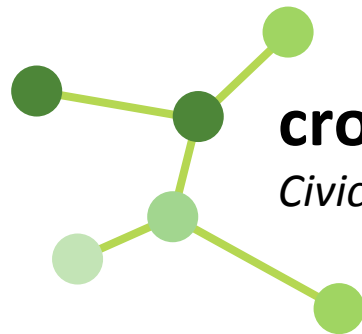


Transport without Planners

Andrew Nash
andy@andynash.com



crowdsourced-transport.com

Civic Technology for Sustainable Transport

*Who would
have thought?*

Brexit
US Election
Populism

...

Visions

Visions

- **How ... do we build visions?**
- **What ... could a vision look like?**
- **Why ... is vision important?**
- **When ... do we begin?**

How? ... Crowdsourcing

Crowdsourcing ...

- *Uses communications and IT ...*
- *to outsource activities and functions ...*
- *once performed by institutions ...*
- *to a large, undefined network of people.*

... it is (already) completely changing how we plan and operate transport systems.

Transport Crowdsourcing

4 ways to crowdsource transport

- *Report*
- *Analyse*
- *Collaborate*
- *Act!*

Report

VBZ Züri-Linie

Home
Andrew

VBZ Züri-Linie
7,041 likes · 293 talking about this

Liked

Message

Product/Service
Die Verkehrsbetriebe Zürich mit ihren Fahrzeugen gehören zu Zürich wie die Limmat und der See. Umsteigen lohnt sich. www.vbz.ch

About – Suggest an Edit

Photos

7,041

Fahrplan

VBZ Apéro Game

Events

Videos

Welcome

Mainstream Social Media: Facebook – Zurich

Report an Issue

Follow this Place

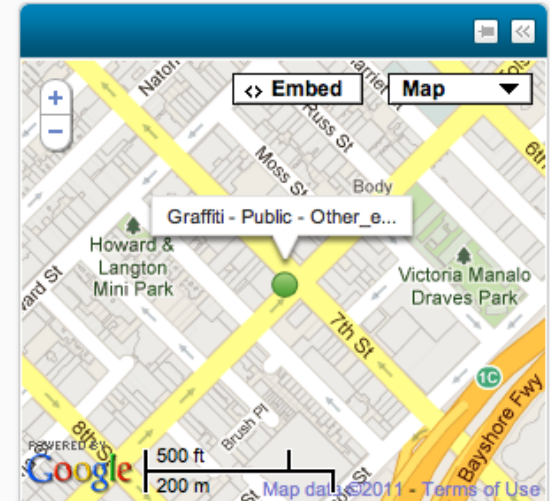
Sort by: Hotness ▾

2 **Graffiti - Public - Other_enter_additional_details_below** **Acknowledged**
 290-298 7th St San Francisco, CA 94103, USA - South Of Market
 reported about 8 hours ago
 SF311 about 8 hours ago
 Your request to SF311 has been accepted. Your service request ID is 992366
 Join the conversation!

2 **Garbage and/or overgrowth near building** **Acknowledged**
 142 Brighton Ave San Francisco, CA 94112, USA - Ingleside
 reported about 9 hours ago
 SF311 about 9 hours ago
 Your request to SF311 has been accepted. Your service request ID is 992335
 Join the conversation!

2 **Graffiti - Public - Other_enter_additional_details_below** **Acknowledged**
 Ocean Ave & Aptos Ave San Francisco, CA 94127, USA - Ingleside
 reported about 9 hours ago
 SF311 about 9 hours ago
 Your request to SF311 has been accepted. Your service request ID is 992333
 Join the conversation!

2 **Illegal_Dumping** **Acknowledged**
 1927 Alemany Blvd San Francisco, CA 94112, USA - Outer Mission
 reported about 15 hours ago



Top Users	Who's Watching
Sinclair	
Raph	
Neighboreyes	
hubbert	
sodapop	
More Top Users Nearby >	

Generic Reporting App – SeeClickFix



FixMyTransport

Euston, we have a problem

BETA

[ABOUT](#) [FEEDBACK](#)

[mysociety](#)

[DONATE](#)

[OUR SITES](#)

[Sign in or sign up](#)

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

How does it work?

What FixMyTransport does

-  Reports problems
-  Finds people responsible
-  Grows support
-  Tracks progress
-  Gets things done

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.



Browse Site

[View recent issues](#)

[View routes by region](#)

[Map of issues](#)

Customised Reporting App – FixMyTransport

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



[Info](#) [Kontakt](#) [Impressum](#) [Mach mit!](#) [login](#)

meine Radspur

The image shows a map of Vienna with various cycling routes highlighted in green and blue. A login overlay is centered on the map. The overlay has a title bar 'Login' with a close button. Below the title bar is the logo 'meine Radspur'. Underneath is a 'Client ID' field. A warning message in German states: 'Hinweis: Ein Login ist erst nach erstmaligem Upload eines Tracks möglich.' Below this is a paragraph of text explaining data privacy: 'Das Projektteam nimmt den Schutz deiner personenbezogenen Daten sehr ernst. Wir verarbeiten personenbezogene Daten, die beim Besuch unserer Webseiten erhoben werden, unter Beachtung der geltenden datenschutzrechtlichen Bestimmungen. Deine Daten werden von uns weder veröffentlicht, noch unberechtigt an Dritte weitergegeben. [nähere Informationen](#)'. At the bottom of the overlay is an 'Anmelden' button. The map background shows streets like Währinger Gürtel, Leopoldsdorfer Gürtel, and various side streets. A scale bar in the bottom left indicates 500m and 2000ft. A 'powered by' logo is in the bottom left corner. A 'radkarte.at' logo is in the bottom right corner.

500 m
2000 ft
powered by

radkarte.at

Map-based Reporting – Meine Radspur, Vienna



What's Street Bump?

Street Bump is a crowd-sourcing project that helps residents improve their neighborhood streets. Volunteers use the Street Bump mobile app to collect road condition data while they drive. The data provides governments with real-time information to fix problems and plan long term investments.

Report potholes automatically using smart phone accelerometer.

Where is Street Bump being used?

1,837 trips recorded, 102,506 bumps detected

17 bumps reported in Boston, Massachusetts about 15 hours ago



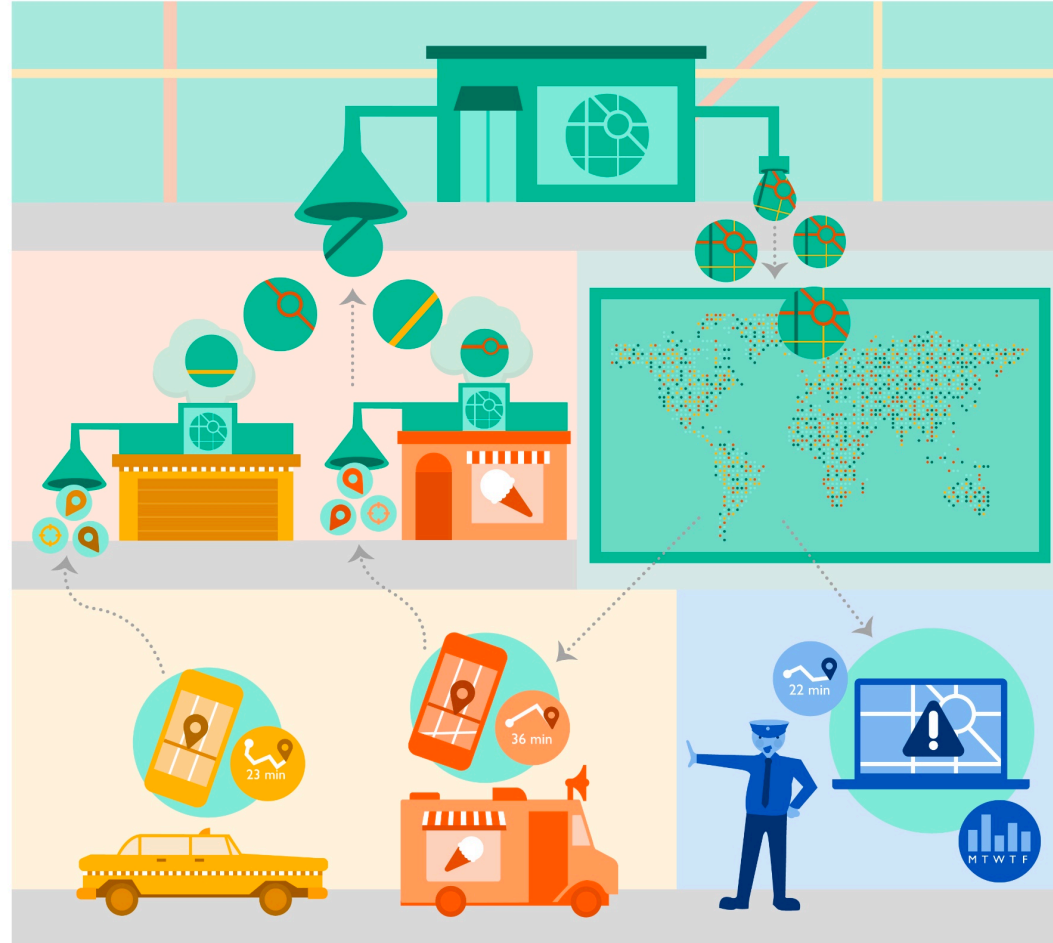
Sensor-based Reporting – Street Bump (Boston)

Analyse

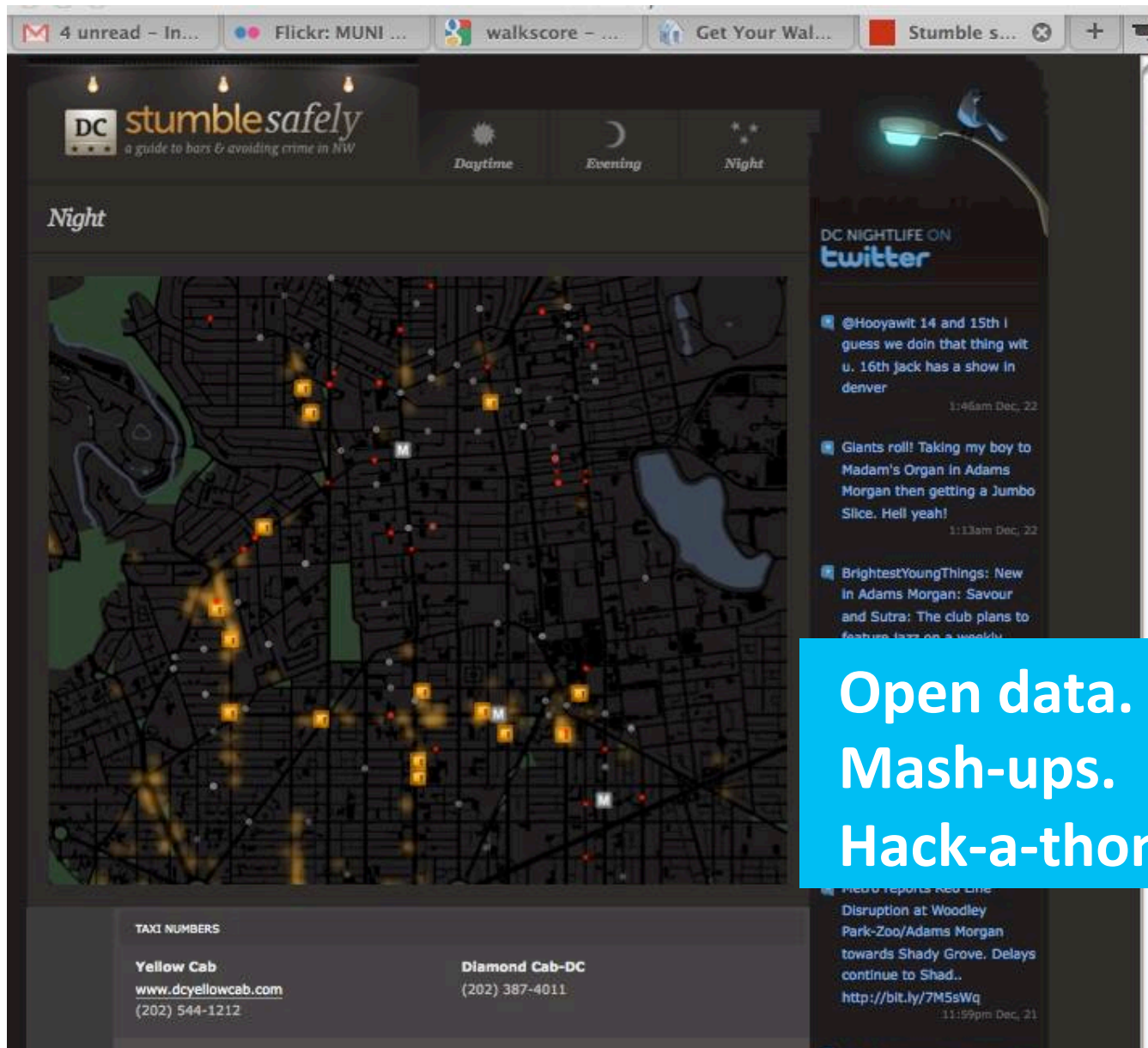
Collecting & Analysing data is *easy*

- Open data;
- Transport application data (tracking);
- Resident-collected data (cheap sensors).

*... vastly improved computing enables **anyone** to analyse scenarios, evaluate service, and develop their own transport plans.*

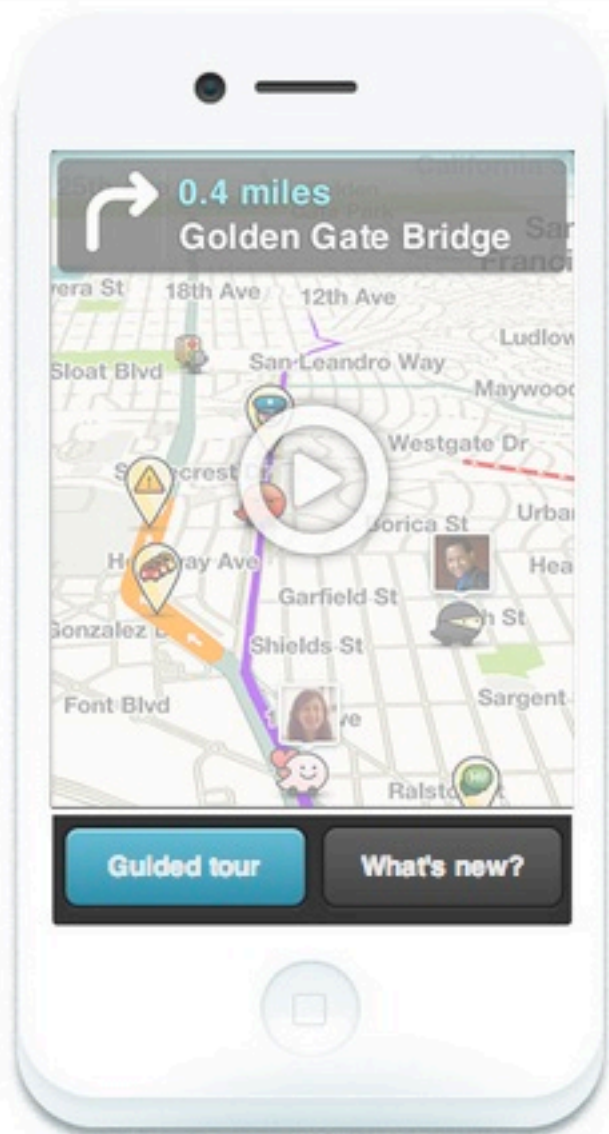


Open transport data – openttraffic.io



Open data.
Mash-ups.
Hack-a-thons.

Use Open Data to create apps & visualisations
Stumble Safely, Washington D.C.



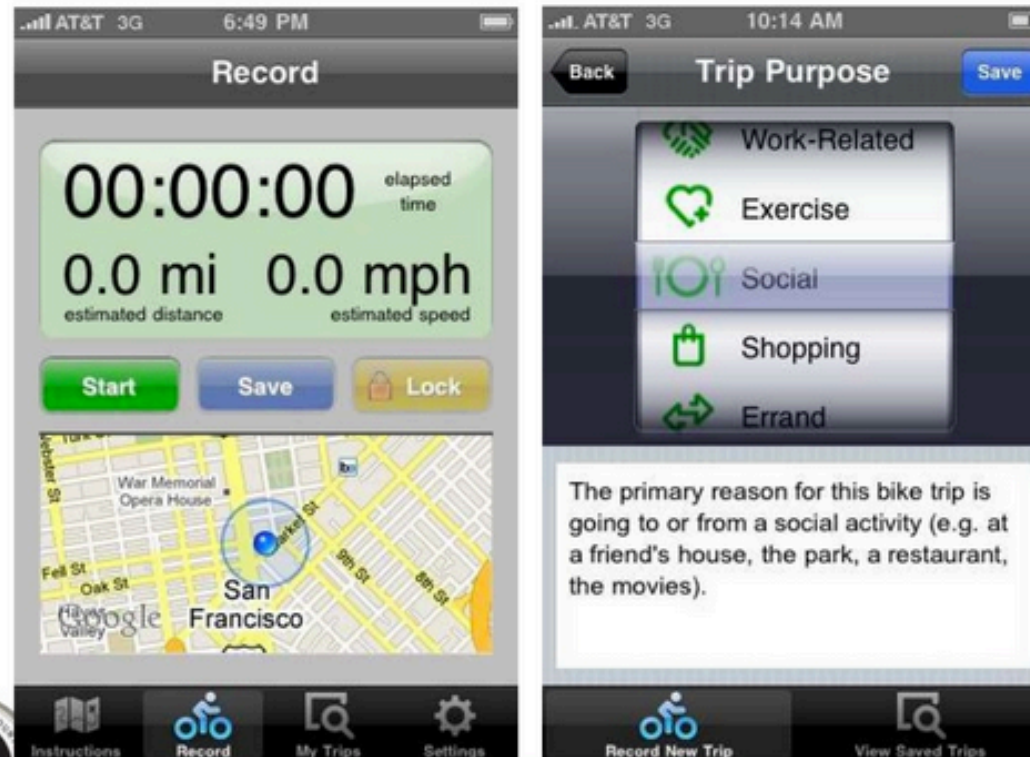
Get the best route,
every day, with real-time
help from other drivers.



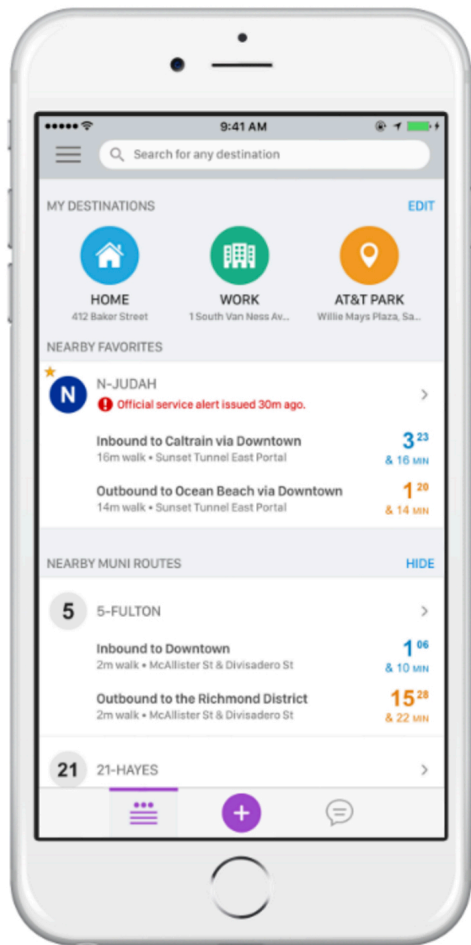
Waze is the world's fastest
based traffic and navigat
in your area who share r
saving everyone time an
commute.

Tracking data.
Incident reporting.
Guidance.

Enter New Trip



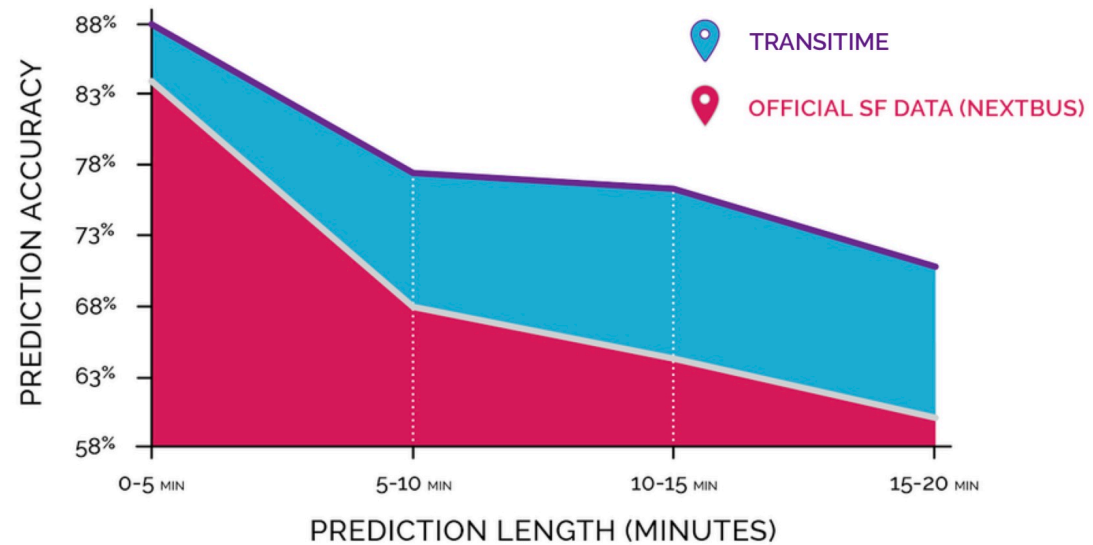
Open Source Bike Tracking App – Cycle Tracks (SF)



Meet Transitime

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.

PREDICTION ACCURACY

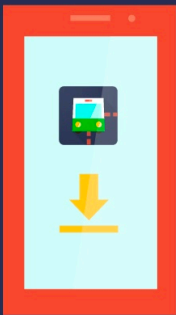


Swift app and “Transitime” analysis tool

More accurate than transit agency data?

¿Cómo participo?

1



Descarga la app

Disponible para dispositivos Android 4.1 y superior.

2



Mapea

Usa la app para registrar tus recorridos en autobús, microbús y vagoneta en equipo o de forma individual.

3



Gana premios

Los mapeadores más activos ganarán aparatos electrónicos y hasta 30,000 pesos en efectivo.

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 1/5th 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



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, alley ways, 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.

WayCount data can be used to inform necessary improvements to the design, maintenance, and policy of transportation systems.

This information can be used in combination with, or separately from, conventional measurements like Annual Average Daily Traffic (AADT). AADT is a standardized indicator for measuring the rate of automobiles traveling down a street and is a value used by transportation engineers to help guide changes to

Your own traffic counter.
Cost: 200 Euros.

Resident data collection – WayCount traffic counter

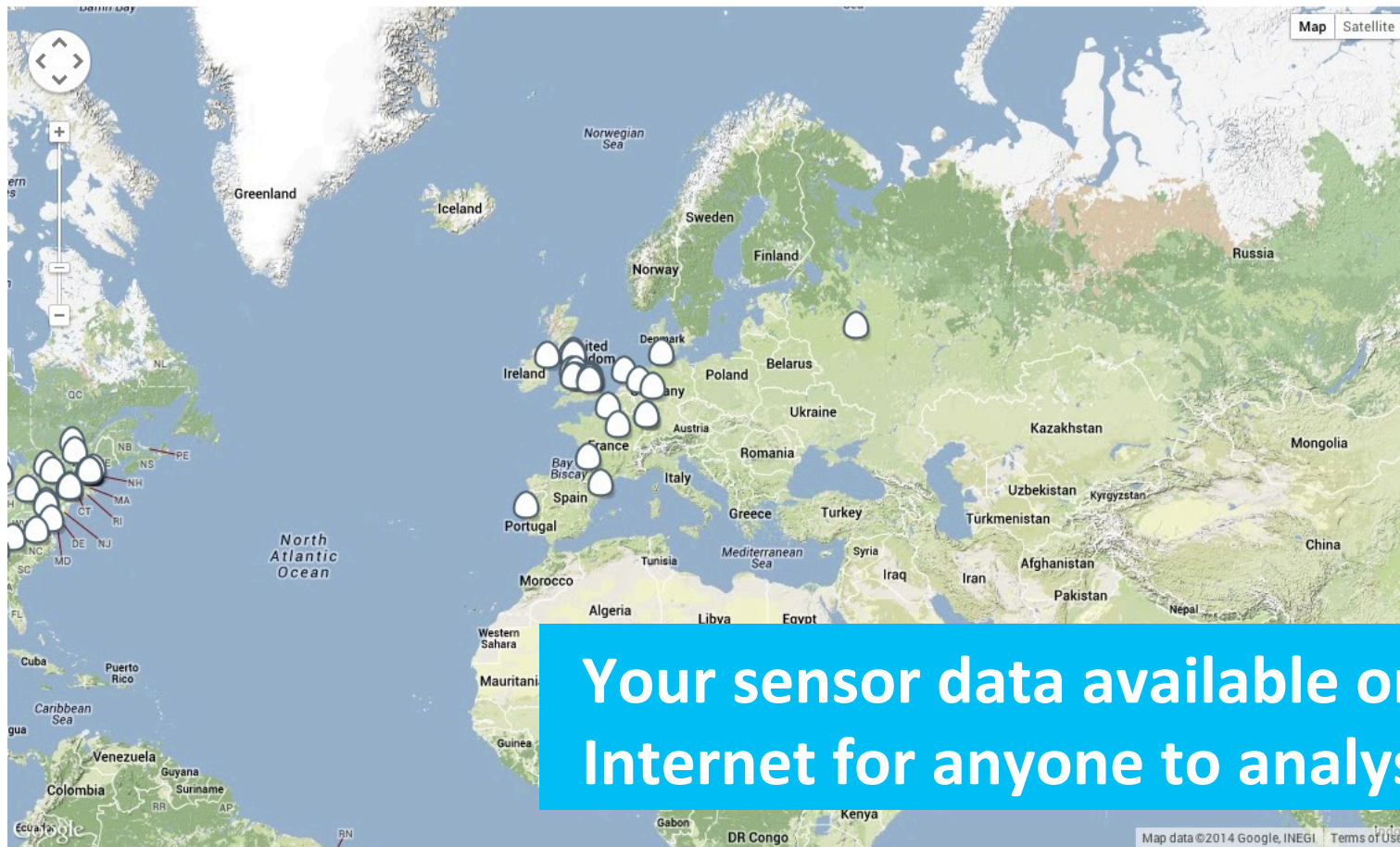


Air Quality Egg

community-led sensing network

Serial Number

ADD MY EGG



What is it?

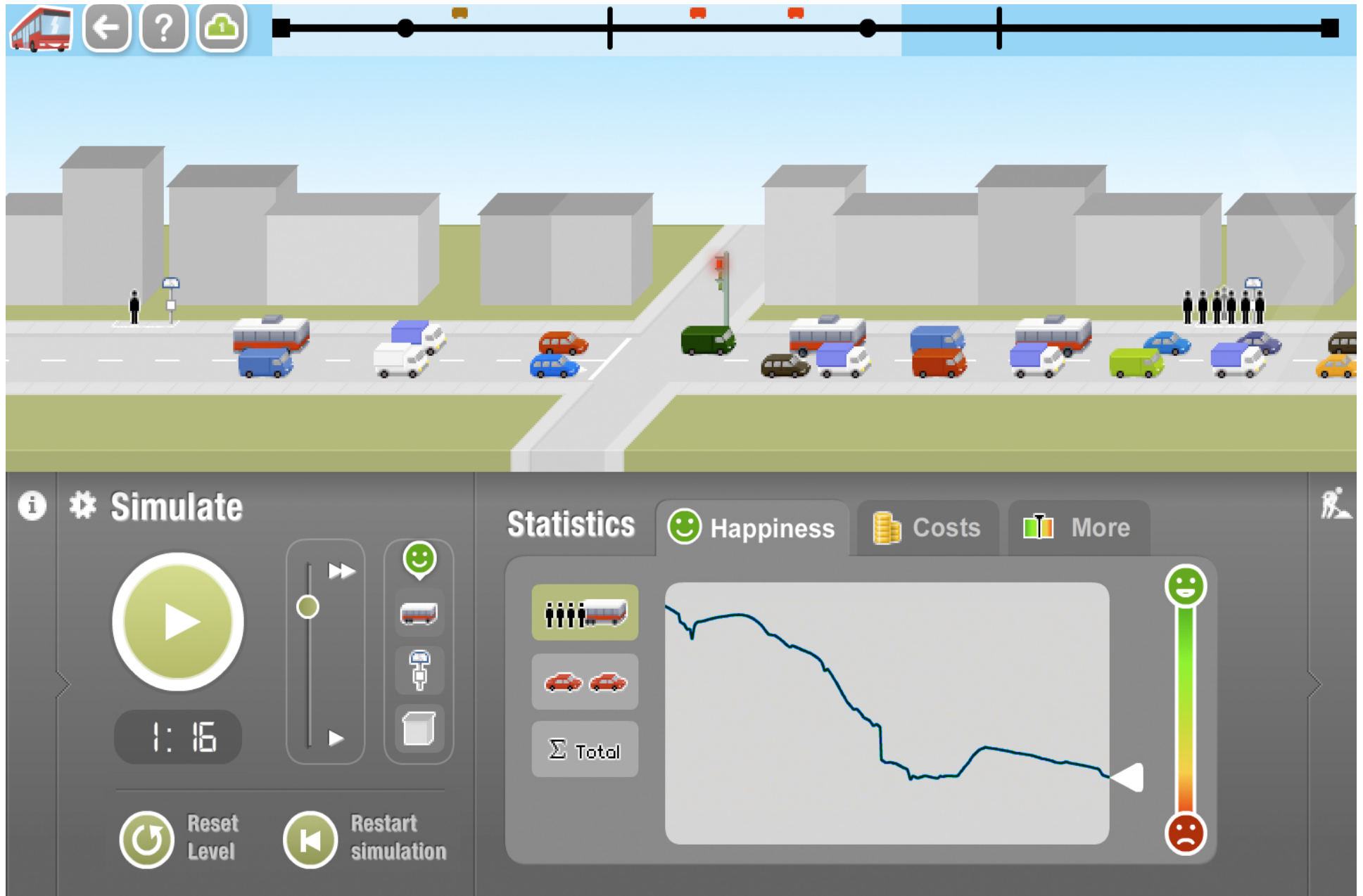
A community-led air quality sensing network that gives people a way to participate in the conversation about air quality.

Sharing resident-collected data - Air Quality Egg

Collaborate

Apps make Collaboration more *efficient*

- Education – problems are complex;
- Process – meetings are difficult;
- Engagement – more is better.



Education: Games – Bus Meister




Education: Visualisation – streetmix.net




Education: Virtual Reality

Participatory Chinatown Boston

 Forum Game Best Practices Login with Facebook

Sustainable Urban Transport

Helping you make transport in your city more sustainable.






GreenCityStreets Forum


The GreenCityStreets Forum provides a place for you to recommend sustainable transportation ideas for your community. You can support (Like) or comment on ideas already in the Forum or add your own ideas. Use the links to display all the ideas for a city, for a public transport line or from another user.

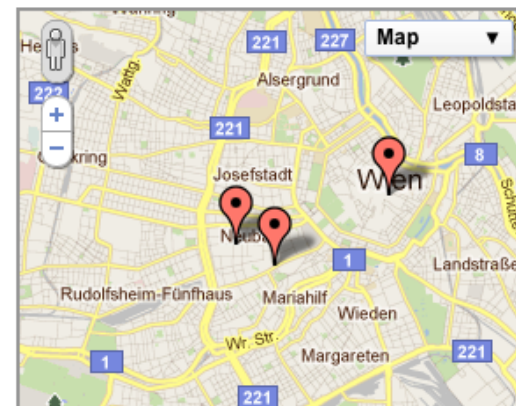
Beta Version - Everyone can read GreenCityStreets Forum posts but currently you need to login via Facebook to add posts, support or comment.

Latest Forum Posts

-  0

 Like
- Wien | 13A stuck in traffic** 13A
- in mariahilfstrasse 60, Wien
- by [Andrew Butler Nash](#) about 1 hour ago
-  0

 Like
- Wien | Tram 49 comes in bunches** 49
- in Westbahnstrasse, Wien
- by [Andrew Butler Nash](#) about 1 hour ago



Collaboration via Facebook – Green City Streets Forum


1

A growing region faces growing obstacles. Let's move forward together.


THE CHALLENGES AHEAD

We've reached a tipping point in the Greater Toronto and Hamilton Area.


We can no longer ignore the congestion that affects our economy, our quality of life and the air we breathe. The time to act is now.



Economic Costs



Social Costs



Environmental & Health Costs


What's the big solution?

Find out →

Environmental & Health Costs

Growing urban sprawl and harmful greenhouse gas emissions.

Rising reports of respiratory illnesses caused by air pollution.

 **METROLINX**
An agency of the Government of Ontario

Welcome to the Big Move. You can use this helpful tool to explore our vision of transportation for the next 25 years (and how to pay for it).

2

UNDERSTANDING THE PLAN

3

MAKING THE MOVE





4

PAYING THE FARE

5

SPREADING THE WORD

Share



Collaboration & Education – MetroQuest



1. Talk things through

Start a discussion on any topic, and bring in the right people. Share diverse perspectives and develop ideas together.



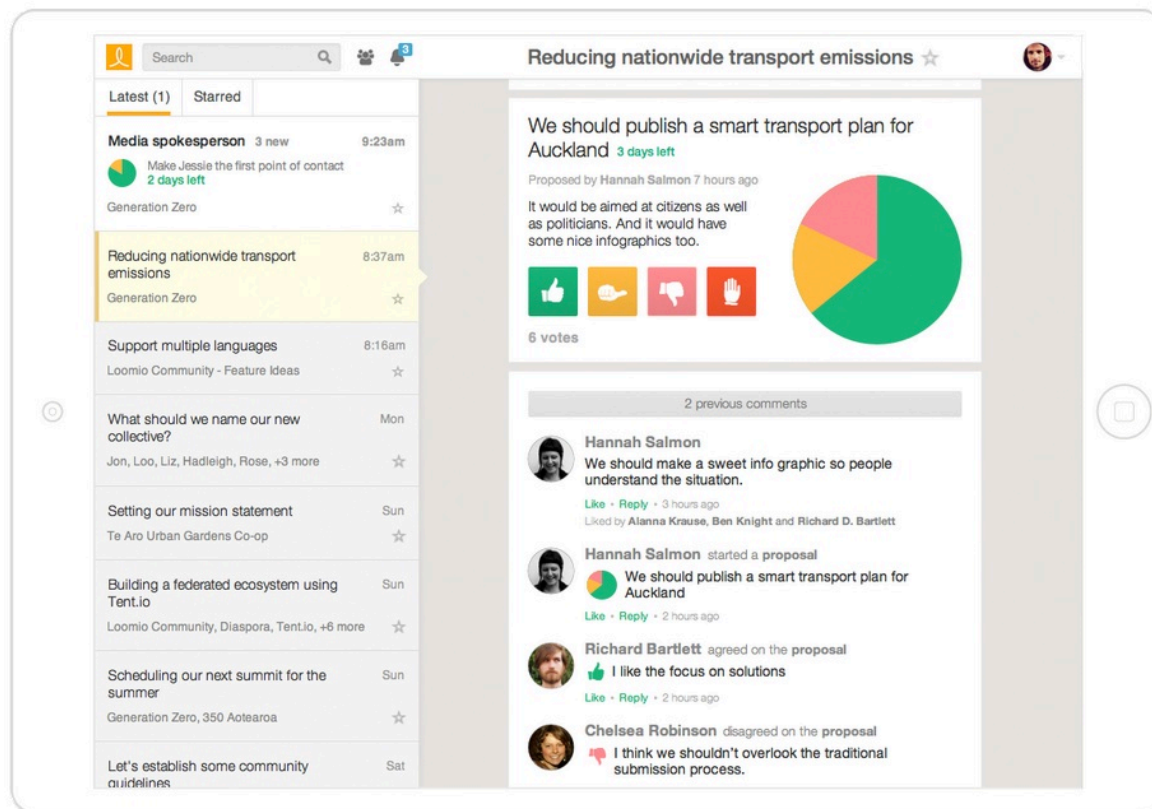
2. Build agreement

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

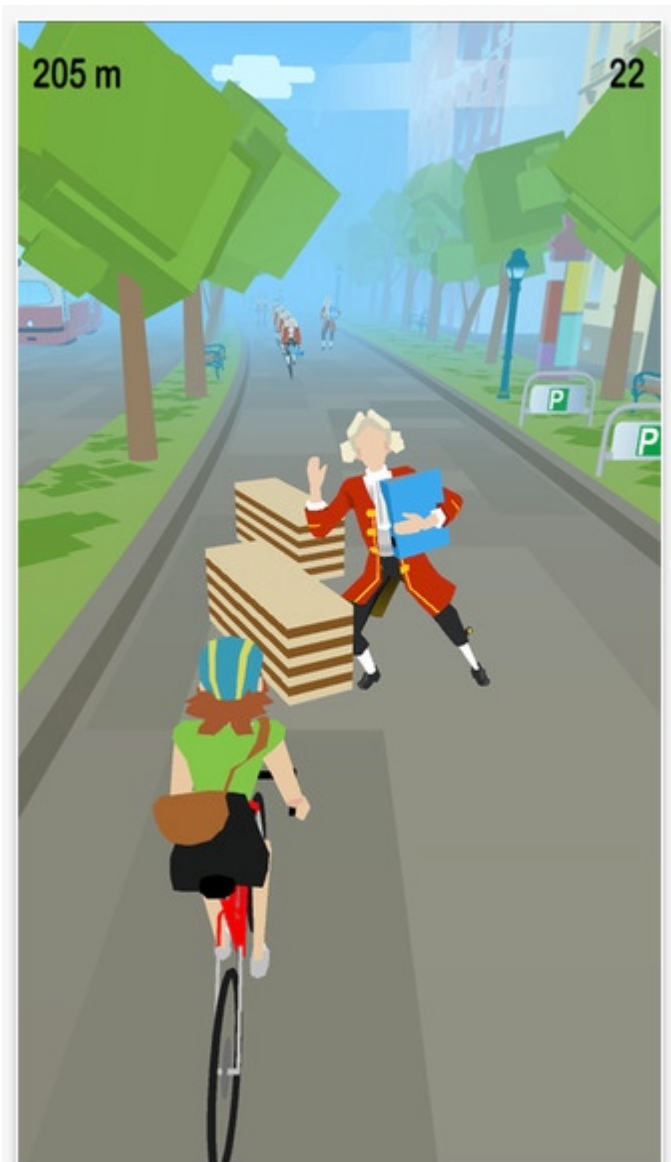


3. Decide together

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



Ringstrasse 150 - Ring Ride

Help make the Ringstrasse better

Organisationen

<p>RADLOBBY ÖSTERREICH</p> <p>Radlobby Wien</p> <p>In Wien kümmern sich die Radlobby-Vereine <u>ARGUS</u> (Arbeitsgem</p>	<p>RadKummerKasten</p> <p>Rad-Ärgernisse direkt an die Zuständigen der Stadt Wien senden? Das geht ganz</p>	<p>Rasen am Ring</p> <p>Die Plattform „Autofreie Stadt“ tritt am Internationalen Autofreien</p>
--	---	---

Engagement: Games – Ring Ride Vienna

Act

Apps lead to ACTION

- ***Re-use*** ... vacant urban land → 596 Acres;
- ***Share*** ... food with neighbours → Casserole;
- ***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?

596 ACRES

ver en Español

Get The News From The Acres

Your email address

Subscribe

GET INVOLVED

NEWS

RESOURCES

PRESS

DONATE

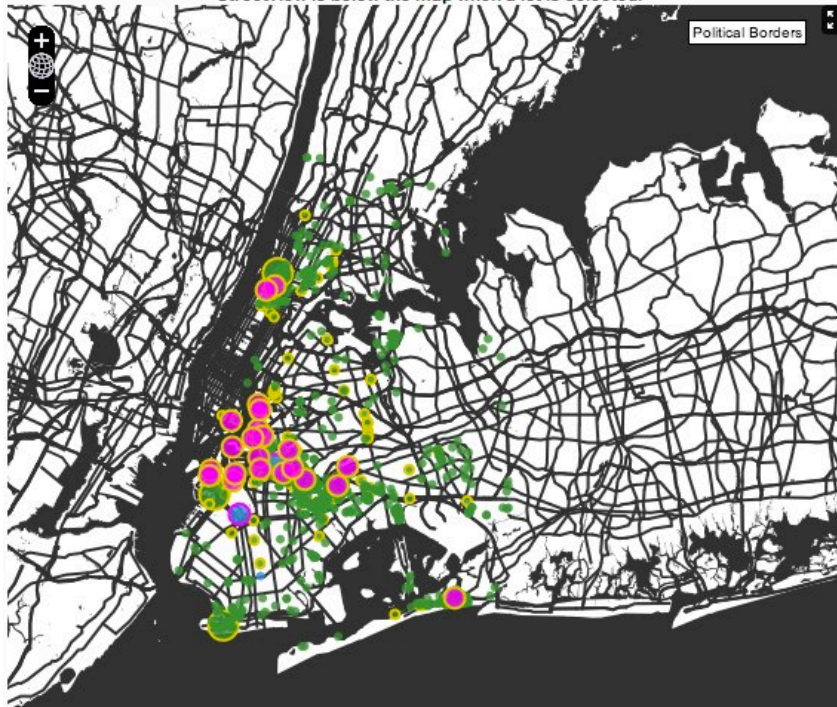
CONTACT

ABOUT

FREQUENTLY
ASKED QUESTIONS

Lot size: 0 to 3+ acres

Streetview is below the map when a lot is selected.



This map shows sites of potential community projects. We have taken several different sources of information about vacant publicly owned land, chosen the most accurate information from each and shared them here. This is our commons. We also add few private lots whose owners have volunteered their land for community use.

- ☒ public vacant lots
- ☒ public vacant sites being organized around (114)
- ☒ public vacant sites where groups have access (22)
- ☒ private vacant sites (1)
- ☒ private vacant sites being used by community (3)
- ☐ community gardens on public land
- ☐ gutterspaces

Acres' People



Upcoming Events

596 Acres at GreenThumb Grow Together in the Bronx
Saturday, March 29 from 8:30 a.m. to 4 p.m.

596 Acres' Citywide General Organizing Meeting
Saturday, April 5 from 1 p.m. to 8:30 p.m.

Book Binding with 596 Acres at Build It Green in Gowanus!
Saturday, April 5 from 1 p.m. to 3:30 p.m.

[view all upcoming events](#) | [view past events](#)

Recent news

News From the Acres - March 20, 2014
March 20, 2014 in [news from the acres](#)

Vacant Acres Dinner at the Sunview with Uncle Ruth
March 17, 2014 in [Other Cities](#)

News From the Acres - March 13, 2014
March 13, 2014 in [news from the acres](#)

Information exchange and organisation ... 596 Acres

Search for lots near an address:

Boroughs:

- ☒ Bronx
- ☒ Brooklyn
- ☒ Manhattan
- ☒ Queens

You are currently looking at:

1221 public vacant sites on **1375** lots on **432.592** acres ...how big is that?
114 public vacant sites being organized around on **214** lots on **54.025** acres ...how big is that?
22 public vacant sites where groups have access on **37** lots on **4.218** acres ...how big is that?
1 private vacant sites on **1** lots on **0.305** acres ...how big is that?
3 private vacant sites being used by community on **3** lots on **0.163** acres ...how big is that?
0 community gardens on public land on **0** lots on **0** acres ...how big is that?
0 gutterspaces on **0** acres ...how big is that?



Share: Meals – Casserole (UK)

- *Cooking the meal is as important as receiving it.*
- *Social contact is as important as nutrition.*

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)

IT'S NOT TOO FAR.

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

 Follow @WalkYourCity

 Like 2.2k



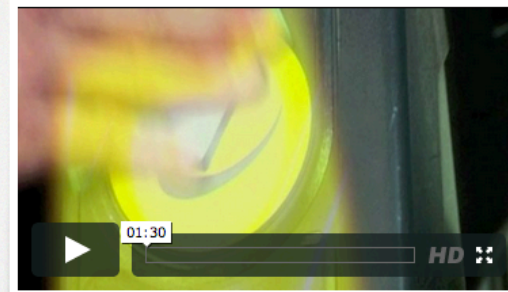
 Feedback & Support

DYI – *Do it yourself* – Signs (Walk Your City)

Chromaroma, adding colour to your journeys

A new game for London...

Sign Up Now or [find out more](#)



Use your Oyster card to play online

Chromaroma takes your travel data
and makes it into a game where every journey
counts in a competition for the city!

Play with friends or compete against them

Set records, earn
achievements, go on real missions.
Travel like you mean it!



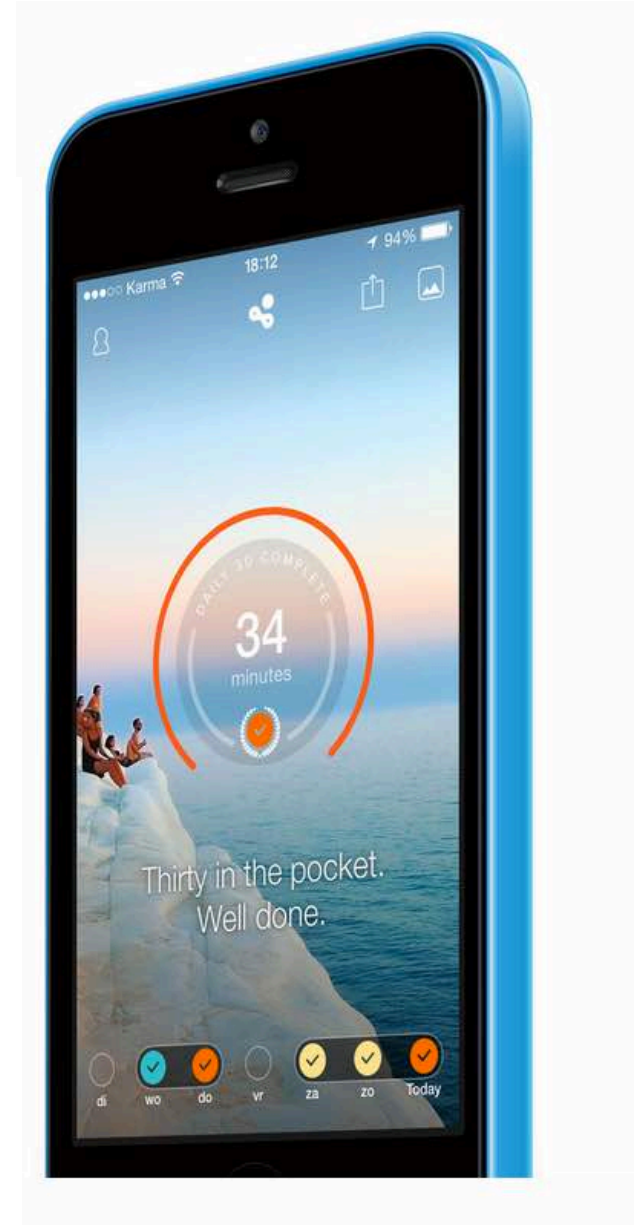
Change Behaviour – Chromaroma game (London)

$$\begin{aligned} &\text{Activity monitor} \\ &+ \\ &\text{Real time transport data} \\ &+ \\ &\text{Social networking} \\ &= \\ &\textbf{Walk-a-Stop} \end{aligned}$$

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

Home Updates 23 Backers 88 Comments 6

Athens, GA Public Art

Funded! This project was successfully funded on Jan 3, 2012.

Update #22

Mar 2 2012

[love shack bus stop is finished and installed!]

2 comments Like

{hey there everyone, i have some pictures up on my website that you 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!}



88

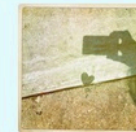
backers

\$3,015

pledged of \$2,500 goal

0

seconds to go



Project by

Dana Jo

Athens, GA

[Contact me](#)

First created · 2 backed

Dana Jo Cooley 1120 friends

[danajocooley.com](#)[See full bio](#)

Pledge \$5 or more

14 backers

a postcard art print of the love shack

Fund local projects – Bus Shelter (Kickstarter)

The logo for BlaBlaCar, featuring the words "Bla Bla Car" in a sans-serif font. "Bla" is green, "Bla" is blue, and "Car" is red. The logo is set against a white rounded rectangular background.

Bla Bla Car

Trusted ridesharing

Connecting people who need to travel with drivers who have empty seats

Choose the country for your rideshare

Confirm

Provide transport service – Rideshare (Bla Bla Car)



[HOME](#)

[ANNOUNCEMENTS](#)

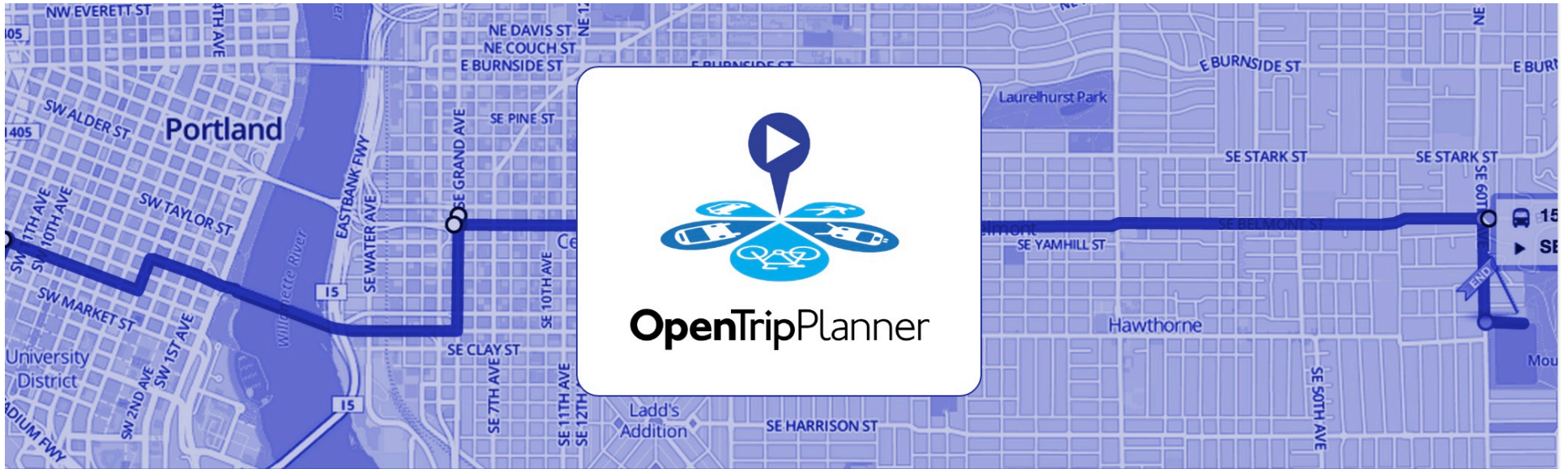
[SERVICE AREA](#)

[WE'RE HIRING](#)

CONNECTING THE CITY

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

Provide transport service – Public Transport (Bridj)



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

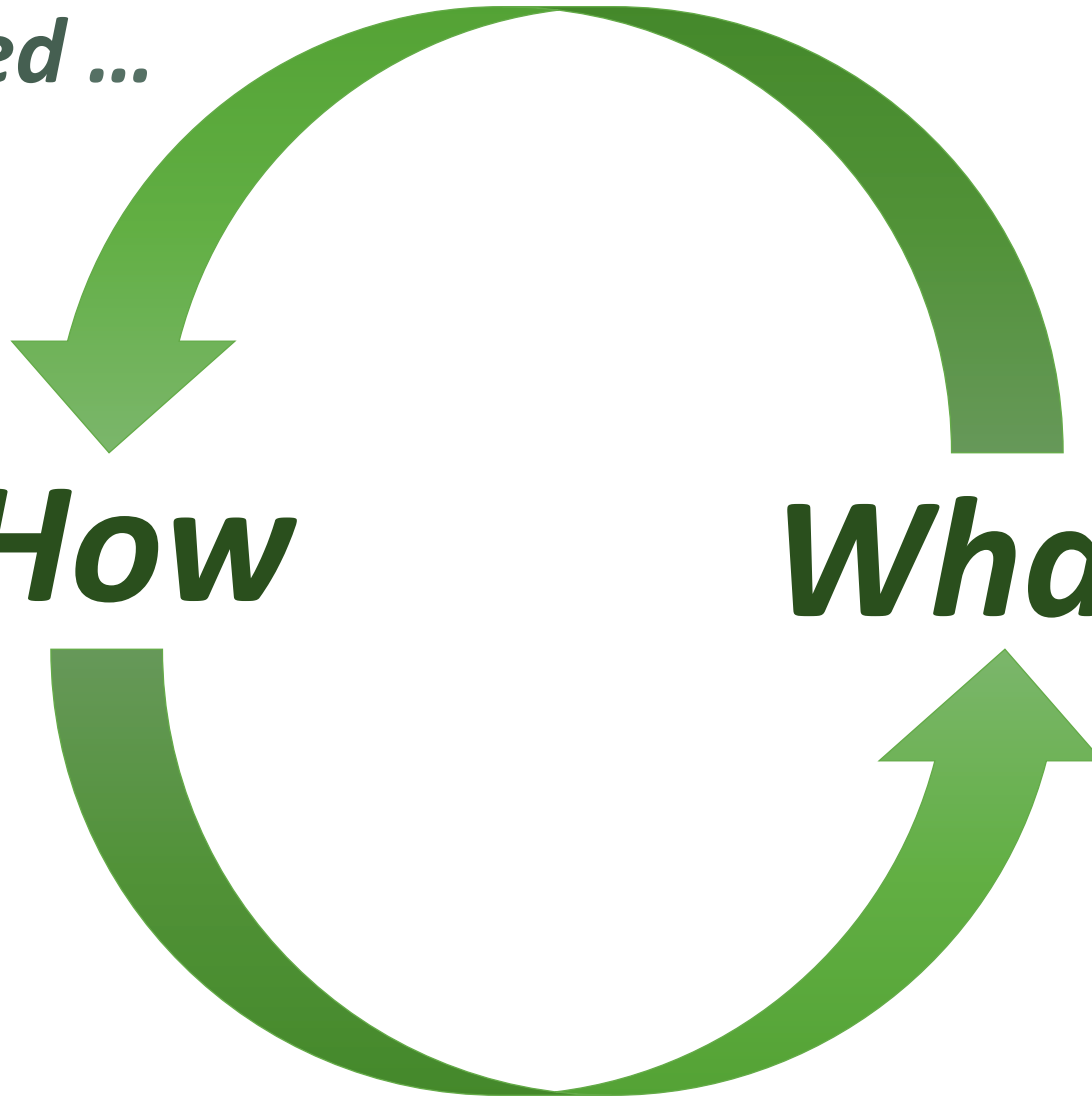
Create – Open source software (Open Trip Planner)

What

I cheated ...

How

What



Why

Crowdsourcing Applications

*Can help address
pressing problems.*

Automation, robots, the end of work?

Passion replaces salaries in an age of guaranteed incomes.

Crowdsourcing apps can help people find opportunities to ____.

Alienation, elitism, inequality?

*Building shared visions creates
a foundation for community.*

Use crowdsourcing apps to create community.

When

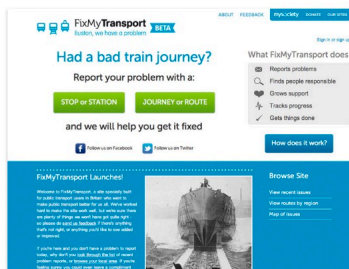
Now ...



crowdsourced-transport.com

Civic Technology for Sustainable Transport

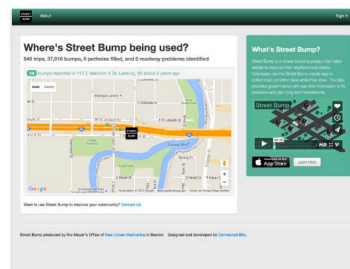
Four Types of Crowdsourcing in Transportation



Report

Report problems.

[read more](#)



Analyse

Collect and analyse data.

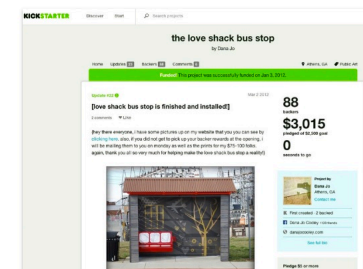
[read more](#)



Collaborate

Work together on projects.

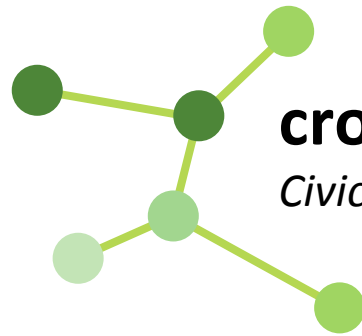
[read more](#)



Act

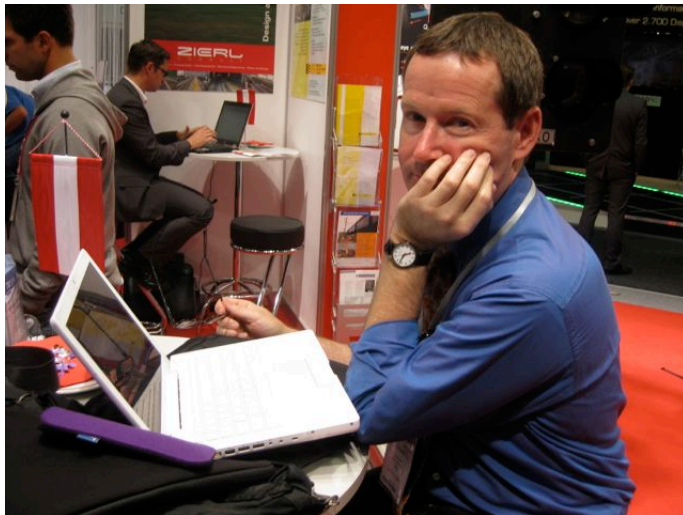
Support and provide transport.

[read more](#)



crowdsourced-transport.com

Civic Technology for Sustainable Transport



Andrew Nash develops engaging public participation applications and games designed to improve city live-ability and transport.

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