



Combining bicycle data sources: intelligent solutions to enable modal shifts.

Traffic monitoring for cars has been around for more than 60 years, and since a few years now, it has expanded to active transportation (pedestrian & bicycle traffic). Yet, to increase safety and encourage cycling, communities need complete traffic data. And while the data provided by automatic counters give an overview of the evolution of bicycle traffic at strategic points, cities now want a more detailed picture of how people move in their territory: origin/destination, routes, stop times, average speed and distance, etc.

To do this, cities need to combine existing data (bike counts) with qualitative sources like GPS traces, and more specifically, extrapolate traces with bike counts.

Several projects have already been carried out with this ambition through various applications, but the user sample is often biased or not large enough.

This presentation will show relevant European examples of communities analyzing count data overlaid with GPS traces to present a complete view on bicycle traffic and answer key questions such as:

- Are cyclists riding along the designated bicycle network, or opting for back routes?
- Where are the neighborhoods with less mobility choices?
- How can I reach out and develop my local community of cyclists?
- How can users share their needs for better infrastructures?
- Are there desired corridors or popular routes without designated bicycle infrastructure?
- How do cycling facilities influence travel duration and speed?
- What should be prioritized to increase safety for bicycle users?

