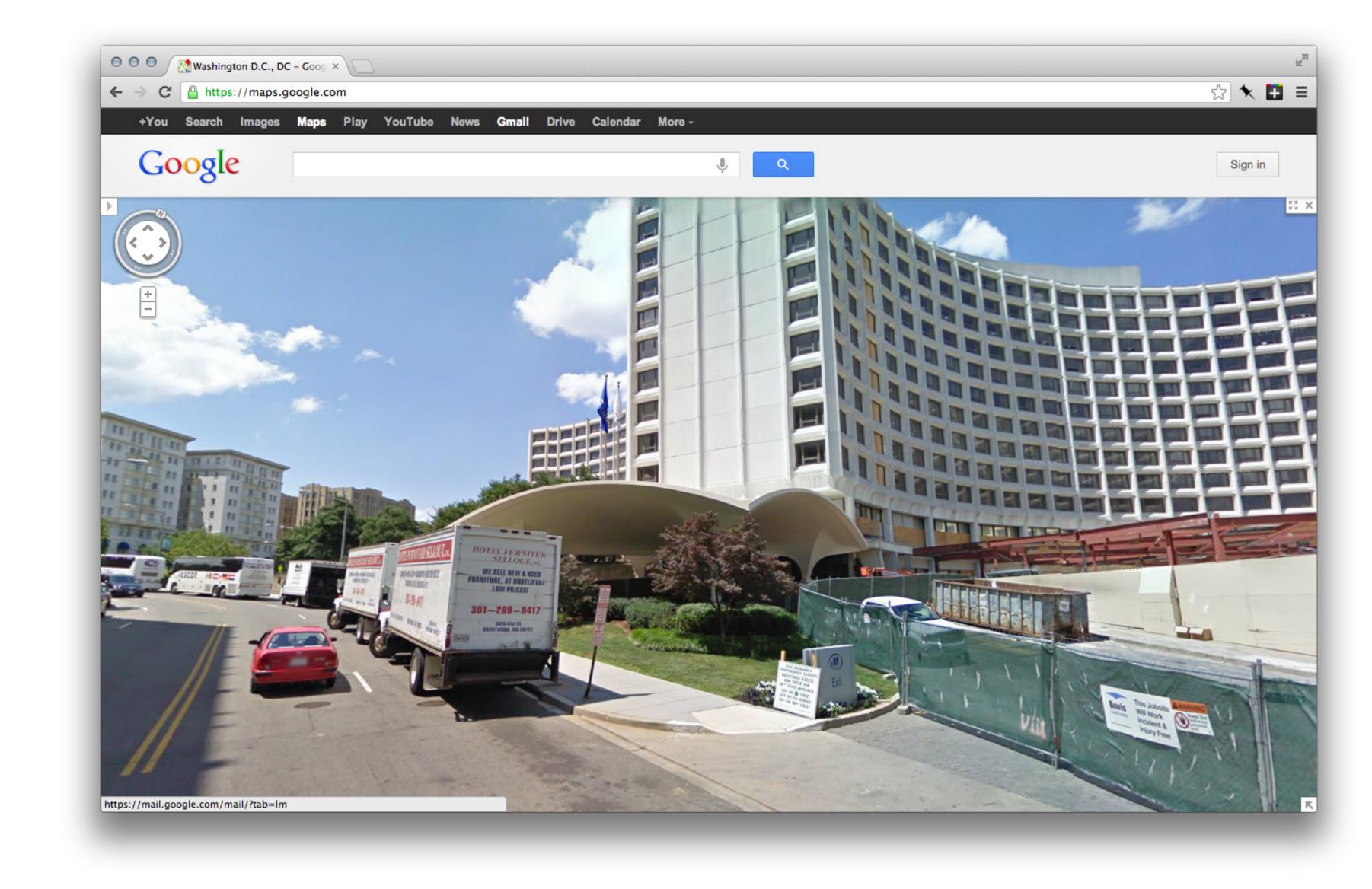
# Eyes on the street: innovative web tools for data collection

Google's Street View is the largest available collection of street imagery ever. How can we use it for innovative data collection and public input?



OpenPlans created two web-based apps to put Street View to work for planners and cities as a crowdsourcing tool. These tools gather annotation on Street View images, and support pairwise comparisons of different streets.

## Gathering comments on street images

NYC DOT is gathering public input about 4th Avenue in Brooklyn.

As well as attending public meetings and other outreach events, residents can annotate Street View imagery to provide detailed, highly-specific comments about places.

Reviewing the comments, planners can see exactly what the person was looking at when participating.



For more information about the 4th Avenue study, contact Neil Freeman, NYC DOT. nfreeman@dot.nyc.gov

Explore a location using Street View, panning and zooming to find places of interest.

See the level of

activity at each

location.

Leave comments on particular locations.

Read comments from others and see what the author was looking at when leaving the comment.



Drag the slider

to explore each

intersection.

With a

custom map,

manager can

the project

show local

context.

# Pairwise comparsons

Pairwise comparison is an established tool for understanding how people feel about streets and places.

Which one is more beautiful?

Which one feels safer?

By gathering a large dataset of comparisons, planners can distill the findings and engage the public in a discussion about common features in liked and disliked places.

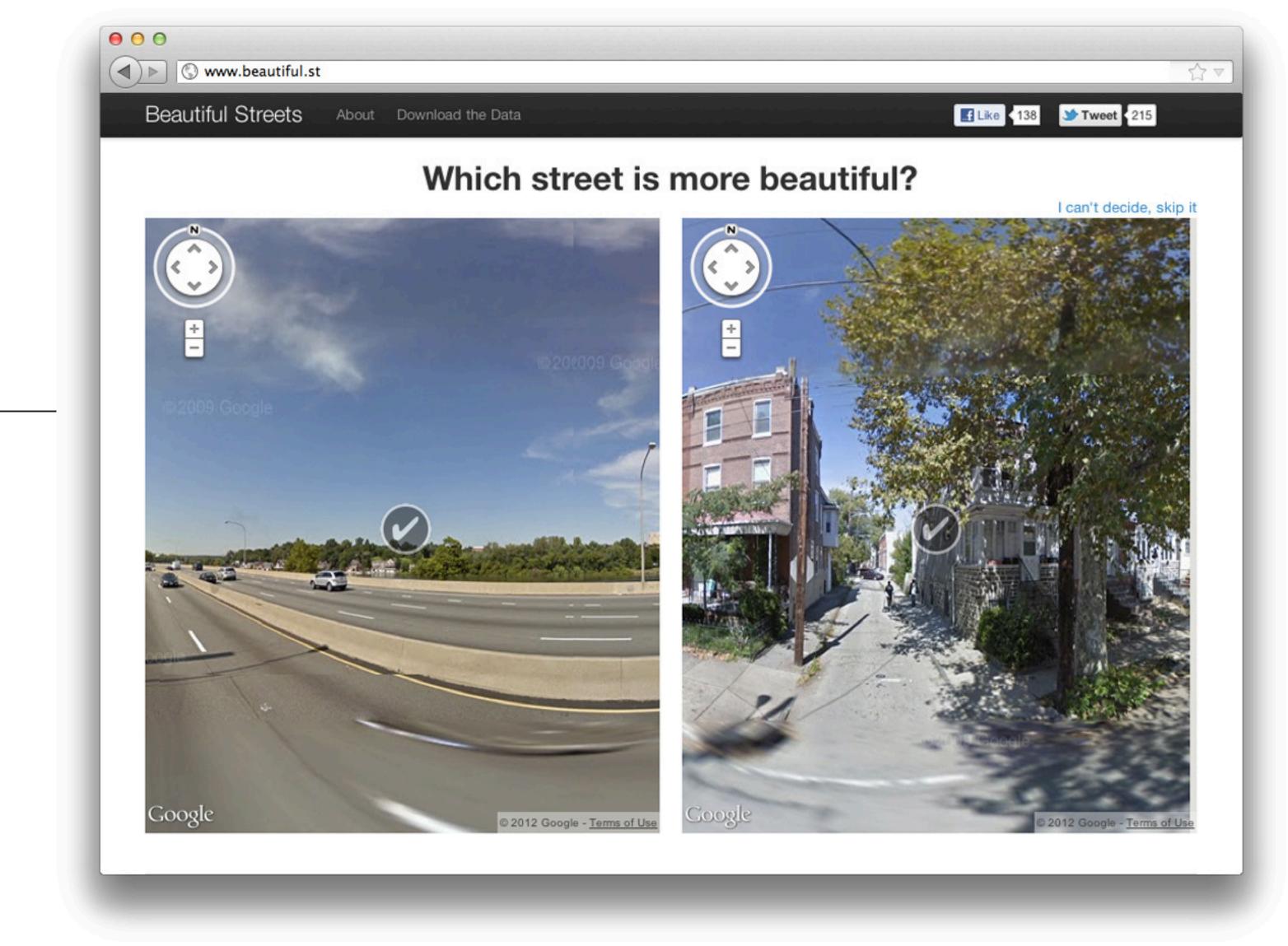
Beautiful Streets takes the concept of pairwise evaluation online. Planners can choose a set of locations to compare between. Participants then click to indicate their preferred street when shown a pair of Street View locations, based on a question, such as, "which street is more beautiful"?

#### Uses

Use Beautiful Streets to gather data about different neighborhoods in advance of public meetings

Compare different street treatments to understand which ones are liked by citizens

Gather detail about participants' background that they bring to the tool, such as home zip code and most used travel modes.



#### **Beautiful Streets Philly**

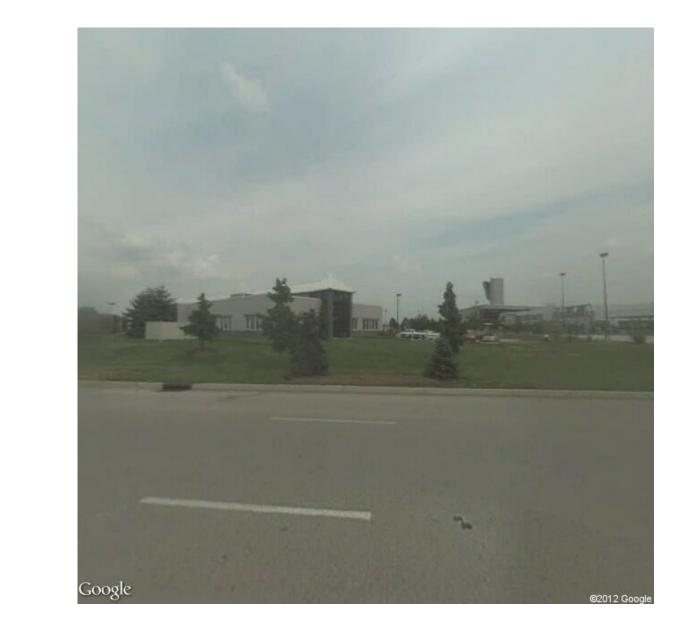
In February 2012, OpenPlans conducted a pilot evaluation of 200 street pairs in Philadelphia.

Through the Beautiful Streets website, participants evaluated over **100,000 street pairs**. Try the tool and download the data at openplans.org.

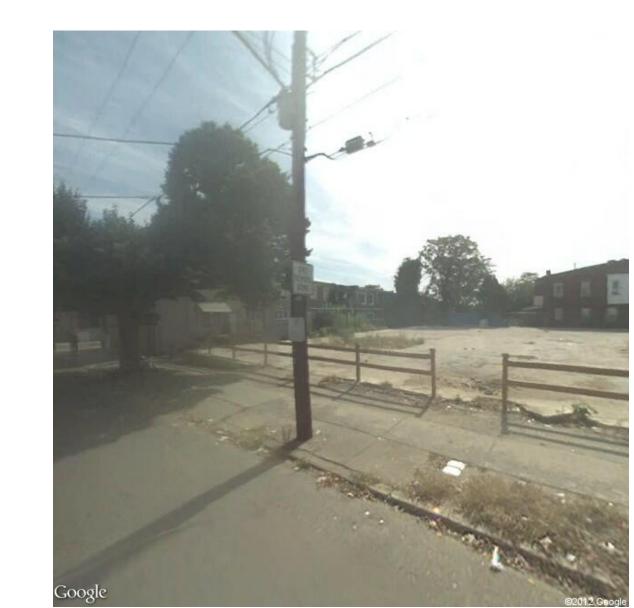
#### **Beautiful Streets Denver**

PlaceMatters used Beautiful Streets to gather input on streets in Denver ahead of a technology and planning event during Summer 2012. Over 2,300 pairs were evaluated

After over 100,000 random comparisons between 200 locations, these Philly streets "won" less that 5% of the comparisons:







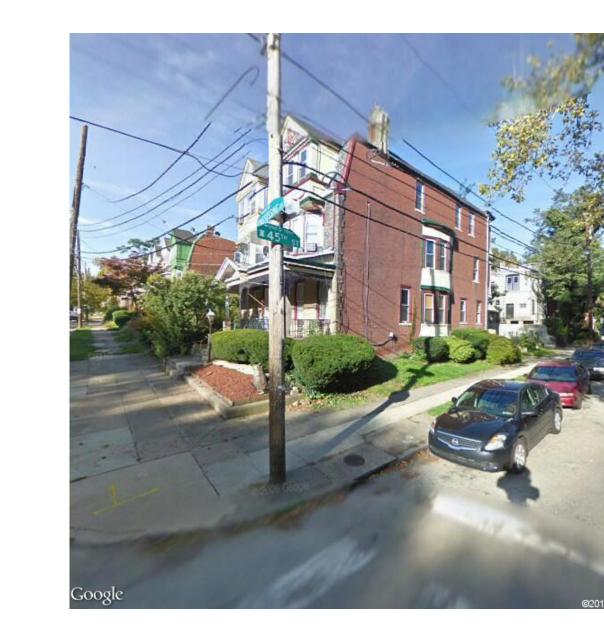
#### These streets won around 50% of comparisons:

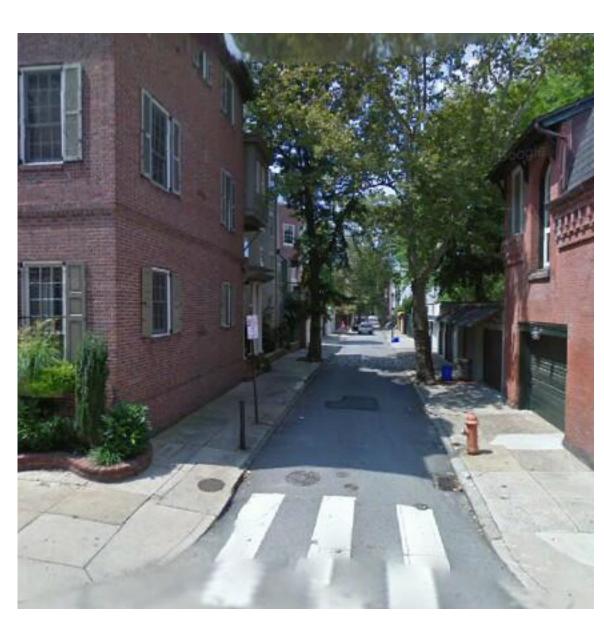






These streets won >95% of comparisons:







## About OpenPlans

What's Street View?

datasets of eye-level images of streets, and

with multiple cameras, creating panoramic

make them available online. The images

are collected by specially-equipped cars

programmatically, making it possible to

All street imagery via the Google Maps API

integrate photos of particular locations

views as they travel.

v3. Copyright Google.

Google's data can be accessed

into planning outreach websites.

Several data providers collect massive

OpenPlans is a social enterprise developing open-source technology solutions that make cities run better.

Our software tools can be used to increase civic engagement and create better informed planning projects.

Find out more at openplans.org

