Apps for Public Involvement: *Introduction and Recommendations*

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crowdsourced-transport.com
*Civic Technology for Sustainable Transport*
Apps for public involvement

• Crowdsourcing is public involvement “2.0”

• 5 types of crowdsourcing:
  • Reporting
  • Collect and analyze data
  • Collaborate
  • Act
  • Intend

• Recommendations

• And, one final thought.
What is Crowdsourcing?

Crowdsourcing ...

- *Uses communications and IT* ...
- *to outsource activities and functions* ...
- *once performed by institutions* ...
- *to a large, undefined network of people.*
Report
Generic Reporting App – SeeClickFix
Had a bad train journey?

Report your problem with a:

STOP or STATION  JOURNEY or ROUTE

and we will help you get it fixed

Follow us on Facebook  Follow us on Twitter

FixMyTransport Launches!

Welcome to FixMyTransport, a site specially built for public transport users in Britain who want to make public transport better for us all. We've worked hard to make the site work well, but we're sure there are plenty of things we won't have got quite right - so please do send us feedback if there's anything that's not right, or anything you'd like to see added or improved.

Customised Reporting App – FixMyTransport

feeling sunny you could even leave a compliment about a route or station that you think is particularly

Browse Site

View recent issues
View routes by region
Map of issues
Analyse
Collecting & Analysing data is *easy*

- Open data;
- Transport application data (tracking);
- Resident-collected data (cheap sensors).
Open transport data – opentrtraffic.io
Open Source Bike Tracking App – Cycle Tracks (SF)
Report potholes automatically using smart phone accelerometer.

Where is Street Bump being used?

17 bumps reported in Boston, Massachusetts about 15 hours ago

Sensor-based Reporting – Street Bump (Boston)
Swiftly has developed a more accurate real-time transit arrival prediction algorithm, called Transitime, to provide you with more accurate arrival and departure times. These predictions are accurate up to 20% more often than most current city-wide systems and bus stop signs.

**Meet Transitime**

**Prediction Accuracy**

- **Transitime**
- **Official SF Data (Nextbus)**

**Swift app and “Transitime” analysis tool**

**More accurate than transit agency data?**
Using GPS tracking (& games) to crowdsource a map

Mexico City private mini-buses
What is WayCount?

WayCount is a hardware and web platform for crowdsourcing automobile and bicycle traffic count data.

WayCount was created with the belief that when we collectively gather and share traffic count data, together we can create a leap in understanding the movement patterns of automobiles and bicycles worldwide. As a result, we can positively influence transportation design decisions and create better cities.

The WayCount device works like other traffic counters, but has two key differences: lower cost and open data. At 1/10th the price of the least expensive comparable product, the WayCount device is affordable. The WayCount Data Uploader allows you to seamlessly upload and map your latest traffic count data, making it instantly available to anyone online.

What Does WayCount measure?

WayCount measures and records the following four parameters:

- The quantity of automobiles and bicycles
- The quantity of bicycles
- The quantity of trucks
- The quantity of buses

Why Count Traffic?

Data is Power. Collectively, the WayCount user community has the potential to build a rich repository of traffic count data for busy boulevards, bike paths, alleyways, neighborhood streets, and any other traffic path that deserves measurement. With a better understanding of automobile and bicycle ridership patterns, we can inform the design of better cities and towns.

Your own traffic counter.
Cost: 200 Euros.

Resident data collection – WayCount traffic counter
Your sensor data available on the Internet for anyone to analyse.

What is it?
A community-led air quality sensing network that gives people a way to participate in the conversation about air quality.

Sharing resident-collected data - Air Quality Egg
Collaborate
Collaboration is more efficient

- **Education** – problems are complex;
- **Process** – meetings are difficult;
- **Engagement** – more is better.
Education: Games – Bus Meister
Welcome to Streetmix.

Design, remix, and share your neighborhood street. Add trees or bike paths, widen sidewalks or traffic lanes, learn how your decisions can impact your community.

Start by moving some segments around with your mouse.

Education: Visualisation – streetmix.net
1. Talk things through
Start a discussion on any topic, and bring in the right people. Share diverse perspectives and develop ideas together.

2. Build agreement
Anyone can propose a course of action. People can agree, abstain, disagree, or block – so you can see how everyone feels, and why.

3. Decide together
Develop the proposal together so that it works for everyone. Every decision has a clear deadline, so you always get a clear outcome.

Collaboration tools and app – Loomio
Engagement: Games – Ring Ride Vienna
**Actions are organised**

- **DYI** ... do it yourself → bike lanes, pedestrian signs;
- **Change** ... travel patterns → Chromaroma, Walk-a-Stop;
- **Fund** ... local projects → Spacehive, Kickstarter;
- **Provide** ... transport service → Uber, BlahBlahCar, Bridj;
- **Create** ... open source software and apps → travel
- **Share** ... food with neighbours → Casserole;
IT'S NOT TOO FAR.

Plan, design and install quick, light and affordable street signs for people.

DYI – Do it yourself – Signs (Walk Your City)
STEAL THIS IDEA: A $600 PROTECTED BIKE LANE DEMO AT AN OPEN-STREETS EVENT

Chrissy Lee of the Minneapolis Bicycle Coalition sets up a "pop up" bike lane demo last summer.

DYI – *Do it yourself* – Bike lane (Minneapolis)
Activity monitor
+ Real time transport data
+ Social networking
= Walk-a-Stop

Public transport agency sends push notifications to help manage demand (e.g., crowded station).

Why not walk a stop?

Users receive map and reward (points, coffee on route).

Change Behaviour – Walk-a-Stop (Prototype)
the love shack bus stop
by Dana Jo

Update #22 ⌛️ Mar 2 2012
[love shack bus stop is finished and installed!]

2 comments  ❤️ Like

88 backers
$3,015 pledged of $2,500 goal
0 seconds to go

(hey there everyone, i have some pictures up on my website that you can see by clicking here. also, if you did not get to pick up your backer rewards at the opening, i will be mailing them to you on monday as well as the prints for my $75-100 folks. again, thank you all so very much for helping make the love shack bus stop a reality!)
Provide transport service – Rideshare (Bla Bla Car)
Multimodal trip planning & analysis

OpenTripPlanner provides a range of passenger information and transportation network analysis features using our infrastructure for finding itineraries combining transit, pedestrian, bike, and car segments.

OpenTripPlanner  OTP Analyst

Create – Open source software (Open Trip Planner)
Share: Meals – Casserole (UK)

- *Cooking the meal is as important as receiving it.*
- *Social contact is as important as nutrition.*
Intend
Demands are *served*

*Using real-time crowdsourced travel intentions to operate transport services:*

- **Taxi** – Uber;
- **Transit (Route)** – Bridj;
- **Public Transport (Network)** – Banedanmark.
Tap the app, get a ride

Uber is the smartest way to get around. One tap and a car comes directly to you. Your driver knows exactly where to go. And payment is completely cashless.

MORE REASONS TO RIDE
Bridj is your everyday transportation system that adapts in real time to where you live work and play.

Provide “Intentions” – Public Transport (Bridj)
I want to go from A to C.

How do we operate a public transport system to serve this intent?

Service Intentions

Convert Intentions → Operations – Banedanmark
Recommendations
How Boston’s Changing the Way People Experience Transit
And why picking one app is good for commuters everywhere

Thank you, Boston.

Don’t reinvent the wheel – Transit App and Boston
Boston will use Waze data to measure ‘block the box’ ticketing push

Give data to get data – Waze and Boston
Open beats closed – opentraffic.io
What happens when you don’t provide data in standard formats?
And ...
Crowdsourcing Applications

Can help address today’s most pressing problems.
Automation, robots, the end of work?

Passion replaces salaries in an age of guaranteed incomes.

Crowdsourcing will guide people towards activities they are passionate about.
Alienation, elitism, inequality?

Building shared visions creates a foundation for community.

Crowdsourcing will help create community.
Andrew Nash develops engaging public participation applications and games designed to improve city liveability and transport.

- Crowdsourced-Transport.com
- Ringstrasse150.com
- AndyNash.com