High-Tech Hitchhiking

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Have you ever stood at the bus stop watching hundreds of cars go by and wondered just how many of those cars are headed to the same place you want to go? Wouldn't it be great if you could just stick out your thumb and get a quick ride rather than waiting 10 minutes for the old bus?

Imagining the Future

Imagine if, instead of congested lanes of large cars with one person on board, we had a stream of traffic picking up and setting down passengers to help them get to their destination - a truly 'rapid transit' service in action on every street.

Can you picture this future where every car is instead a mini-bus? Or are you turned off instantly by the modern day stigma associated with 'hitchhiking'?

Hitching a ride used to be quite socially acceptable. Nowadays (at least in the 'civilised' west) somebody sticking out their thumb on the side of the road is seen as a much less than desirable passenger. Equally, were you to decide to try your hand for ride, you might not be all that comfortable with the first person who stops for you - after all, what sort of creep would pick up a stranger off the side of the road?!

Hitchhiking into the Future

It doesn't matter whether it's hydrogen, batteries or gasoline under the hood - if it's two tonnes of

metal carrying one person then it is grossly inefficient. Clearly, we have the roads and spare seats in the vehicles to get us where we want to be. In our more frugal future, we're going to need to make better use of those spare seats.

For those of us standing on the side of the road waiting for a ride, what we lack is a means of connecting us to a driver who doesn't know we need them. But the technological solution to this problem is already close at hand - it is simply a matter of integrating three common functions:

- A mobile (cell) phone to inform the world of our current location and where we want to go.
- GPS units to work out where we are standing and which drivers are coming our way.
- A means of paying the driver a small fee for the ride.

Introducing the 'iHitch'

Let's call this new device the *'iHitch'* - a phone, GPS and payment system all in one - a simple challenge for the likes of Nokia, Apple or Garmin. The next step is equipping a critical mass of passengers and vehicles for it to be a practical option. And finally we will need some software which, when told where the drivers are going and where the passengers want to be, can make the optimum connections between the two. Seems simple really!

Of course, depending on your destination, it might take more than one 'ride' to get you from 'A to B'. With public transport, a journey that requires multiple connections with long waits in between can quickly become tedious and very time-consuming. But if at each change you're only waiting a minute or two for the next driver in the sequence to keep you moving then much more complex trip patterns suddenly become a lot more viable. This is especially true since the speed of travel in one small vehicle will be faster than in the big old bus which has to stop every few hundred metres to pick up and set down more passengers.

The incentive for the passengers are pretty obvious, and as fuel prices start to bite and the affordability of the next tank of fuel becomes a serious question, the benefit for the driver of being able to share the costs of running their vehicle becomes pretty compelling too. When oil was cheap, it was easy to choose the privacy and comfort of having a vehicle all to oneself. But that equation is shifting quickly, and some old and well ingrained habits may be ready for change.

Breaking down Barriers the eBay Way

Technology is the easy part - the far more challenging problems are those we have created for ourselves. To make our hitchhiking future happen we're going to need help overcoming the significant social and cultural barriers. But the answers are out there - in this case we need only look at other models of social interaction over the internet.

Consider how the eBay model of 'rating' buyers and sellers could be applied:

- If you smell, talk dirty or are otherwise poor company in a confined space, your 'passenger' or 'driver' rating will quickly plummet.
- If things work smoothly and your rating is high, you won't have to wait long for a friendly driver to pick you up and get you on your way. High rated drivers may also be able to charge a little more for their services.

On a busy route in the middle of the day, you might be happy to offer a ride to a B-rated passenger but if you're looking for a ride home at 3am in the morning you might prefer to wait a little longer to get a AAA-rated driver. These personal preferences would be adjusted in your 'iHitch' and the software makes the matches according to your criteria. The more stringent you are, the longer you'll have to wait!

Every Car is a Mini-Bus

In my case, instead of a bus stop it's actually a tram that I end up waiting for at all hours of the day and night. I hope it won't be long before I can stand there, plug a destination into my 'iHitch' and have a driver pull up moments later, long before the tram would have arrived. Instead of every oil consuming vehicle being the problem, they become part of the solution in the form of a mini-bus.

As the scheme becomes widely adopted, the number of vehicles on the roads will drop as more drivers leave their car at home, choosing the new speed and convenience of riding as an 'iHitch' passenger instead. Not everybody can be a passenger (even a real bus needs a driver!) but a substantial reduction in traffic and oil consumption is readily achievable.

In a crunch, one can envisage the same system being pushed to its limits with each vehicle 'saturated' with passengers and only the bare minimum number of drivers taking their cars out on any given day. In an 'oil shock' scenario, I can see it being possible for a city to keep functioning and successfully moving people around on essential journeys using a small fraction of their previous total oil use. The extra time involved in picking up and setting down passengers may even be won back through less congested roads so the speed of individual travel may not drop.

But the key here is preparation - if the crunch hits first and you don't have the tools in place then

it's very hard to co-ordinate the drivers and passengers and chaos (and doom) rule instead.

So getting an 'iHitch' scheme up and running in your town could be a valuable insurance policy, even aside from the direct benefits. And unlike other major infrastructure responses to peak oil which will take several decades, the 'iHitch' solution can be rolled out as fast as you can manufacture mobile phones.

So, will technology cut our future fuel bill in half? Sure, and that high-tech future might be a whole lot closer than you think.

With thanks to the [Beyond Zero Emissions](#) discussion group in Melbourne (amongst others) for part of the inspiration behind this story and the impetus to put pen to paper.