2025 GEN RE EXECUTIVEFORUM

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Three Within Five Three Coming Realities Within the Next Five Years

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Looking Ahead



2030 In Focus

01

Technology Speeds Forward

- Robotaxis shift to commonplace
- Al advances gradually but profoundly
- Medical advancements prove stunning

02

Microplastics Become Perilous

- Being seen everywhere and found in everything
- Health concerns mounting
- Litigation wave coming?

03

Gen Z Yearns for Connection and Change

- Loneliness epidemic worsens
- Parasocial relationships develop
- Populism rising, with potential political instability resulting









Technology Speeds Forward

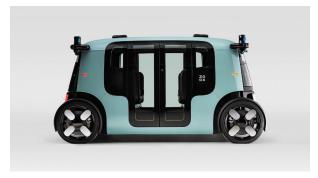
Autonomous Vehicles/Robotaxis



Key Milestones

Date	Event
2013	Make complete trips
2016	Average of 10,000 miles between real safety interventions
2017	Public rides with safety driver; 100,000 miles per incident
2018	Testing with no safety driver; Tempe AZ fatality
2019-2020	Limited public rides; Open to public
2023	Cover entirety of decent-sized city; pilots in Bay Area, Los Angeles, Phoenix and Austin
2024	Average of 100,000 per week reached; Waymo posts 4M trips; existing territories expanded
2025	Expansion to Atlanta, Miami
2026-?	Scaling of territory; building of business model; Transportation as Service (TAAS) becomes reality









Source: https://www.forbes.com/sites/bradtempleton/2024/10/17/waymo-timeline-also-ranks-all-robotaxi-players-with-tesla-in-last/

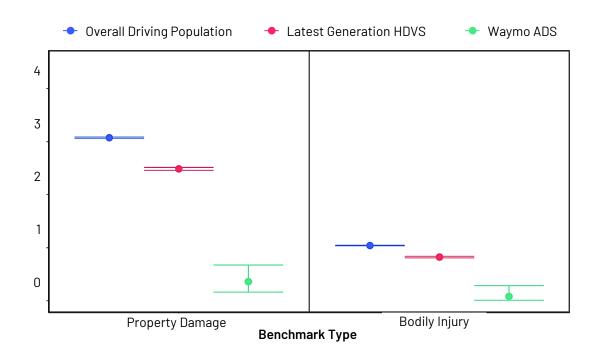
Autonomous Vehicles/Robotaxis



Impact on the Insurance Industry

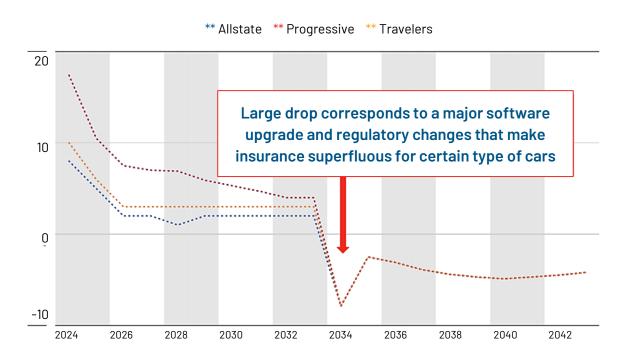
Claims Frequency

(per million miles)



Growth Converges as the Industry Enters a Period of Decline

(Y-O-Y personal auto net earned premium growth %)



Source: https://www.morningstar.com/lp/autonomous-vehicle-impact-on-insurance; https://waymo.com/research/do-autonomous-vehicles-outperform-latest-generation-human-driven-vehicles-25-million-miles/

Artificial Intelligence



Gradually, Then Suddenly

- "Agentic" Al: learn personal preferences and interact for routine tasks and save time (end "tyranny of choice")
 - Book Travel
 - Order food
 - Shopping
- Applied Robotics
 - Heath Care / Elder Care
 - Warehousing / Households
- Forecasting Precision
 - 10-day weather forecasts with **97.2**% **improvement** than current model
 - NOAA: Al and new modeling resulted in best-ever hurricane-season predictions in 2024



Sources: https://www.wsj.com/tech/personal-tech/life-changing-2025-ai-ev-self-driving-tiktok-c2d5c80b; https://www.forbes.com/sites/markminevich/2024/12/29/12-predictions-for-2025-that-will-shape-our-future

Medical Advancements



Stunning Potential

- Chip Implants: End blindness, alleviate paralysis and promote speech
- Tissue Engineering: Use stem and existing cells to stimulate growth
 - Heart
 - Other organs
- Perfusion and Xenotransplantation:

Preserve existing organs grow new ones in genetically similar mammals

- Provide surgeons extra time
- Increase donor pool
- "Repair rather than replace"

Future Impact

- Increased medical costs; more treatment options
- Better rehabilitation potential; heightened patient autonomy; possible reduced future non-economic damages



Sources: https://www.wired.com/story/neuralink-robotic-arm-controlled-by-mind/https://www.wired.com/story/amputees-could-control-prosthetics-with-just-their-thoughts-no-brain-surgery-required-phantom-neuro; https://www.wsj.com/health/grow-heart-lung-tissue-medical-technology-24b22bb4; https://www.nytimes.com/2024/04/02/health/organ-transplants-perfusion.html

Technology Speeds Forward



Takeaways

Autonomous Vehicles

- Continued rapid "robotaxi" expansion, contingent on MIA and ATL successes
- Primarily a "sun belt" phenomenon. . .for now
- Al will enable and accelerate development
- Impact to personal auto market sooner (2045?)
 rather than later

Artificial intelligence

- Job enhancement over replacement
- Agentic Al in variety of applications
- Debate: What constitutes "human work"?

Medical Advancements

- Rapid ongoing progress will continue and even accelerate
- Al has enabler in diagnosis, drugs and treatment
- Significant potential in dramatically improving plight of the catastrophically injured

Impact to Insurers

- Watch pace of robotaxi "scale." If rapid,
 Transportation as Service ("TaaS") becomes viable
 and threat to personal auto turns real
- Long-term projected labor shortage will spur Al development and applications like robotics, in turn making risks more complex to insure
- Medical advancements will both improve patient outcomes and capabilities but increase treatment costs related to injury. Implant tech could be "game changer."



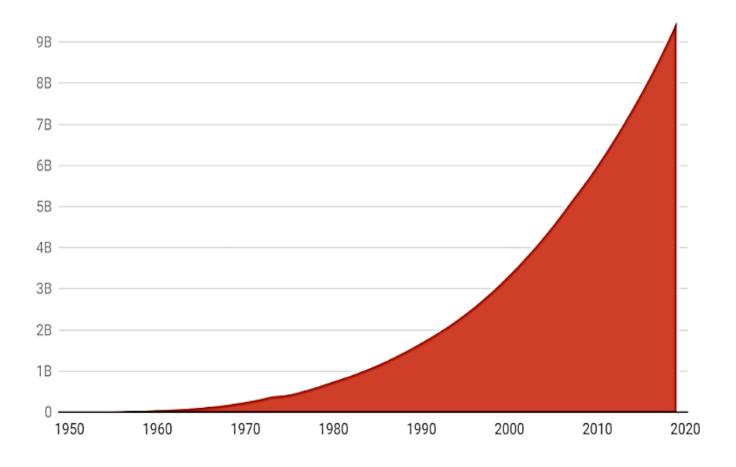






Scope of Problem

- World produces nearly a 500 million tons of plastic each year, more than double that of two decades ago
- Estimated 8 billion tons produced since 1950
- One garbage truckload of plastic enters earth's oceans ever minute
- Only 9 percent generated globally is recycled
- If a country, plastics would be the world's fifth-largest emitter of greenhouse gas
- Exacerbated by the COVID-19 pandemic
- Found on all continents and in 75% of all commercial fish



Source: Gen Re Research; https://www.nytimes.com/2024/11/24/climate/plastic-pollution-south-korea-talks.html



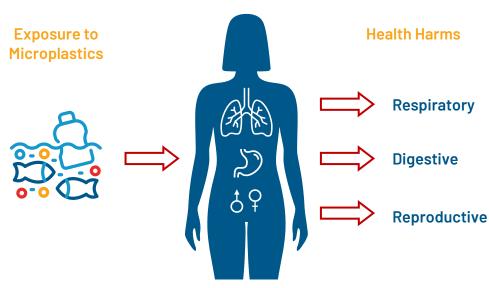
Recent Discoveries

University of California at San Francisco study:

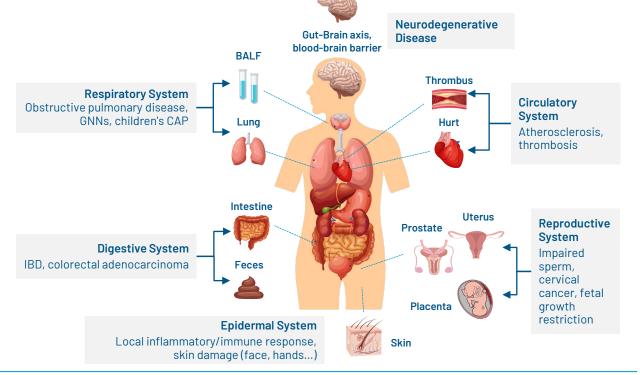
Microplastics "suspected" to harm reproductive digestive, and respiratory health, with suggested link to colon and lung cancer

New England Journal of Medicine research: Micro and nanoplastics (MNPs) is potential risk factor in cardiovascular Forestry University (China) investigation: MNP found in multiple organ issues correlated with lesions

Explanation for growing rates of GI cancers in those between 15-39?



Sources: Gen Re Research; https://pubs.acs.org/doi/10.1021/acs.est.3c09524; https://www.nejm.org/doi/full/10.1056/NEJMoa2309822; https://phys.org/news/2024-12-microplastics-multiple-human-tissues-lesions.html; https://www.wsj.com/health/healthcare/young-people-cancer-causes-gut-science-21375280





Takeaways

- Fast-moving public scrutiny microplastics will potentially surpass that with PFAS now
- Great potential for health harms to be identified, given myriad studies in conjunction with PFAS and/or other chemicals (bisphenols; phthalates)
- Class Actions and "4th Party" suits underway and will grow
 - California AG against Exxon for plastic pollution and recycling deception
 - Los Angeles County against PepsiCo and Coca-Cola for misrepresenting recycling of single-use plastics and inundating environment with harmful waste
 - At least seven class actions against bottled water companies falsely labeling and marketing bottled water as natural but having unnatural microplastics
- Largely issue for producers and "big food" but potential for restaurants and retailers to be involved as well
- Plastics: Pollutant or Product?









Gen Z Yearns For Connection and Change

Epidemic of Loneliness

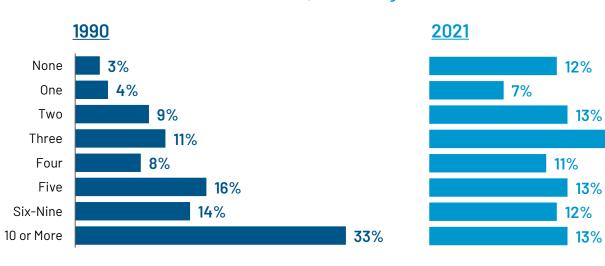


Phones Replace Friendship

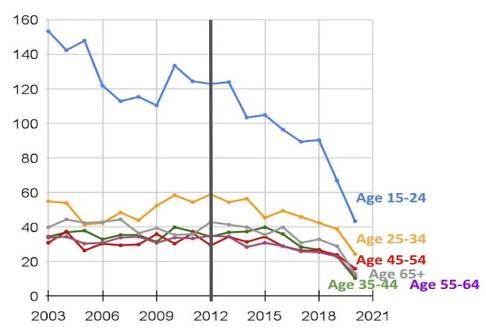
- Nearly half (49%) report having three friends or fewer
- More than one-third (36%) report having several close friends
- More than one in ten (12%) report having no close friends
- Americans spend 70% less time with their friends than a decade ago
- MIT: Neuroscientists find that isolation provokes brain activity like that seen during hunger cravings

The Number of Close Friendships That Americans Have has Declined Over the Past 7 Decades

% of Americans who say they have the following number of close friends, not counting their relatives



Daily Avg Time with Friends (minutes)



Sources: The State of American Friendship: Change, Challenges, and Loss - The Survey Center on American Life; A hunger for social contact | MIT News | Massachusetts Institute of Technology; Rebroadcast: Why Americans are spending less time with friends -- and what to do about it | Laist; https://www.afterbabel.com/p/the-new-cdc-report

17%

Parasocial Relationship



Meaning and Examples

- Relationship that a person imagines having with another person whom they do not know, such as a celebrity or fictional character
- Feelings of close, intimate connection with someone whom they have never met but closely follow through media, TV, etc.
- Entails feelings of relationship with the subject due to the emotional investment made in that person's life
- Become unhealthy when they interfere with real-life relationships and daily life









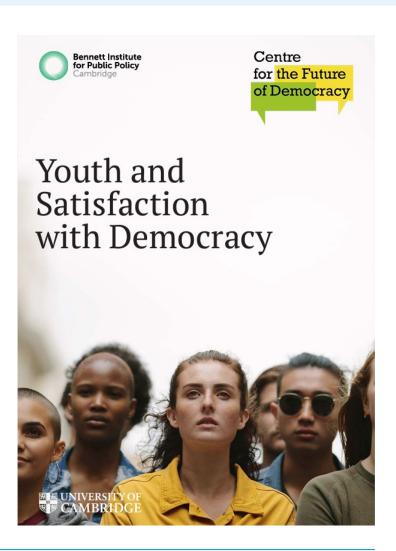
Source https://www.dictionary.com/e/tech-science/parasocial-relationship/?utm_source=nomercynomalice.beehiiv.com&utm_medium=newsletter&utm_campaign=people-are-the-new-brands&_bhlid=744a8dab321bd154b1e11de9a672e8cecf912836

Disconnected, Discontent, and Dissatisfied



Populism on the Upswing - Political Instability Ahead?

- Worldwide, younger generations not only dissatisfied with democratic performance than the old, but also more discontent than previous generations at similar life stages
- Developed democratic North America, Great Britain, Australia and Southern Europe, show growing intergenerational divide in life opportunities
- Developing democratic Asia, Latin America and sub-Saharan Africa split between old and young, with young tiring of generations-long "democracy struggle"
- Rising populism globally signals structural failure to address wealth inequality, economic insecurity and malfeasance among elites
- Choice for leaders: address or face economic decay



Source: https://www.cam.ac.uk/system/files/youth_and_satisfaction_with_democracy.pdf

Gen Z Yearns For Connection and Change



Takeaways









Thank you!



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