

MIT Media Lab's Concept Car with General Motors

January 3, 2006

The City Car is a stackable electric two-passenger city vehicle. The one-way sharable user model is designed to be used in dense urban areas. Vehicle Stacks will be placed throughout the city to create an urban transportation network that takes advantage of existing infrastructure such as subway and bus lines. By placing stacks in urban spaces and key points of convergence, the vehicle allows the citizens the flexibility to combine mass transit effectively with individualized mobility. The stack receives incoming vehicles and electrically charges them. Similar to luggage carts at the airport, users simply take the first fully charged vehicle at the front of the stack. The City car is NOT a replacement for personal vehicles, taxis, buses, or trucks; it is a NEW vehicle type that promotes a socially responsible and more effective means of urban mobility.

Technology:

The City car utilizes fully integrated in-wheel electric motors and suspension systems called, "Wheel Robots." The wheel robots eliminate the need traditional drive train configurations like engine blocks, gear boxes, and differentials because they are self-contained, digitally controlled, and reconfigurable. Additionally, the wheel robot provides all wheel power and steering capable of 360 degrees of movement, thus allowing for Omni-directional movement. The vehicle can maneuver in tight urban spaces and park by sideways translation. This technology is patented-pending and under design development at the MIT Media Lab.

Team

The City Car is currently under conceptual development under the "MIT Media Lab's Concept Car Project with General Motors." The Smart Cities group, an interdisciplinary group of architects, engineers, urban planners, and scientists, led by Professor William J. Mitchell, works in collaboration with GM and other Media Lab sponsors to conceptualize, design, and develop this overall concept and accompanying technologies.

For more information about Smart Cities please look at:
<http://cities.media.mit.edu/>

(For additional press links, look under information, press.)

For more information about the MIT Media Laboratory please look at:
<http://www.media.mit.edu/>

Contact:

Ryan Chin, PhD Candidate
MIT Media Lab, Smart Cities Group
rchin@media.mit.edu