

e-mobility applications for sustainable and livable cities

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Introduction



Throughout history cities have been the generators of human culture and economic wealth ...

... and their importance is growing.

To be sustainable and livable
cities need to become ...
... more efficient and attractive.



How do we make cities
more efficient and attractive?

Traditional strategies



- Big capital improvements
- Big bureaucracies
- Big political processes
- Centralized systems

... are failing.

Could ...



... small-scale, local, citizen-based efforts replace big centralized programs?

Yes ...



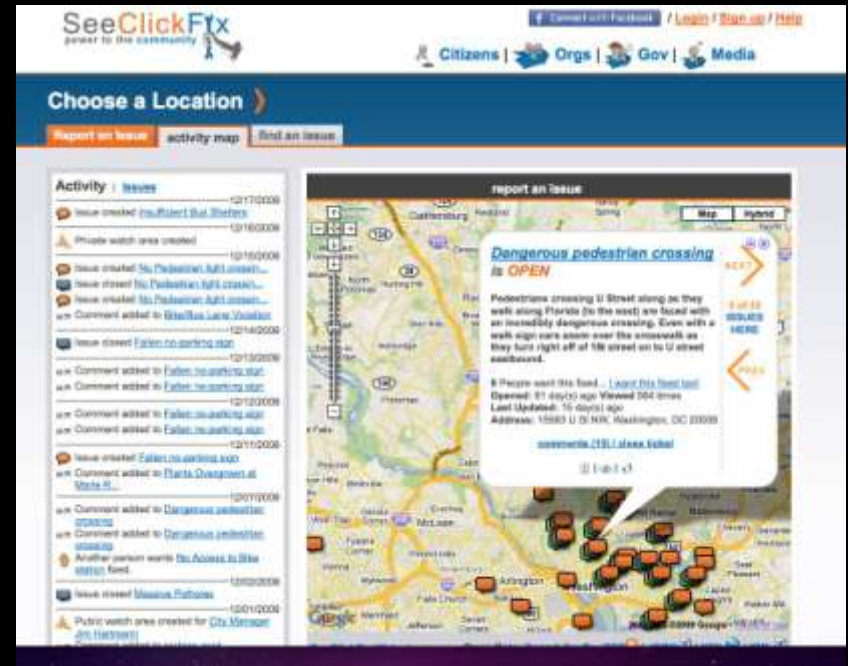
... new technologies provide citizens with the tools needed to help create more efficient and attractive cities.

Internet-based
applications
enable ...

everyone ...

to develop ideas, and ...

help get good ideas implemented.



What are internet-based applications?

Four categories of internet applications

- 1 - Informational (wikis, mash-ups, traditional websites),
- 2 - Planning and administration (seeclickfix),
- 3 - Social networking (Facebook),
- 4 - Analysis and evaluation (cloud computing, games).

The best integrate several of these into a single application.

Research Database



Game



Social Networking



Interactive Plan

Bus Meister: an example

Bus Meister helps citizens identify and implement ideas for improving public transport:

- **Game** - players learn how PT priority can improve service on their public transport routes.
- **Crowd sourced research wiki** - documents best practices in PT priority.
- **Social networking tools** - help players generate political support for implementing PT priority improvements.

Bus Meister game:



- Players enter information (routes, stops, etc.) about their PT route into the game;
- Google maps/ GPS-enabled device interfaces facilitate data entry;
- Players test PT priority improvements by dragging “widgets” onto the route maps;
- Game educates players, increases interest and helps identify best solutions.

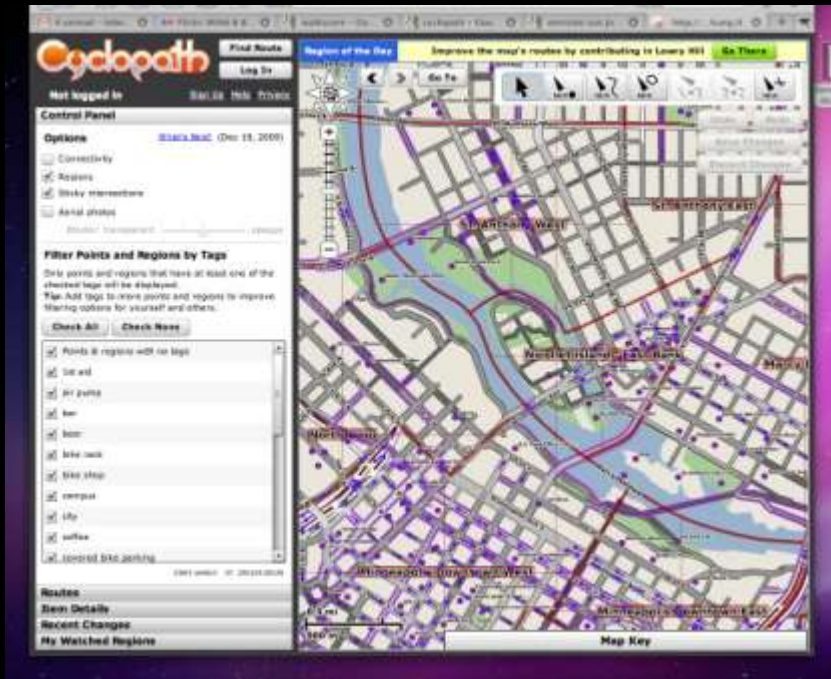
Why a game?

Games provide the main components of happiness:

1. *Satisfying work*
2. *The experience of being good at something*
3. *Time spent with people we like*
4. *The chance to be a part of something bigger.*

Computer games can help solve real problems!

*Source: Jane McGonigal, *Avant Games*; <http://www.avantgame.com/>*



In other words, Bus Meister **educates and empowers** citizens to improve the efficiency and attractiveness of urban public transport.

The basic approach:

Creating an integrated set of internet applications to educate and empower citizens ...

... can help solve many urban problems.

Possible applications (from your list):

- Improve public transport
- Improve parking space management
- Use traffic management to reduce environmental impacts
- Increase traffic safety
- Support zero emission vehicles
- Encourage integrated transport planning solutions (e.g. pollution control)
- City Logistics: optimize freight delivery to improve efficiency, energy use and environment.
- Urban planning: design cities to reduce transportation impacts.
- Create smart grids to ensure energy availability, reduce pollution, etc.
- Use communication tools to improve public transport, traffic management, etc.

In summary

- We need to make our cities more efficient and attractive to create a more sustainable and equitable future for all.
- Traditional solutions focusing on big projects and centralized bureaucracy are failing to achieve these goals.
- Integrated internet applications can educate and empower citizens to develop and help implement new solutions for improving the efficiency and attractiveness of cities.

Questions?

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