

A \$3 Trillion Crypto Rescue Economy?

When the population heals from the Coronavirus, the economy will be a mess for years to come. Here is an idea that will stimulate it for decades.

- * \$1 Trillion for a Driverless America Backbone
- * \$1 Trillion for local circulators in 275 cities
- * \$1 Trillion for a Smart Grid and Fiber Optic Virtual Reality TV
- * All weather, all electric operations and 45 mph city to 150 mph
- * All sharing the same easement and structures
- * 100% funded by private sector with State government ownership
- * Getting more juice into the economy and creating millions of jobs
- * Ripple effect of 5 x 1 economic development at stations
- * Feds approve a State model Public Private Partnership
- * States approve fundings and competitions for Consortias
- * Consortias to design, build and operate for 30 years
- * Funded by offerings from the crypto industry using blockchain technology
- * Trading digital currency using blockchains for liquidity and appreciation
- * First effort is a Driverless America Feability Conversation
- * Then \$1 Billion incubators



A Driverless America Is Coming

Right under our noses a new industry with 75 new companies is emerging that will be a game changer in the American economy. Transportation is going driverless and highways will be electrified with a market potential in excess of \$1 Trillion dollars. Today America can't even afford to expand or replace its existing infrastructure. It is aged, worn, congested, fragile and yet is the backbone of the American economy. However, we built it on cheap oil and that is changing.

Is a new 50,000-mile, \$1 trillion national driverless backbone of all weather, elevated, automated, ground based transport that is funded by the private sector, really feasible? The new driverless transport industry is projected to grow into an estimated \$2 trillion in size: [mobile industry](#) These structures can share their easements with other infrastructure such as: cargo, fiber media and energy.



Why is This Important?

Rarely can one idea do so much and with as many spin offs, as a national Driverless America network could do. Here are number of foreseeable public benefits:

- * Rescues the Economy: It is going to take years for the economy to recover from the economic effects of the Corona Virus. A Driverless America offers millions of new jobs reduced congestion, reduced travel costs, less pollution and a ripple effect of real estate development around the stations that can be 5 to 1.

- * Powers the Economy for Decades: As we all know, the economy is a mess and will take years to recover. The \$21 trillion American economy relies on a worn and under maintained transportation infrastructure that is approaching gridlock. It needs a new way of growing to meet the future demand of increasing population. With our existing transportation systems all overloaded, an elevated transportation network is needed for continued growth. Driverless America offers the triple potential to unclog existing

systems, earn profits and generate new growth of pedestrian villages around stations. The size of this driverless market is estimated by Wall Street to be over \$2 trillion. Real estate investment multipliers range from four to ten times transit investment. Therefore each \$1 billion invested in Driverless America will generate \$5 billion in pedestrian villages along that route. At each station, an 850' walking radius contains over 2 million square feet of land area. Zoning regulations allowing 5 to 1 density would grow small mixed-use pedestrian villages that attract a driverless population. Mixed use development around many stations could grow into the hundreds of billions of dollars in new tax base. For each route, thousands of development jobs will be created in both transport and real estate. These could grow into millions of jobs as the routes densify and interconnect and offer more coverage throughout the states. But that is just the beginning as these systems are economic generators for the real estate around stations stops (the big money maker) and then there is cargo and food hauling in the after-hours, fiber optics, advertising, naming rights, travel reservations and web sites.

* Combat Climate Warming: Just five countries — including the United States — create more than 50% of the global CO2 emissions. Two-thirds of the California is experiencing “extreme drought,” and 2013 was the driest year ever recorded in the state. The historic drought has been [devastating for California's crops](#). Last month the temperature on the Antarctic peninsula hit 65 degrees Fahrenheit, beating all previous records. For the globe, 2019 was the second hottest year on record, and the hottest without the contribution of a big El Nino. The coming decade may be our last chance to contain the chaos driven by humankind's craziest experiment: the idea that carbon can be stored in the thin filigree of air around the planet. The breaking up of permafrost in the Arctic circle assumes an extra ferocity. That would release plumes of methane, 30 times more lethal at trapping heat than carbon. Experts say the [heating](#) produced by carbon dioxide would result in a period of super-tropical conditions, In 50 years [3 billion people](#) may not be able to stand the heat and bringing in chaotic [high-energy stormy conditions](#) that would prevail over much of the Earth. A Driverless America project will reduce gas pollution and the reduces the need for fossil fuels. It introduces a higher fuel economy on a national scale. An elevated all-weather driverless system will operate better in these conditions that the existing roads for cars.

* Growth: America has grown by over 33 million people since 1990. In the next 25 years, it will grow 54 million [more](#). Where are they going to go? They will

add huge congestion to our roads. It is a lot easier to put down columns every 70 feet in the urban environment than to add another lane of freeway. The transportation systems around which the modern world has been built are on the verge of a significant transformation. Intelligent transportation systems are making driving and transport cheaper, more options and safer for everyone and this typifies the future transport framework. Infrastructure evolving to accommodate the demand for global investment in the new driverless transport. We are at a tipping point for change in this industry. This rescue economy would include adding another \$1 trillion for circulators in Americas 100 largest cities that connect to the 50,000-mile American backbone. In the next 25 years population growth is expected to create the need for expanding highways and airports. "There are 161,000 miles in the National Highway System of which 47,000 are Interstate freeways. We should be replacing 25% or approximately 40,000 miles (averaging 3 lanes) of freeways and highways every 10 years. This is about 750,000 lane miles and at \$2 million per mile per lane equals \$1.5 Trillion over 10 years. Unfortunately, the United States Budget only provides \$115 Billion per year and half of this goes to other uses such as light rail, buses, etc. Experts are warning this deficiency is several Trillion dollars".

All Weather and All Electric With the guideways twenty feet up in the air, traffic would not be impacted by floods, winds, storms or snow as much as the current roadway technology is. In snowy areas the traction element can be heated when necessary. Solar power is envisioned to provide all electric operations. Over time other forms of power generation can be added and the excess sold off to adjacent users. Connections for backup power can be provided when necessary. Linear Induction up to 150 mph is envisioned for long haul and simple electric motor for local systems.



See over 70 startup companies in driverless systems by clicking on this image

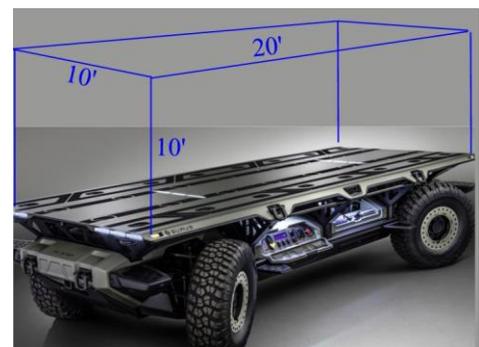
Merging the Driverless Car with Elevated Guideways

Every major car manufacturer has their own prototype driverless car as shown below. Driverless cars are expected to increase the volume of traffic at a time when every city has congestion already. By merging both systems into a coordinated mix of ground and elevated traffic there are huge benefits. The first is that elevated systems can move people around town faster than congested roads. The second is that ground-based driverless cars can be the missing link to the final destination for elevated systems. Eventually the guideways will carry ground-based cars above the traffic and charge their batteries along their route. Each manufacturer below has produced a driverless prototype to enter the market.



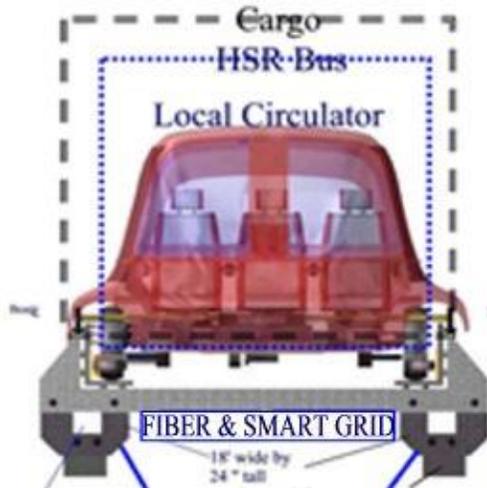
Stacked “Pay Zones” with other carriers using the same easement

1. Shipping/Delivery- on driverless trucks that can go off the guideway to programmed addresses. The picture shows the General Motors experimental version. Up to 2,000 cubic feet would be 10' x 10' x 20'. as shown by the blue lines



After the Corona virus delivery services are expected to grow especially for foods. This market combines with the traveler market will give the individual routes more traffic and even traffic through the night. The combination will mean significant revenues.

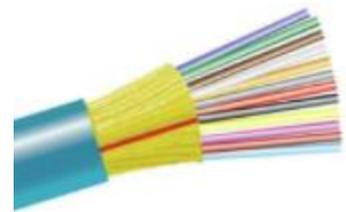
2. Fiber Media- Underneath the guideway there is room to hang 5 to 6 pipes about 3" in diameter. These pipes can carry up to 100 fiber optic strands each.



The carrying capacity of each strand can also be increased by multiplexing them into even more individual signals. Thus, the combined number of channels could grow into the thousands. Fiber optic cables solve a massive problem by removing congestion over the wireless networks

This capacity will allow for all the existing forms of media plus new ones like Virtual Reality, Augmented Reality and 5G which is

100 times faster than 4G, thus creating huge new economic growth. Along the guideways wireless transmitters can distribute and collect the signals to an audience of user's livings within miles of each side. The end user will also have control of this media through his cell phone. The cell phone can navigate this use of his traveling schedules, reservations and deliveries. The fiber media cost for the 50,000 backbone + another 50,000 miles in the cities will add \$500 Billion to the job creation for Rescue Economy. This will include new cell phones for 5G, TVs, transmitters, wiring building, arenas, airports etc. Revenues have not been calculated yet but are thought to add another a very large amounts to the profit opportunities.



3. Smart Grid- The main source of electricity is expected to come from solar although other types are envisioned. Only 1000 watts per 70' of each guideway section is needed to operate the entire systems allowing for an excess of electricity to be collected and distributed to users within a few miles of the route. Intelligence (software) can be added to these power sources making them more efficient and even amplifying them. Newer technologies such as energy from water vapor in the air could supply each one mile of guideway with enough energy to supply adjacent users.

Some States are building Driverless Testing Grounds

According to *The New York Times*, "[States are] financing research centers, building fake suburbs and, perhaps most important, going light on regulation, all in an effort to attract a rapidly growing industry." For instance, a fake town is being built outside of Lakeland, Florida lined with sidewalks, intersections, and shops. Virginia has blocked off an entire 70-mile combination of highway, arterial roads, and urban streets. There's a fake city being built in the middle of the New Mexico desert capable of holding an imaginary population of 35,000 people. And more states are jumping onboard quickly.

Who would use it? Driverless America should be cheaper than car purchases which costs an average of [\\$773 per month](#) according to AAA. Then there is insurance, maintenance, fuel, parking, washing, roadside assistance and depreciation. Car ownership is the second highest cost for Americans after home ownership. Those who are traveling such as the military and tourist would save money at \$5 per day for unlimited ridership over car rentals. Approximately 10% of Americans don't own a car such as the poor and elderly and this could allow them the mobility to find jobs, shops and restaurants. Commuters would also find it cheaper than operating their cars. In large cities driverless buses will increase the ridership especially for the poor. The guideways will be capable of 20 passenger buses although some stations will have to be modified for docking and loading facilities for this size.

Security In this world of increasing threats from terrorism and now the Corona Virus, security is a must. In the bigger stations one or two staff will be planned. These can include other tasks such as information, emergency and crowd control. Entry onto the loading dock will have to consider how to scan for the Corona Virus and security will have to respond somehow. In order to use the system and to purchase a subscription or even a day pass, users will have to voluntarily be checked out for accurate Identification. Otherwise a large number of the population may not use it unless they have confidence in their fellow riders. The cell phone is the ideal candidate to store this info and to scan at the station. A recent certificate of health may also be necessary given the new virus environment. This is not just for riding, but everywhere people gather in restaurants, hotel, events shopping and even office building are going to have to deal with this. Inside each car videos will monitor the activity and remind riders that they are being watched through centralized monitoring

\$1 Trillion for Local Circulation in Cities Today there are 275 cities with populations over 100,000 in America. In 20-years there may be 400. Adding another 50,000 miles of urban Driverless technology both in elevated and ground-based systems is an average of 125 miles per city. As the Driverless technology spreads, cities will spread out more like Los Angeles than New York. Density will be lower, and stations will become the focal points. Someday ground based systems can drive on and off the elevated systems. Until then a transfer will take people to any destination within a mile of the stations using dedicated paths for ground based driverless vehicles. These improvements and circulators are envisioned to be paid for and maintained by local "Improvement Districts" around a mile of each station.

What Would It Take for a Driverless America? It would take political action, public sentiment and better funding. The growing congestion is creating a new demand for political solutions to relieve and expand our infrastructure as gridlock sets in. It will be cheaper to build on top the existing multi Interstate Highway network with smarter computerized and electrified technologies in time to take us beyond oil. And these new 3 to 6 passenger technologies generate revenues that can finance them. Over time 15 to 20 passenger buses can be added. By starting now, we can plan and gradually construct what we want, instead of having oil control us and force us to change our ways without any preparation. Hundreds of new and a few older companies are preparing to compete for a share of this trillion-dollar upgrade market with local circulators now and then Interstate routes soon. The industry is getting traction now with 12 cities starting studies and Colorado is already seeking proposals for a \$3 billion system on I-70 mountain corridor. Such systems would need to have profitable revenues in order to attract private capital and it would need popular selling points such faster and more convenient service, clean energy, 200 mpg equivalency and reductions in our congestion/pollution.

Capital Formation is key to Development This narrative describes an economic concept for a USA PUBLIC BENEFIT CORPORATION (PBC) to provide the tax-free structure, safety and interoperability oversight. Each State will own the Driverless infrastructure and form Public Private Partnerships (PPP) within the PBC with developers and capital to fund corridors that funds

their portion of the 50,000 miles. Collectively this becomes a \$1 Trillion-dollar driverless backbone built above the existing Interstate Highway system. A focus of this concept is to go after some of the \$10 trillion "*flight capital*" that is on the move around the world. It is looking for safe havens and assurance they will get repaid. What assurance is better than investing in critical transport infrastructure that generates all its revenue from user fees?

In addition to "*flight capital*" are repatriated dollars. The Public Benefit Corporation could create a Federal Bank Depository for foreign and repatriated dollars. "When the confidence blows away, the first people to dump the dollar are going to be foreigners. All those dollars, and the trillions abroad, are going to come back to the United States in exchange for what?"

Digital Currency Is a Digital Currency exchange for a new type of (Green) Bonds feasible. These bonds could be issued by each State as a Public Private Partnership (PPP) based on earning significant infrastructure revenues? Since each State would own their routes via the PPP, they could sponsor competitions for funding and for developers. These in effect put a 30-year tax free mortgage on each route. The Bonds would be like industrial development bonds with 3.5% interest, 30-year amortization and a surplus. Over time there will be large surpluses, so each party gets a share: developers 20%, each State 30% and the capital funders 50%. This should attract the needed capital for each route. After 30 years the mortgage is paid in full and the State gets everything. Digital Currency is a new wave sweeping the globe. There are thousands of Crypto companies already set up to market investments. Using their [blockchain](#) technology would offer investors some of these features such as instant liquidity, faster, cheaper, more security, anonymity, decentralized and appreciation of shares. With the earnings from ridership subscriptions the volatility would be minimized compared to today's Crypto market. The Crypto industry is going mainstream. In 2020 Big business, big banks and big governments are preparing their own form of digital currency. Technology companies such as [Microsoft](#), [Google](#), [Amazon](#), [Apple](#) and [Facebook](#) have plans to issue this year or next. [Walmart](#), [Ford](#), [Disney](#), [Met Life](#) and [Intel](#) are said to be preparing for issuing digital currency products next year. Even the big banks which have resisted Cryptos so far are known to be preparing their own digital currency: [JP Morgan](#), [Wells Fargo](#), [Morgan Stanley](#) and [Bank of America](#). The United States government has a plan to issue [Fed Coin](#) soon. Even [China](#) is getting in. Also [Congress](#) has Introduced 32 Crypto and Blockchain Bills for Consideration. These are all just timid first steps.

Sustainable Economics Based on a subscriptions service of around \$100 per month for unlimited ridership in the metro areas, travelers would save money over car ownership and normal travel costs. The “last mile” problem has always been the short fall to transit, but with Uber and other shared services this problem is easily solved. In addition Improvement Districts can be installed for one mile around each station to provide dedicated paths for drivers buses, trolleys, carts and trams, Our rough economic evaluation is that these routes can pay for themselves and can retire debt over a 30-year period. With the “Stacked Pay Zone” concept they could pay double today’s market returns. If investors could also get some of the surplus, it would make the funding even more marketable. Why will there be a surplus? (1) less labor costs (2) multiple revenues such as travelers, cargo (fills the night-time hours), fiber optics (underneath guideway) and solar electricity (3) increasing prices (4) increasing users will grow huge over 30 years.

Profits on these systems are thought to be in the 8% to 10% range in the early and grow up to 4 times higher within the full 30 years just for the movement of people. Adding in the other revenues, the profits could soar from 20% to 30% combined ROI in the early years. Small systems costs for malls, resorts, universities, hospitals, airports, office parks and venues will cost \$25 to \$50 million, city circulators will be \$100 million and up and Interstate systems will be in the Billions of dollars. By stacking the various carriers (travelers, cargo, fiber and energy) into one easement, the combined profits are expected to be larger, more sustainable and growing faster.

This will stimulate the economy, give each state the authority to design and sell new Bonds based on tax free incentives and higher returns. America needs a new economic model for the movement of goods and people. It also generates new jobs building it. Mobility is the heart of our economy and the lifeblood of every community in which we live, work and invest.

The Ripple Effect If we could attract a trillion dollars to a new industry that funds a national system equal to the Interstate Highways System of 50,000-miles, then here are some ripple effects: The first ripple effect will be adding metro circulators in the cities that collect and distribute for the backbones. This alone will be another \$1 Trillion dollars and it can be paid for with either new Bonds or by a portion of the



surplus. Each dollar invested in a Driverless America is expected to generate \$5 or more in development projects around small stations in the cities. Transportation investment has historically generated this kind of multiplier investment in adjacent real estate property. A Driverless America would cause a \$5 trillion construction boom developing pedestrian villages at station stops and creating an array of public benefits over the next few decades. If the urban one third of the Driverless America has two stations per mile, as many as 30,000 pedestrian villages would result. If each one averaged 1000 condominiums and a supporting mix of commercial services, then 30 to 50 million people could live work, play and shop without the need for owning a car. They could use buses, taxis, trolleys and car rentals to go off-line into other areas. Such systems will also attract a sizable commuter ridership and more revenues from outside people working and visiting in these villages. A Driverless America can link activity centers such as hospitals, malls, resorts, campuses, airports, trains, cruise terminals and office parks. Its pedestrian villages can require clean energy usage. The new labor and property tax bases generated will add hundreds of billions of dollars per year to both federal and state coffers from the trillions of dollars in additional investments for real estate at the stations. Then there is the huge ripple effect of spending \$500 billion or more on a 50,000-mile fiber optics enterprise.

Job Creation At the turn of the century when automobiles started, there were over 500 companies competing for their idea of what a car should be. The same thing is expected again, but this time the stakes are higher. This infrastructure can set the conditions for thousands of companies to grow new profits by incorporating new innovative automation, information and robotic technologies in tomorrow's economy of innovation. In every state, various industries will be required to organize, fund, build and operate a variety of Driverless transport routes and technologies. Below is a list of the main industries that would be stimulated by millions of jobs to build a Driverless America network:

Propulsion Systems	Credit Cards processing	Voter Campaigns
Travel Reservations	Cargo Integration	Vehicle Assembly
Media Companies	Amination Companies	Demographic data
Civil Engineers	Structural Engineers	Fiber Engineers
Automation Software	Station Development	Underwriting Docs
Power Distribution	Raw Concrete & Steel	Money Management
Guideway Fabrication	In Car Advertising	Station Car Rentals
Economic Feasibility	Construction Management	Energy Generation

Most displaced workers such as truck drivers will still have jobs for decades while the systems are constructed. Even afterwards there will still be routes for them to collect and distribute traffic to the Driverless backbone. Cities will still need to operate their transit systems, but they will be more oriented to the driverless backbones. Fossil fuel companies will grow smaller and those jobs will be replaced with newer technologies

How does a \$1 Trillion Driverless Market Compare? Systems will cost, on average, about \$15 to 20 million per mile, funding about 50,000 miles over 20 years – is about the size of the interstate highway system. If it earns more than other public investments, there is plenty of private money to fuel a trillion-dollar Driverless Industry, for example, the Internet showed how quickly a trillion in capital formation can occur for national infrastructure. The Internet attracted over \$2 trillion in capital in less than ten years. The Iraq and Afghanistan wars are said to have cost over \$5 Trillion. Today there is over \$2.5 trillion in money markets saving accounts earning less than 3% and waiting for better investment climate. The stock market in late March is down to about \$20+ trillion. Over the next ten years, America's GNP is expected to exceed \$200 trillion cumulatively and yet is dependent on an aging and overloaded transportation network. We are proposing a Driverless America capable of attracting capital for any route that can offer a 10% long term return. Transportation, being America's fourth largest industry and accounting for 11% of the Gross National Product (was exceeding \$22 trillion) is primed for automation and possesses conditions that are ripe for explosive growth.

First Steps A Driverless America Feasibility Conversation would bring public awareness to the opportunity via social media. Someone would have to run it, but that should not be hard to find. Once the public sees the number of benefits involved, political action is more possible. Congress would have to provide tax-free incentives and approval for the funding concepts. A public feasibility conversation is necessary to attract government interest and attract many of the players with expertise. It would be an inexpensive way to start. It would also narrow the opportunities into the most feasible methods and configurations

Mobilization of a Brain Trust-Eventually all these human resources from the feasibility conversations will need to organize into something that

allows them to collaborate with each other, sources of capital, conferences, ideas and events. This should be a revenue generating enterprise that allows its services to grow with the number of opportunities.

\$1 Billion Incubators- From the Driverless industry shown on page 4 and 5, entrepreneurs can form in the States of their choosing to study Driverless Corridors and begin discussions with those Depts of Transportation. Eventually in order to manage this much activity, these startup companies will grow into development Consortia that provide the automation software, shipping, car manufacturing, fiber media and construction. Some formation factors are:

- Variety of technologies that can be integrated in many configurations.
- Private sector financing with better returns than existing methodologies
- Increased consumer mobility efficiency and safety
- Increased economic development in other related industries
- Minimum Federal governmental involvement

The enclosed narrative is a draft proposal for submittal to the Democratic leadership about the notion of using Digital Currency to raise funds for a longer-term economic rescue than today's stimulus efforts. I am looking for advice and sponsors that are willing to work on this idea with me by adding better links and more recent information before sending it to the Democratic National Committee. If you are interested, please have someone contact me by email to discuss how we can work together to improve this draft before it goes out. Hopefully this idea will lead to a public discussion and perhaps even cause government to become more interested. If you are interested in reviewing a specific \$1 Billion Incubator, please ask for it.

So, can Crypto funding of infrastructure take root in America?

Reply to

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