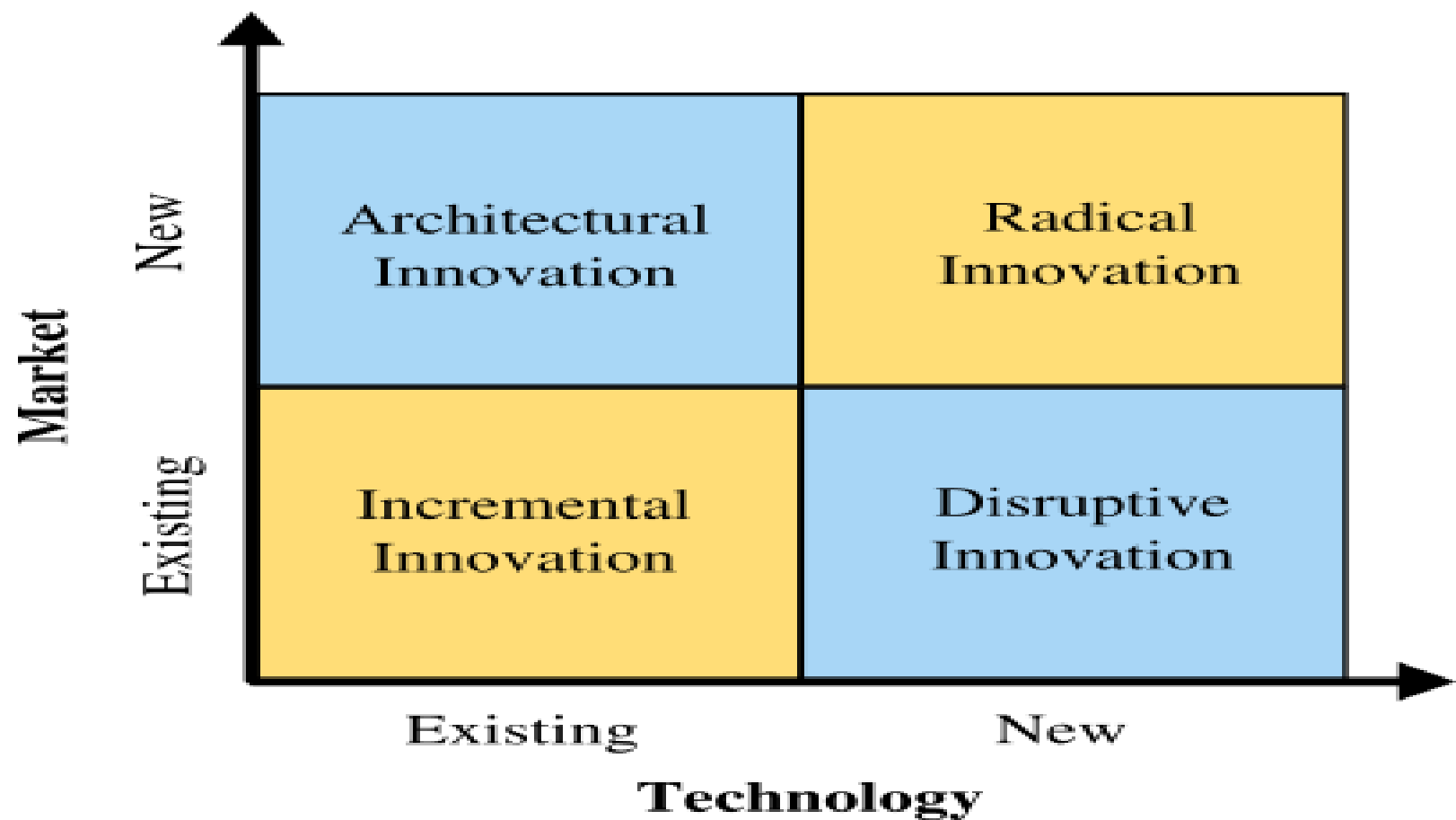


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The Promise

Emerging transport technologies offer the exciting prospect of changing the very nature of transport systems, reducing car dependence, urban sprawl, segregation of communities, and associated public health concerns.

The Challenge

-
- *But whether this will happen depends to a large extent on how governments legislate, the tone they set in policy documents, and the way they consider autonomous vehicles across multiple policy sectors.*

Policy issues

- Path dependence
- Uncertainties
- Safety and Ethics
- Aging Communities
- Liability and Insurance
- Consumer Expectations
- Licensing of alternative modes of transportation
- Revenue models and collection
- Public safety
- Health risks: obesity, isolation, stress, reduced mobility
- Employment

Regulatory innovation

- Adaptive regulation
 - Responsive, iterative, evidence-driven
- Regulatory sandboxes
 - Prototype and test new approaches/light regulation
- Outcome-based regulation
 - Focus on results and performance
- Risk-weighted regulation
 - Not one size fits all, but data driven/segmented
- Collaborative regulation
 - Engage communities and stakeholders

Scenario 1: Fragmented Future

- Rates of car ownership increase
 - Everyone travels independently by car regardless of age or ability
 - New vehicles are expensive but necessary for getting around
 - Traffic volumes and urban sprawl accelerate
 - City revenue declines
 - Diminished safety and regulatory oversight
-
- *In this world, adults fear being unable to afford a vehicle or its updates as they age because losing access equates to social isolation.*

Scenario 2: Connected Communities

- People walk, cycle, and use a shared fleet of electric AVs.
- No private cars or parking necessary
- More efficient land use
- More affordable urban housing
- Rural areas revitalized
- Built environments that better promote community
- Reduced congestion and significantly reduced road toll
- Climate emissions mitigation

In this world, adults seamlessly maintain their social connections and activities outside the home as they age.

