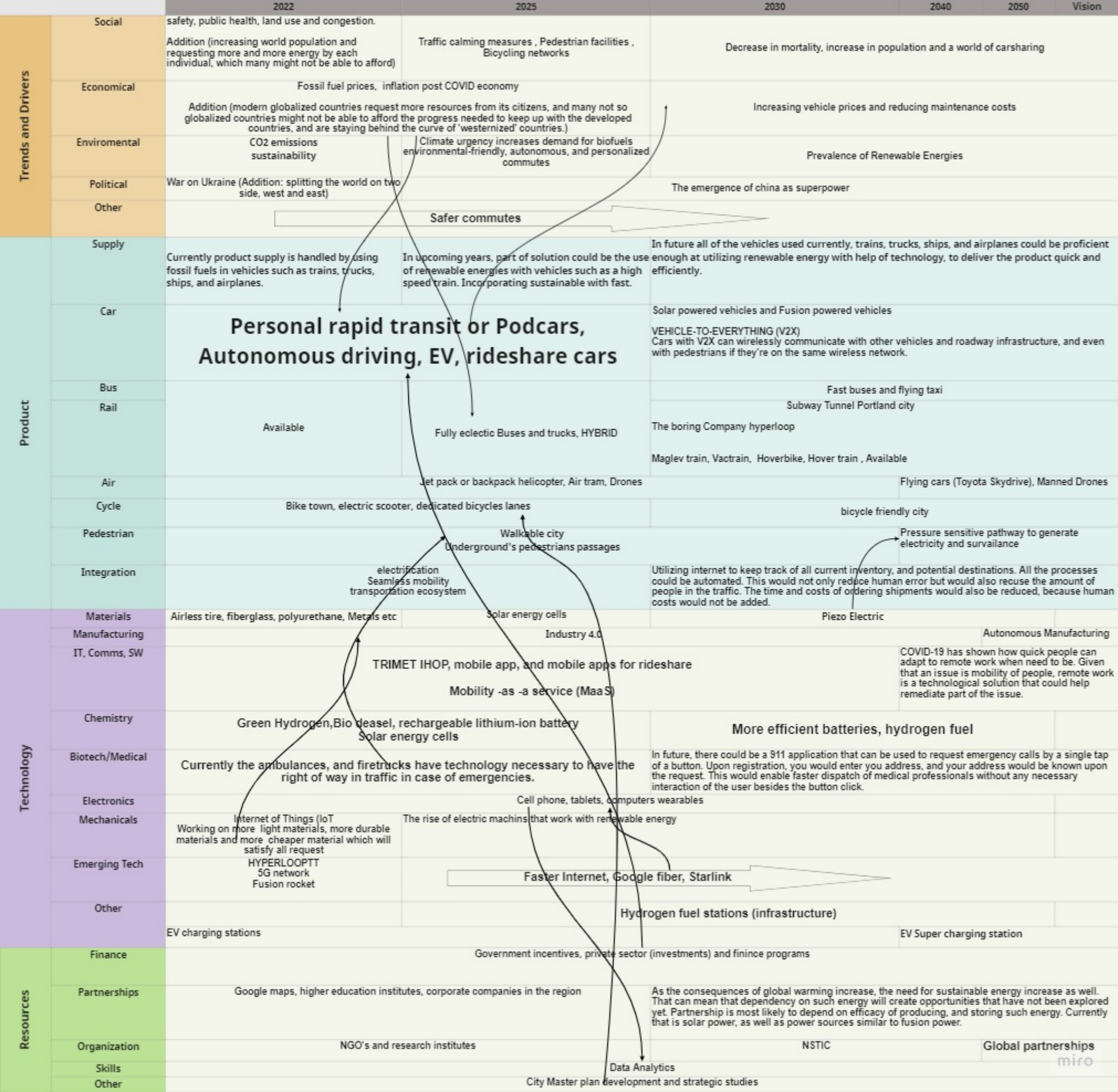
2022
2025
2030
2040
2050
Vision
Trends and Drivers
Social
safety, public health, land use and congestion.
Addition (increasing world population and requesting more and more energy by each individual, which many might not be able to afford)
Traffic calming measures , Pedestrian facilities , Bicycling networks
Decrease in mortality, increase in population and a world of carsharing
Economical
Fossil fuel prices, inflation post COVID economy
Addition (modern globalized countries request more resources from its citizens, and many not so globalized countries might not be able to afford the progress needed to keep up with the developed countries, and are staying behind the curve of 'westernized' countries.)
Increasing vehicle prices and reducing maintenance costs
Enviromental
CO2 emissions
sustainability
Climate urgency increases demand for biofuels environmental-friendly, autonomous, and personalized commutes
Prevalence of Renewable Energies
Political
War on Ukraine (Addition: splitting the world on two side, west and east)
The emergence of china as superpower
Other
Safer commutes
Product
Supply
Currently product supply is handled by using fossil fuels in vehicles such as trains, trucks, ships, and airplanes.
In upcoming years, part of solution could be the use of renewable energies with vehicles such as a high speed train. Incorporating sustainable with fast.
In future all of the vehicles used currently, trains, trucks, ships, and airplanes could be proficient enough at utilizing renewable energy with help of technology, to deliver the product quick and efficiently.
Car
Personal rapid transit or Podcars, Autonomous driving, EV, rideshare cars
Solar powered vehicles and Fusion powered vehicles
VEHICLE-TO-EVERYTHING (V2X)
Cars with V2X can wirelessly communicate with other vehicles and roadway infrastructure, and even with pedestrians if they're on the same wireless network.
Bus
Fast buses and flying taxi
Rail
Subway Tunnel Portland city
Available
Fully eclectic Buses and trucks, HYBRID
The boring Company hyperloop
Maglev train, Vactrain, Hoverbike, Hover train , Available
Air
Jet pack or backpack helicopter, Air tram, Drones
Flying cars (Toyota Skydrive), Manned Drones
Cycle
Bike town, electric scooter, dedicated bicycles lanes
bicycle friendly city
Pedestrian
Walkable city
Underground's pedestrians passages
Pressure sensitive pathway to generate electricity and survailance
Integration
electrification
Seamless mobility transportation ecosystem
Utilizing internet to keep track of all current inventory, and potential destinations. All the processes could be automated. This would not only reduce human error but would also recuse the amount of people in the traffic. The time and costs of ordering shipments would also be reduced, because human costs would not be added.
Technology
Materials
Airless tire, fiberglass, polyurethane, Metals etc
Solar energy cells
Piezo Electric
Manufacturing
Industry 4.0
Autonomous Manufacturing
IT, Comms, SW
TRIMET IHOP, mobile app, and mobile apps for rideshare
Mobility -as -a service (MaaS)
COVID-19 has shown how quick people can adapt to remote work when need to be. Given that an issue is mobility of people, remote work is a technological solution that could help remediate part of the issue.
Chemistry
Green Hydrogen,Bio deasel, rechargeable lithium-ion battery
Solar energy cells
More efficient batteries, hydrogen fuel
Biotech/Medical
Currently the ambulances, and firetrucks have technology necessary to have the right of way in traffic in case of emergencies.
In future, there could be a 911 application that can be used to request emergency calls by a single tap of a button. Upon registration, you would enter you address, and your address would be known upon the request. This would enable faster dispatch of medical professionals without any necessary interaction of the user besides the button click.
Electronics
Cell phone, tablets, computers wearables
Mechanicals
Internet of Things (IoT
Working on more light materials, more durable materials and more cheaper material which will satisfy all request
The rise of electric machins that work with renewable energy
Emerging Tech
HYPERLOOPTT
5G network
Fusion rocket
Faster Internet, Google fiber, Starlink
Other
Hydrogen fuel stations (infrastructure)
EV charging stations
EV Super charging station
Resources
Finance
Government incentives, private sector (investments) and fininces programs
Partnerships
Google maps, higher education institutes, corporate companies in the region
As the consequences of global warming increase, the need for sustainable energy increase as well. That can mean that dependency on such energy will create opportunities that have not been explored yet. Partnership is most likely to depend on efficacy of producing, and storing such energy. Currently that is solar power, as well as power sources similar to fusion power.
Organization
NGO's and research institutes
NSTIC
Global partnerships
Skills
Data Analytics
Other
City Master plan development and strategic studies
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