

Solutions at a Glance: CAN RELIABLE, EFFICIENT TRANSIT LIMIT THE NUMBER OF SECOND CARS?



No need for a schedule – buses run on main routes every five minutes in Aalborg

Okay. Even I think the Danes may have gone too far. On May 14, when the Hollywood royalty, Brad Pitt, Nichole Kidman and Johnny Depp were pulling up to the Cannes Film Festival in their Rolls Royce's, the European royalty, princes and princesses from Norway, Spain and Monaco, were being chauffeured to the wedding of Frederick, Crown Prince of Denmark...in busses. They were no doubt luxurious, but still, they were busses. I've often asked myself, but especially after seeing this, why are the Danes so obsessed with busses, trains and all forms of public transportation?

This is why. In Scandinavia as well as other parts of Europe, mobility – the

ability to get around – is more than a necessity; it's a right. It is a deeply ingrained cultural value that no one should be left out of the societal flow because of money, age (either young or old), or disability. The problem with universal mobility is that as long as it is used only by those who don't have a choice, it is very expensive. This presents a challenge to municipalities, who are largely responsible for getting people from one place to another. Transportation planners in Denmark realize that no matter how good public transportation is they will never prevent people from wanting to own a car, so they don't try to fight that battle. The battle they are waging is to get families to refrain from buying

a second car even though they can afford it. Toward achieving this end, a great amount of time and money is spent to make the bus and train systems better and better. The more fare paying passengers there are, the less the municipality has to subsidize the system. It's a matter of making the social value of universal mobility an economic practicality.

In their seduction of the potential second car owner, the municipality is willing to go to great lengths. On well-traveled routes during much of the day, busses and metros come by every five minutes or less making schedules unnecessary.



Automated displays linked to GPS keep drivers on track and on time.

Transportation planning prioritizes public transport, which makes getting around by bus and rail more efficient than cars in larger cities. City centers and certain streets have limited or no access to cars. In-bus GPS systems automatically communicate with traffic lights, so that if a bus is running late, every intersection it reaches has a green light.

Communication, reliability and accessibility are essential in making public transportation appealing. At the bus stations and stops, real-time LCD boards tell passengers exactly when the bus will be arriving, not when it is supposed to arrive. In Copenhagen, the operator of the metro is financially penalized if the on-time rate goes below 98%. Busses are comfortable and safe enough for children to travel around on their own. Children who are traveling with their parents are free. During the wee hours of the night when there are few passengers, riders can call for a taxi and pay what it would cost to take a bus. This is much less expensive than providing around-the-clock bus service.

Denmark is going to a smart card system for all forms of public transportation. With this system, passengers will have one card to use for all modes – busses, trains and metros. Once the card is scanned, the money will automatically be debited from their bank account. Aside from making public transportation easier to use, planners believe it will have an added psychological benefit. The expense of car use is largely hidden from the owner since the cost of the car is paid either all at once or in monthly installments, which are automatically paid from their bank account. The purchaser feels the pain either all at once, or once a month when looking at the bank statement. Passengers on public transportation feel little bits of pain all the time, every day, and frequently many times a day. The smart card system will give riders the same sort of hidden expense benefit that car owners have.

Implementing all of these ideas into a system that provides passengers with a high quality experience takes a tremendous amount of collaboration. The northern city of Aalborg, Denmark, population 170,000 must

work with 14 counties to come up with fares, routes and share in IT development. It also must coordinate with the national train system to insure that passengers can transfer from one system to another quickly and with ease. Although a public agency oversees the system, 24 private companies with 330 busses provide the actual delivery of service. Because of the tremendous amount of coordination required with a multitude of transportation systems and private companies, as well as the on-bus GPS system and real time information network, the use of sophisticated IT is a key component to making everything work.



Informational displays at major stops let passengers know when their bus will be arriving.

Seattle is a city that is having the life choked out of it by traffic. As in Denmark, it would be unrealistically idealistic and impractical to expect people to give up car ownership completely. Getting many people to forego a second car, if there were convenient alternatives, is an idea worth considering. Broadening the base of public transportation users would make it less expensive for the city, safer and provide everyone with a higher quality urban experience.

The 2004 Urban Sustainability Study Group to Sweden and Denmark

In March 2004, a group of architects, engineers, developers and others from Seattle, Washington and Portland, Oregon went to Sweden

and Denmark to look at advanced urban sustainability projects.

During this trip, they relied on public transportation exclusively, using buses, bicycles, trains and subways and proving that life without a car is not only possible but can even be enjoyable.

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