



B. PERSONAL (electric) VEHICLE (PV)

1,000lb - all you need for most all local / county / regional trips. Volkswagen introduced this model in Germany this month. It has a smaller battery pack than a Nissan Leaf (and costs less) because as a PV, it's not needed to go that far and doesn't try to always be able to carry 5 people. Looks like a great car to drive to a RTD Park & Ride to me. Even without being an EV, great idea - smaller cars for most of our daily trip needs in the county (and made safe by quality transportation engineering with an eye to vehicle compatibility issues and safety).



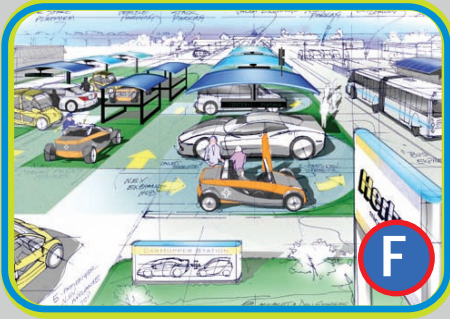
C. LOCAL LO\$\$ - Yes that's \$7,000 leaving our county and state each year for every vehicle on the road. Think about it. Think about it when we don't have enough money to pay our teachers, or other essential services. Yes the local gas station, car repair, and the car dealers are making money locally. But so much is leaving town. This can change by restructuring mobility, and there we can redesign how we move in a way that creates more good jobs here in Boulder County.



D. CAPTAIN ENABLER: ICT The Information and Communication Technology (ICT) revolution is just that: revolutionary! It now takes millions of consumers just 5-10 seconds to acquire a mode of personal mobility. From the 1,000 world cities with carshare services online locally, to the 100 million people in Paris that "micro-rented" a bike over the past three years - the genie is out of the bottle on this future and able to radically restructure mobility in our world and ultimately allow us to rethink the shape of our cities and communities as well. Welcome Mobility on Demand (MOD) world!



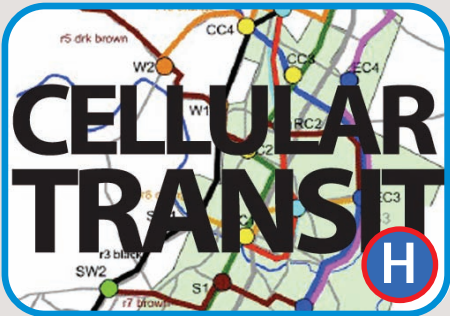
E. DON'T PLAY. For many people - switching to a new mobility solution won't make sense for them, or they just see it as an inconvenience and don't want to do it. Fine. No problem. We know most of this change will likely occur by addressing market segments, like commuters for example to start (and helping households that want great mobility at a much lower price move into this MOD new world.) For those who don't want to participate, they still stand to gain lots of value from any Connected Mobility program. If we see more people using innovative commuting solutions, there will be fewer cars on the road and that will mean traffic will be moving faster in the county. There may ultimately be reduced taxes for less road construction and less maintenance. There are many other benefits from a more diverse, context-sensitive mobility system.



F. "CAR HOPPER" STATIONS. While we have not seen a station yet where a consumer can swap their little city car for a faster "FAR CAR" to travel further distances, faster...we sure think we will! Imagine stations on the far corners of Boulder or Longmont (or other county cities) where a BOCO car can be swapped for a faster or more capable vehicle when needed.



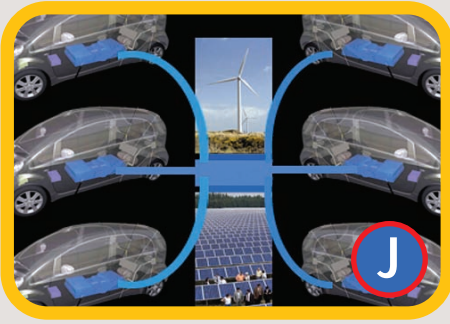
G. BIKE BUS. Seems the RTD Regional Bus that only holds 2 bikes is no longer enough. BOLT and NED routes require drivers to load extra bikes in lower storage bays for example - breaking driver backs and making the commute longer for passengers on bus. Time to consider new bus designs that hold 20 or more bikes? Flat Bikes (with folding handle bars) could fit into cartridge slips. Modified bus designs could be created or all-new bus designs pursued.



H. IF I WAS PRESIDENT OF THE USA I'D GIVE A MEDAL TO RICHARD SHULTZ OF AUSTIN TX FOR INVENTING A CELLULAR MASS TRANSIT SYSTEM! Seems Mr. Shultz has thought more innovatively than many of our US transit agencies and taken a fresh look at how our urban transit systems could be reformatted in this new connected age. Rather than asking people to get on a local bus that stops every block, Mr. Shultz broke transit into the local mode + regional mode. He then focuses on Bus Rapid Transit to go from station to station, across a region (with stations every 4 miles or so apart). He then connects a network of local TAXIVANS to help riders reach the LAST (and of course, FIRST) MILE. Such a system has the potential to greatly speed up public transit travel across a region and to do so for a fraction of the cost of current systems. Way to go Mr. Shultz!



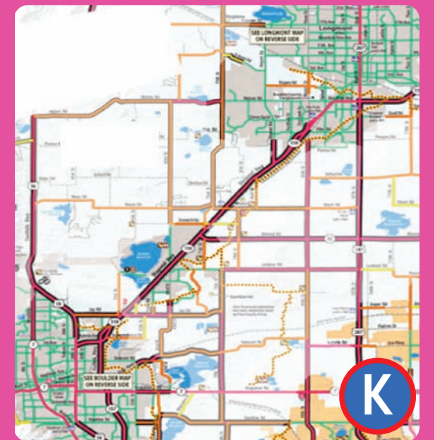
I. EVERY CAR, SUV, AND LIGHT TRUCK THAT DRIVES TO BOULDER'S IDEAL MARKET CAN BE USED TO DRIVE MORE THAN 2,000 MILES TO FLORIDA, BUT ONLY TRAVELS .6 MILE (AVG) TO THE MARKET. In a Mobility-on-Demand (MOD) world, we want to right-size our drive. Using a 4,000lb (I know, stylish) SUV to go less than a mile is like using a shotgun to kill a fly. While there are a few bikes used to get to this market, and certainly some folk walk, most drive an over-engineered vehicle for this short trip. In 1970 this may have been the only way to go. Today, no longer.



J. 70,000 BOULDER COUNTY BATTERY BANKS ON WHEELS. The world needs the Nissan Leaf and other electric cars and plug-in hybrids. So much focus on conserving energy when we really want an ELECTRICITY FUEL "GUSHER" NETWORK to let loose! We have only 52% of our current electrical generating capacity in the USA being used. California can put 20 million cars on the grid without increasing capacity! But having 33% of all cars in BOCO with a reasonable battery pack on board allows for one major benefit beyond transportation: ENABLING SOLAR AND WIND ENERGY INVESTMENTS TO BE MORE MEANINGFUL. Our e-cars could capture the incoming energy and let us use it for mobility or stationary sources as needed. AND – while most talk only about electric cars in comparison to the current automobile-dominated system of today, we would be building a hybrid transit / personal mobility network around our region and reducing the demands on that BOCO electric car. Current battery tech suffices for our needs with this larger system opportunity being addressed.



L. ONLY ¼ OF LOW & MID-INCOME AMERICANS LIVING IN METRO REGIONS CAN ACCESS WORK IN 90 MINUTES USING PUBLIC TRANSPORTATION (Brookings Institute).
Moving into a new connected age, we can do so much better than this!



K. GOLDILOCKS. To innovate new networked approaches to sustainable mobility, the City of Boulder as a "canvas" is too small. Why? Because less than 40% of the people that work in Boulder actually live in Boulder. That means no matter how cool of a solution COB offers, if one's trip starts in Louisville and starts in a car, then it's going to be a car trip that day. We need to begin looking at this across the entire Front Range. From Cheyenne Wyoming to Colorado Springs, perhaps Pueblo. But that is unrealistic to get started. We need to approach this like how the first fax machines found use. (I'm 48 and don't remember who bought the first fax machines, but it was probably like IBM and their lawyer's office. It wasn't until a long time later than millions of people owned them and the size of the network made the purchase prices of a fax machine for me seem reasonable). So if the City of Boulder is too small, and the Front Range is too big, then Boulder County (Boulder, Longmont, Louisville, Lafayette, Superior, and Broomfield) is just right!

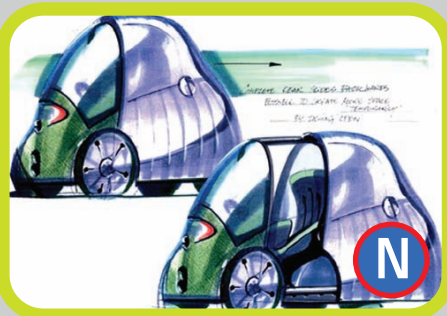


M. NEIGHBORHOOD PACKAGE STATIONS.

Amazon.com is working on these smart automated package centers in Seattle. Imagine a commuter returning to Longmont on the BOLT after a long day of work in Boulder - and can order items online while at work and have them all waiting in one locker for pick-up at the neighborhood transportation center nearest their home. A consolidated drop point can keep the cost of e-deliveries down for consumers. They can remove concerns about packages left on one's door step, and also reduce the number of giant FedEx and UPS trucks on our smaller neighborhood streets.



O. GET HIGH (OK, kids – you know what I mean. I'm not talking about drugs, they are awful for you). Time to begin looking at advanced elevated transit systems that can be built for 50% or less than the cost of building conventional light rail. These systems are capable of being developed to serve the entire Front Range region, or more localized pockets of movement. With a new world of connected first and last mile transportation solutions in the air, getting to and from these future stations will be a breeze. (Disclaimer: I'm a part-timer on the Boulder-based 5superbold SwiftTram.com venture team)



N. GET + GO LOCAL. We have an opportunity to re-invent local transportation. What is the least costly vehicle that could be created and married to safe travel environments for a Boulderite to drive to a nearby Park + Ride 2 miles away on a cold snowy early December day? Could we have vehicles that cost as little as \$4,000 that get you around Boulder? There is an opportunity to turn Boulder into a Transportation Lab. With an ultimate focus on the Front Range urban mobility network, local cars in Boulder or Longmont could be encouraged. Perhaps future arterial streets have dual speed limits with right slower lanes for light vehicles that top out at 40MPH. Whether electric power, human power, or other, light vehicles offer many important benefits and allow us to have a more optimal mobility system.



P. RENT MY CAR. Carsharing is taking off in many places around the world (the 1,000th world city just deployed a carshare service recently). And here in BOCO we have eGo carshare coming online. But what everyone's talking about is Peer-to-Peer (P2P) carshare services that enable consumers to rent their own cars when not being used. If we think different, could BOCO approach one P2P carshare provider, like Google-backed RelayRides, or Getaround and work a deal that brings the service to every block in the urbanized areas of the county? Yes, there is a need for education and behavior change to encourage folks to rent out their cars (but note: the average car is only in use 1 out of every 24 hours). With a growing number of very big companies getting interested in this market, could we imagine having at least 2 cars on every block in the county that could be rented by the hour? Imagine 20 types of different cars available within a few blocks from one person's home that you could rent by the minute, hour, and even day.

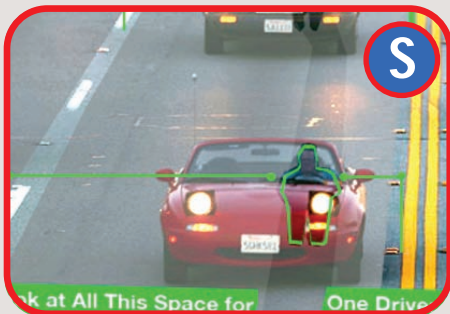


Q. Grid Morning! (Bill Ford now calls it “Gridlock Planet”). What you see here is the “*LEFT ALONE SYNDROME*”. That’s one driver sitting on the *left* side, *alone* in the car. The seat to the right is almost always empty, as is the 3-5 seats behind the driver. The Denver metro region has an average of 1.1 people driving in every car. That’s a 20% load factor. (An airline couldn’t stay in business one week operating at that level of inefficiency).



R. Electric Bikes on Multi-Use Paths – LEGALIZED!

It makes no sense to outlaw friendly e-bikes on City of Boulder’s multi-use path network. Aside from the Creek Path portion of the network in summer, the full network is highly under utilized. For every Boulder resident that takes an e-bike rather than a car, one car vanishes from crowded 28th street. We all know pedal bikes are the ultimate answer, but e-bikes have one thing pedal bikes don’t: they are easier for the larger majority of our population to ride. And if there is one thing we should be doing to encourage people to drive a big car less – that should be making it *EASY!*



S. SPACE AGE: One last image of the spatial inefficiencies of current front range transportation system. Look at the size of one person and the size of their travel lane. One potential solution is narrow-lane cars. Personal vehicles, freeway-capable, that have two tandem seats (driver sits in front of passenger), allowing one travel lane to become two.

RSVP: Dan Sturges email: abovecar@gmail.com or call: **720/641-3011**

Drinks + Happy Hour Food provided by Big Red F Restaurants



Dan Sturges is the single most creative thinker I know in coming up with innovative solutions to our urban transportation challenges.

- Daniel Sperling PhD, Director of Institute for Transportation Studies, UC-Davis | CARB

There are only a handful of people with the expertise to guide us through the next frontier of transportation planning. Dan brings twenty years of experience and a dynamic vision to shape the strategies that will generate the next leap in market share growth. I wouldn't want to enter into long-range strategic change efforts in regional transportation planning and visioning without someone like Dan at my side.

- Cliff Henke, Analyst, Parsons-Brinkerhoff

Dan Sturges has a vibrant sense of what can come next. He can help people break through mindsets that limit advancements. He can engage experts, the public and even children in re-imagining mobility. And most importantly, he can turn all of this into tangible products and systems.

People have the deepest respect for Dan's creativity, expertise, and courage for staying the course on an enormous social transformation.

- Mark Charmer, Founder, Movement Design Bureau

Dan's ideas are not just theories. Breaking completely new ground in real innovation is the most difficult thing imaginable. Dan is better at this most exciting and most painful part of the design process than almost any other person I have ever met. He makes very new ideas real.

- Steve McDonald, Nike Design

Dan is the kind of person we need given today's challenges. He is absolutely brilliant, brimming with huge creativity. He is extremely forward-thinking. But he is not a blue sky dreamer. He has the experience and know-how to bring his ideas to fruition.

- Jean Jennings, Editor-in-Chief, Automobile Magazine