Smart City Cars in the 21st Century

MIT Concept Car with GM and Frank O. Gehry
An Exhibition of Work-in-Progress by the Smart Cities Group at the MIT Media Laboratory

June 28, 2004 — October 15, 2004
Wednesday, September 8
Reception
Wolk Gallery, 5:30
Lecture “Concept Car: A Work in Progress”
William J. Mitchell and Ryan Chin
Bush Room, 7:00

Wolk Gallery
MIT School of Architecture and Planning
Building 7, Room 338
Cambridge, Massachusetts
617 253-2825

Monday through Friday 9:00–5:00
Admission Free

http://cities.media.mit.edu
The automobile and the 20th-century city co-evolved, each adapting itself to the other. The outcome of this process has been unprecedented personal mobility, but its cost has been high—measured in terms of noise, pollution, traffic jams, excessive fossil fuel consumption, road injuries and deaths, urban sprawl, and land-use patterns that do not support social interaction. Reducing personal mobility has not turned out to be an acceptable way of cutting this cost, and incremental improvements in automobile efficiency and safety have not proven to be sufficient. A more promising strategy is to change the fundamental relationship of the car and the city—to provide the 21st-century city’s inhabitants with better opportunities to practice good mobile citizenship. Good mobile citizens continually make decisions that minimize risks of injury to themselves and others, minimize unnecessary consumption of resources, and minimize waste and pollution. They act not only in their own self-interest, but also for the common good, and their public presence contributes to a sense of vibrant community.

To encourage and assist such intelligently ethical behavior, mobile citizens might be provided with automobiles that are not just dumb transportation devices, but intelligent inhabitants of their cities—wheeled robots that perceive, learn, remember, reason, and provide sophisticated, context-aware assistance and advice. Such smart city cars could combine networked, embedded intelligence with drive-by-wire driver interfaces, new propulsion systems, intelligent outer skins, and new vehicle architectures. In collaboration with Frank Gehry and General Motors, the Smart Cities group at the MIT Media Laboratory is exploring designs for smart city cars based upon these principles. The goal is to produce a working concept car. This exhibit presents exploratory sketches and models from the work in progress.