WASTE !

A 4,000 pound
$25,000 vehicle
With a cost of $150/week[1]
And 10 hours idle time
Tying up valuable real estate

Multiply the above by 56 million vehicles.

The DAVe System can save

- Millions of gallons of fuel a week
- Millions of dollars in automobile expenses a week
- Thousands of lives and limbs
- Thousands of commuting hours.

An obvious application is in ferrying commuters to and from Park-and-Ride areas, especially in TODs (Transit-Oriented Developments)[2].

In 2003, there were 170 million commuters, 35.6% of which, 60.52 million, used both their auto plus other modes of transportation, such as rail or rapid transit, to get to work.[3] Since 1.08 people are in the

[1] In 2006, see http://www.boston.com/cars/news/articles/2006/04/23/annual_car_cost_hits_7834
[2] http://en.wikipedia.org/wiki/Transit-oriented_development

commuting automobile[4], this means that 56.04 million vehicles make this trip daily. Presumably they use a chauffeur, or a Park-and-Ride lot or garage where they store their car during the workday. The average travel distance from home to Park-and-Ride stations is 3.4 miles. In 2,000, the average mile per gallon for passenger cars was 22 mpg[5]. Thus, the 6.8 mile round trip would take a little more than .3 gallons. This, multiplied by the number of Park-and-Ride commuter vehicles, would be almost 16.8 million gallons per day or over 83 million gallons per workweek. If only 10% of these riders switched to using the DAVe System, there would be a gross savings of 8.3 million gallons per week.

It is estimated that an electrically-powered DAVe would perform at the equivalent of 300 gallons per mile. Thus, 56.04 million DAVe 6.8 mile round trips would consume the equivalent of only .0023 gallons per trip per DAVe or almost .13 million gallons. Were only 10% of the trips carried out by DAVe, then this would take the equivalent of .013 million gallons and the net savings of the DAVe System than would be 8.287 million gallons per week.

Ingersoll Rand provides figures showing that their Club Car golf cart's cost of electricity is around $.0002 per mile, whereas their gas-version golf cart costs in the order of $.04 per mile. This shows that the electric vehicle does provide net energy savings to the nation/world.

Compared to bus and rail, the big attraction of the auto is that the passenger(s) can depart when they want, to travel to a spot close to their destination. In most towns, villages and TODs, DAVe would take riders from their curb or driveway to the Park-and-Ride lot, simulating the convenience, comfort, security and privacy of the personal automobile. Thus, it seems possible that DAVe could attract even more than 10% of the Park-and-Ride auto commuters.

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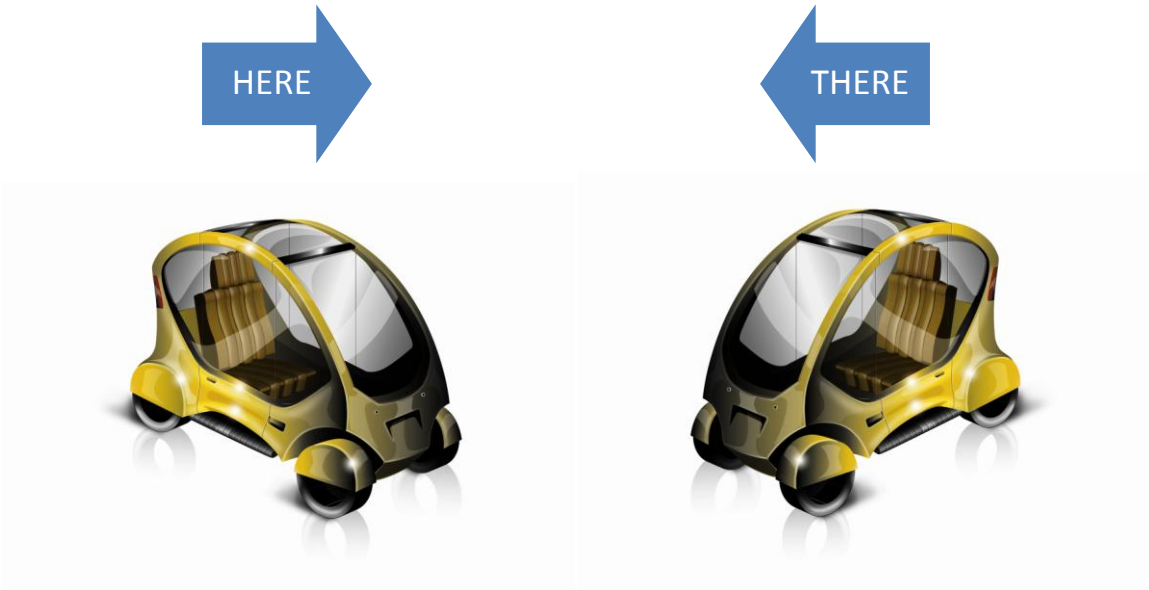
[3] http://www.bts.gov/publications/omnistats/volume_03_issue_04/html/entire.html

[4] http://www.fhwa.dot.gov/ctpp/jtw/executive.htm

[5] http://www.bts.gov/publications/transportation_indicators/december_2001/Environment/html/Average_Motor_Vehicle_Miles_Per_Gallon.html

EUREKA !



Picture this:

A 1,000 pound capsule

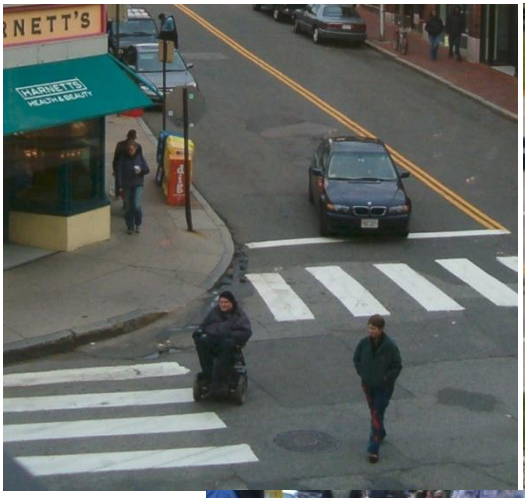
With a cost of only $50/week with no investment to the user

Darting directly back and forth from homes to transit stations.

Using a selection of open "CAPILLARIES" of the "hidden" transportation network:

- Roads
- Multi-use street lanes
- Sidewalks
- Alley ways
- Overhead walkways
- Bike paths
- Railroad shoulders
- High-tension electricity right-of-ways

Where none of the above are available, or for heavy-traffic areas and/or cross-walks, beautiful, light-duty, comparatively inexpensive structures can be built.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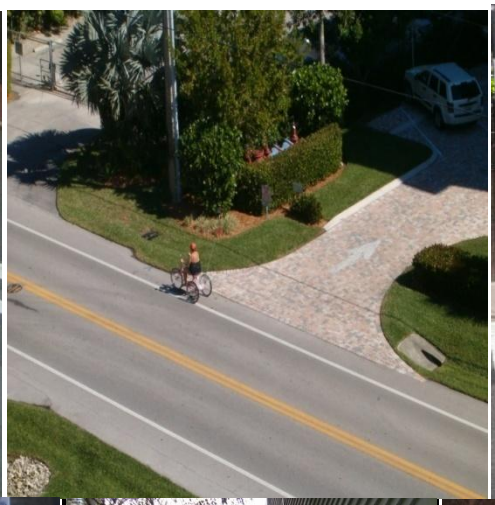
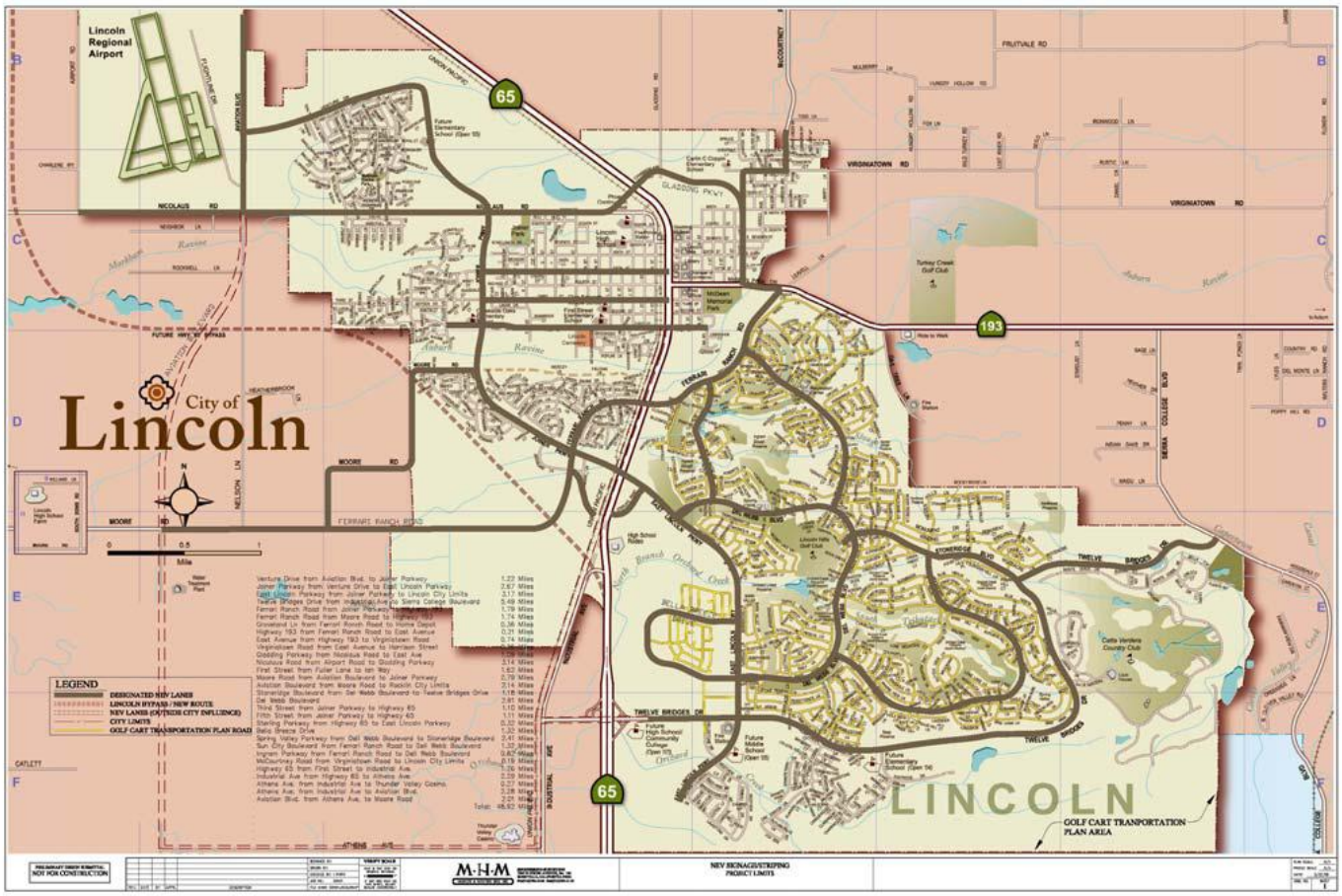



Pride

44th


Note the extensive bikeways already in Santa Cruz.



The circulation plan for NEVs (Neighborhood Electric Vehicles) in Lincoln, CA.

See http://www.lincolnev.com . Hundreds of NEVs travel on any road in Lincoln at 35 mph, and travel on bike lanes also. While city, downtown auto traffic moves at a speed as low as three miles per hour, bicycles move in parallel, bike lanes, at an average speed of 12 mph. In our Harvard Study "One Campus", an auto traveling from the Allston Campus to the Medical School moves at an average speed of 15.5 mph and takes 12 minutes. The DAVe takes 10.6 minutes, for a saving of 11.7% in portal-to-portal travel time.

With 10% of commuters converting to the DAVe System, over $½ billion per week would be saved in total by the DAVe users: $150/week average cost of car[6] minus $50 DAVe cost equals $100/week saving per user multiplied by 5.604 million vehicle trips. An additional saving would be the auto parking lot fees.

DAVe would also reduce the billions-of-dollars of car accident cost. (See http://money.cnn.com/2008/03/05/news/economy/AAA_study .) Most auto accidents are caused by human failure, and few by mechanical or computer failure in the auto. DAVe's failsafe response to obstacles is almost instantaneous, whereas human reaction time in an auto is 2 1/2 seconds to sense and respond to danger. The inebriated, elderly and teen population can travel by the autonomous DAVe safely. Most auto trips are less than 5 miles in length. The average drive to a Park-and-Ride area is 3.4 miles. Therefore, for most trips there is no need for the DAVe to speed in order to get to its destination faster than the auto, as indicated by our studies.

The DAVe System cannot come soon enough. But first, DAVe's claims and safety records must be established in controlled areas such as college campuses and movie studio campuses. All the more reason to hurry…

[6] http://www.aaanewsroom.net/main/Default.asp?CategoryID=4&ArticleID=529