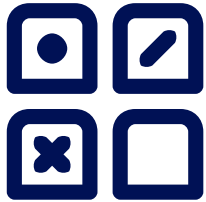# Ready for the future?

Mobility Insights & Traffic Performance from Telecom Data

swisscom
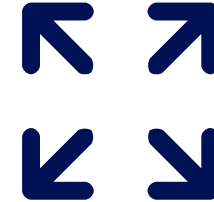
Smart Data @ Swisscom

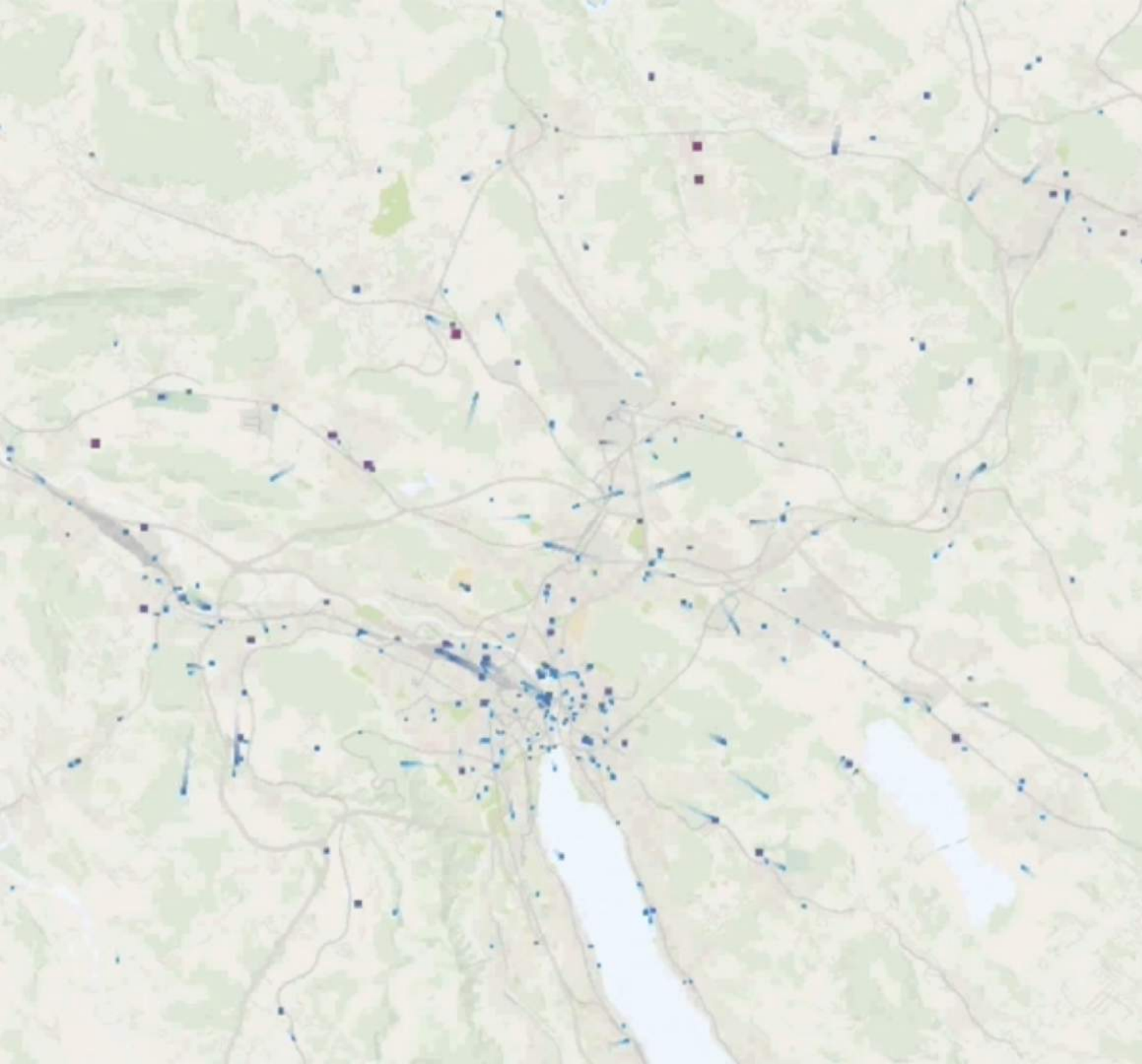Respecting Consumer Privacy and In Compliance with Law

Internal use
for better
services

Enabling our
customers on the
basis of their data

Swisscom
Insights for the
external market
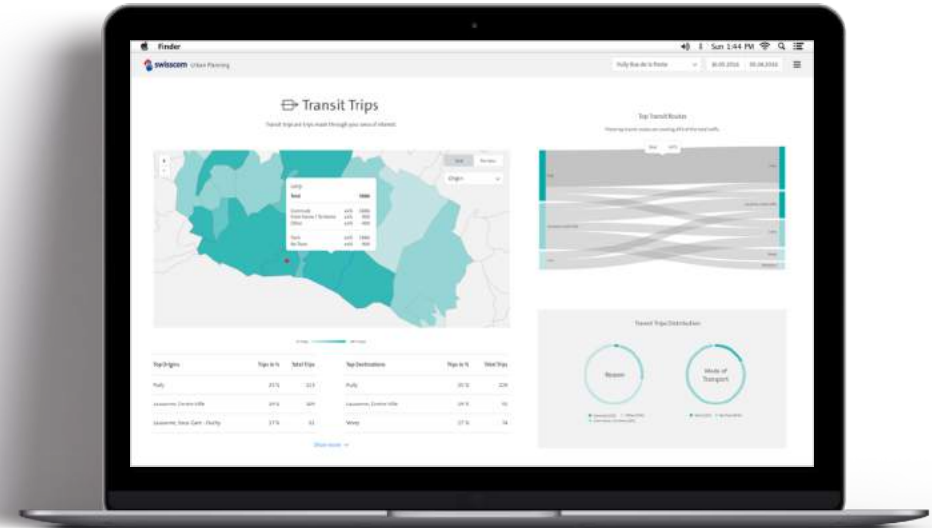
swisscom

Movement Patterns
within Switzerland

Two core propositions
for public and private sectors

Swisscom Insights
Transportation

Referral Customer: Federal Road Authorities,
Regional Traffic Planning agencies etc.

Swisscom Insights
### Population Mobility

Customer: Urban & Regional Planers, Retail
chains, Civil defence etc.

Swisscom Insights Transportation

Since 2013 Swisscom delivers real time monitoring of traffic speeds, travel time & incidents to Swiss Federal Road Authorities

1. **4000 Kms of Swiss Highway**

2. **Divided in 7'500 sections**

3. **Section average 500 meters long**

4. **Updated every 2.5 minutes**

5. **Processing 1 Billion transaction/day**
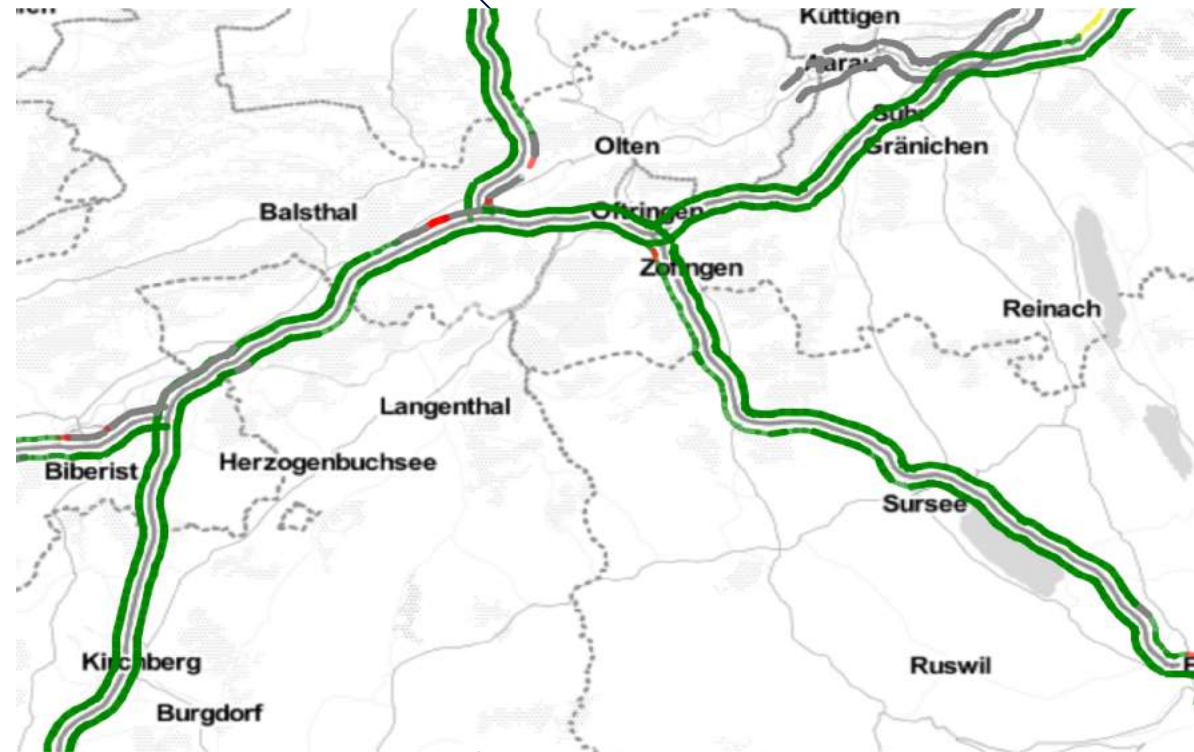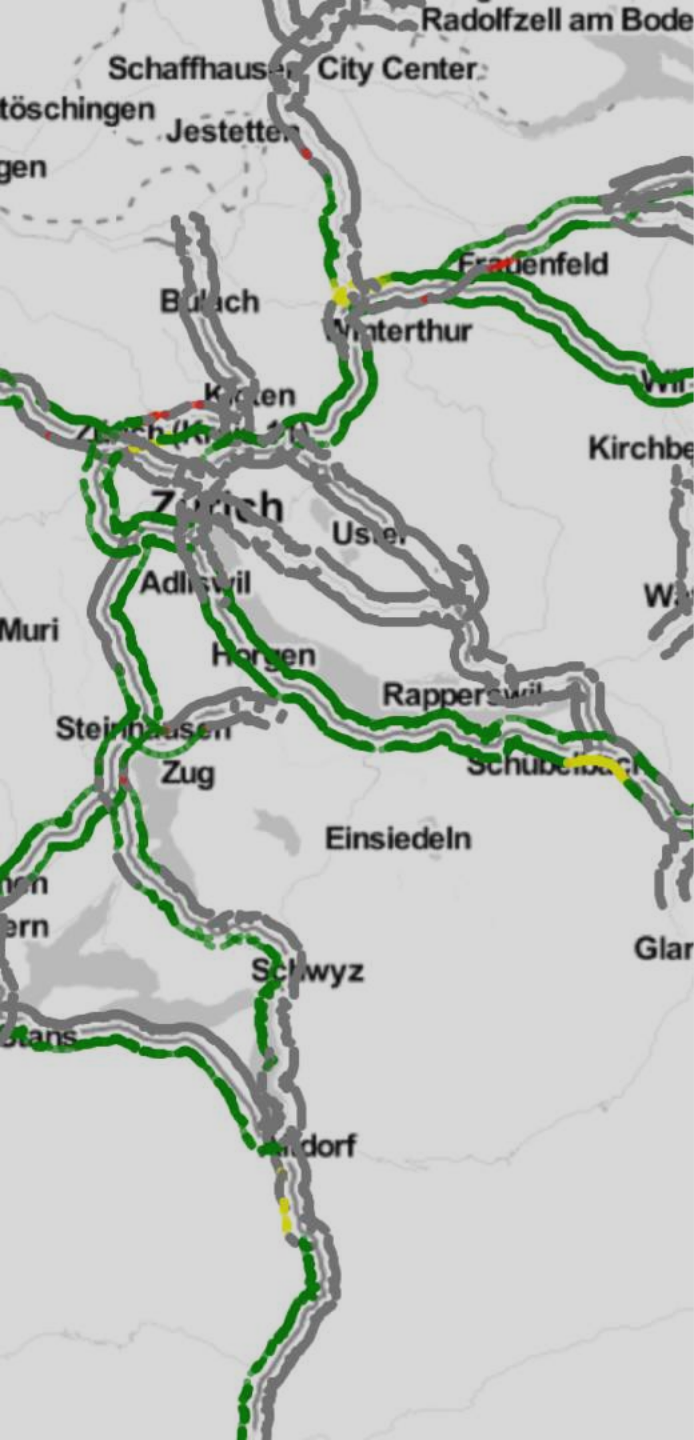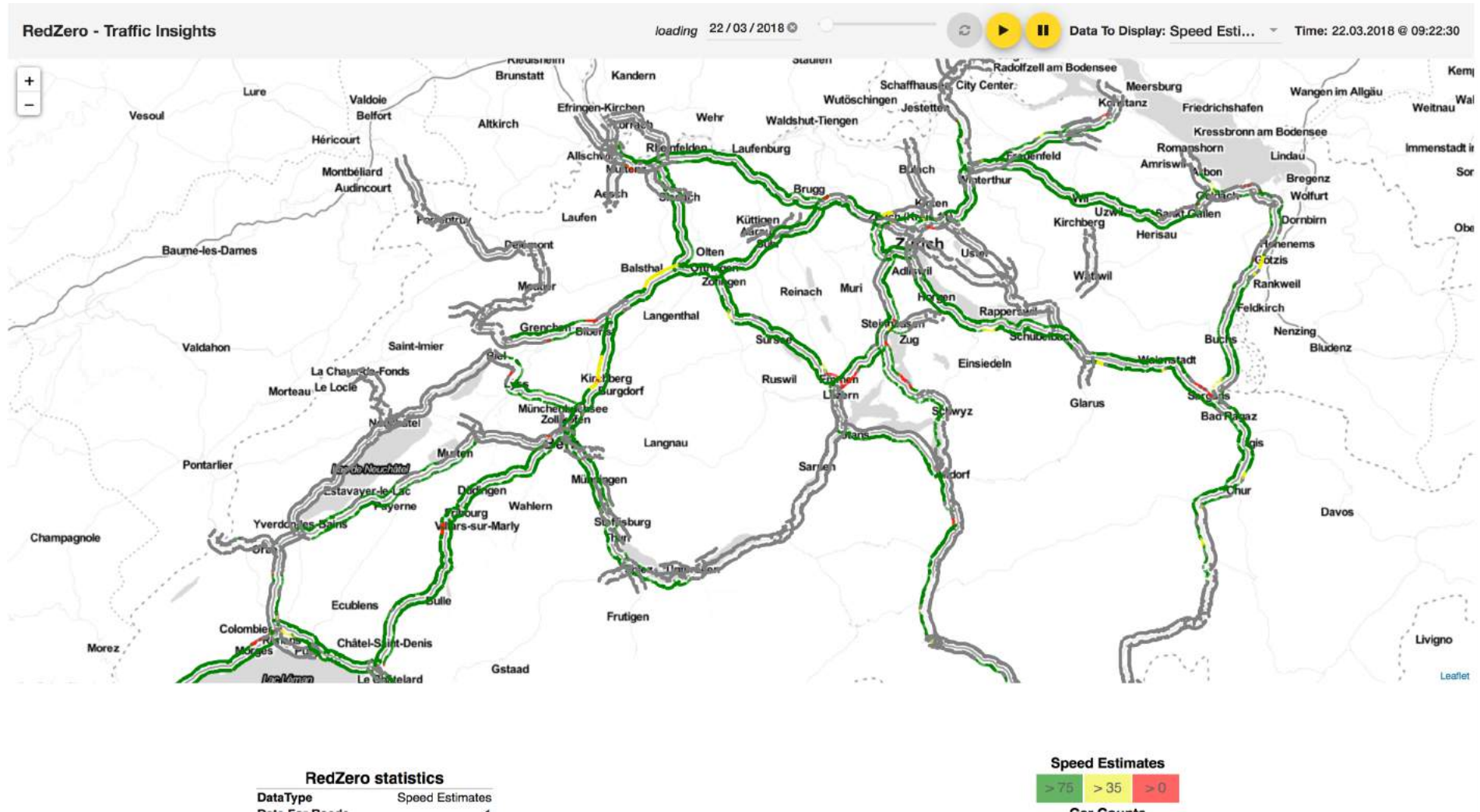
Live Demo

Traffic & Speed Profile

Traffic Jam Detection
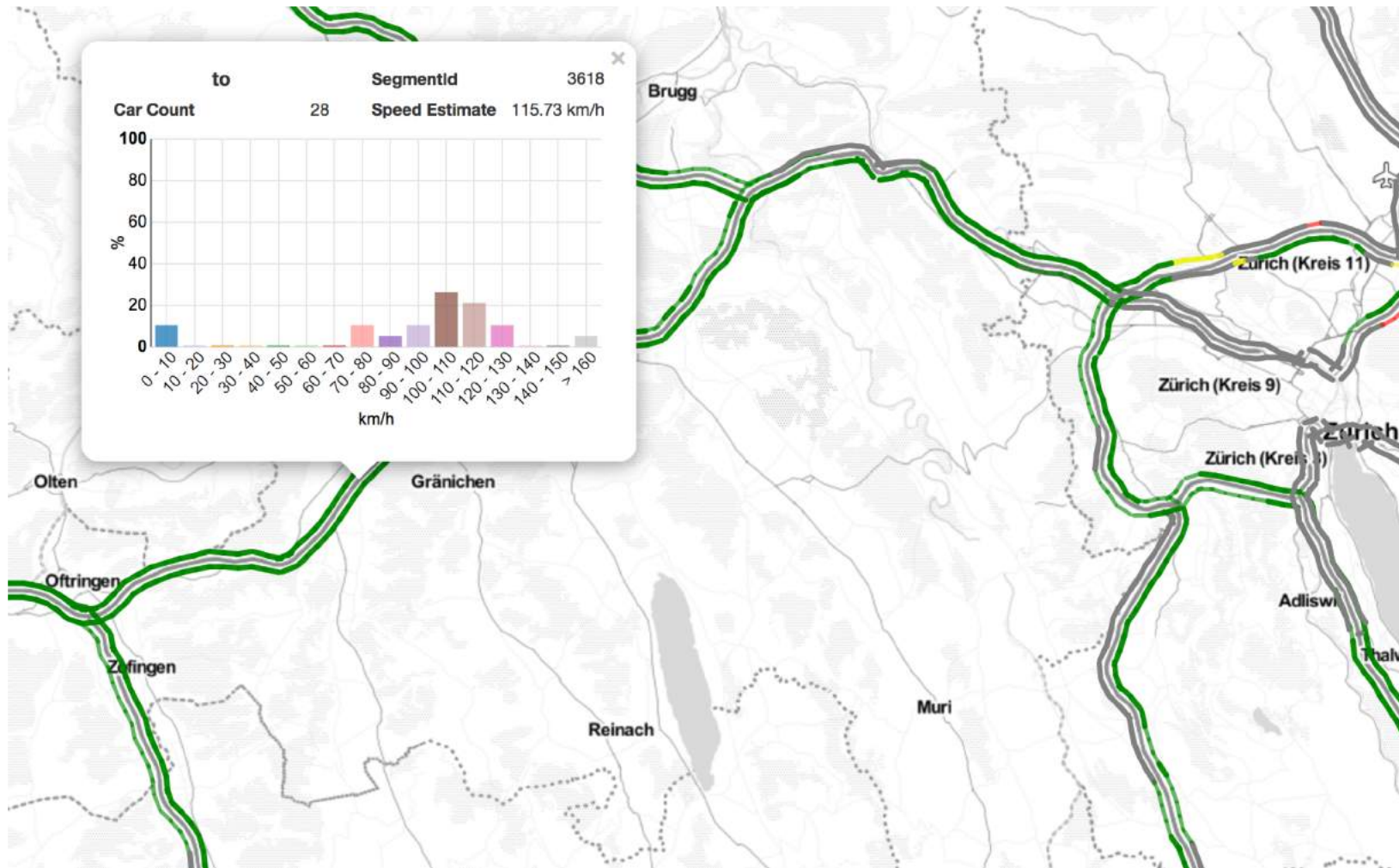
Vehicle Volume Estimation

Vehicle Classification

swisscom

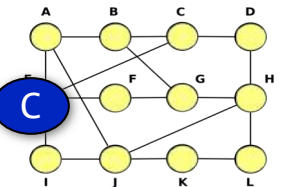# Demo – Example (1/2)

Demo – Example (2/2)

From Road to Rail Transportation...

A **Passenger Count** on all trains(IC,IR,RE) in near real time

B **Station Usage**
Interchange/Travel Entry-Exit/Visitors

C **Origin-Destination**
Time & Volume

D **Dwelling & Travel Time**
Interchange Carrier modality

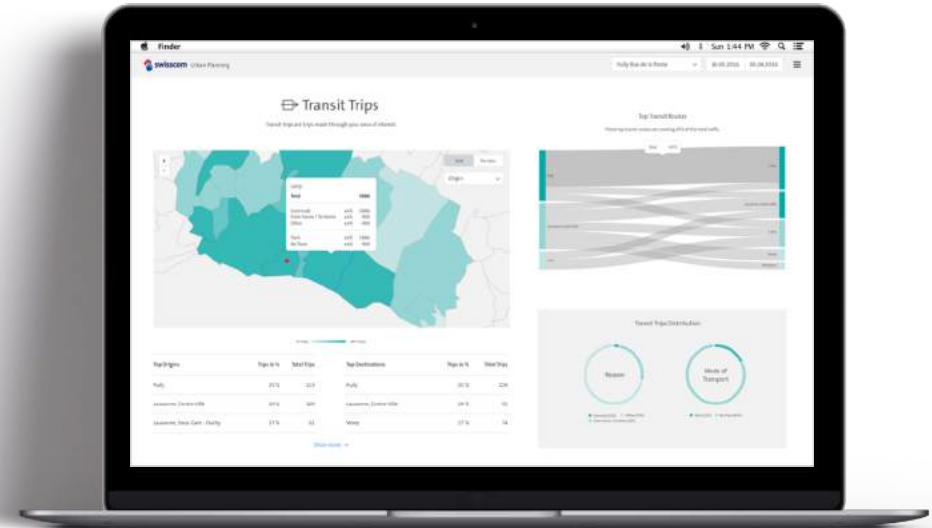**E** **Station Catchment Area**

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Two core propositions
for public and private sectors

Swisscom Insights
Transportation

Referral Customer: Federal Road Authorities,
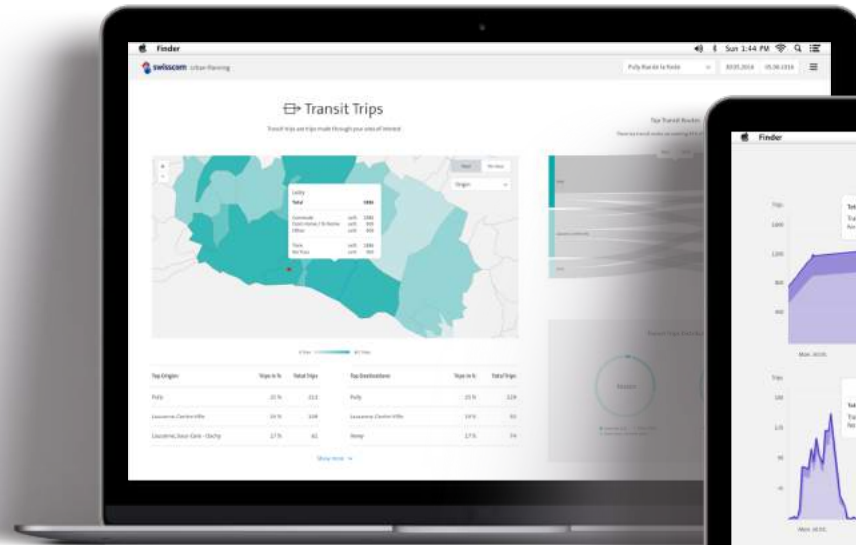Regional Traffic Planning agencies etc.

Swisscom Insights
Population Mobility

Customer: Urban & Regional Planers, Retail
chains, Civil defence etc.

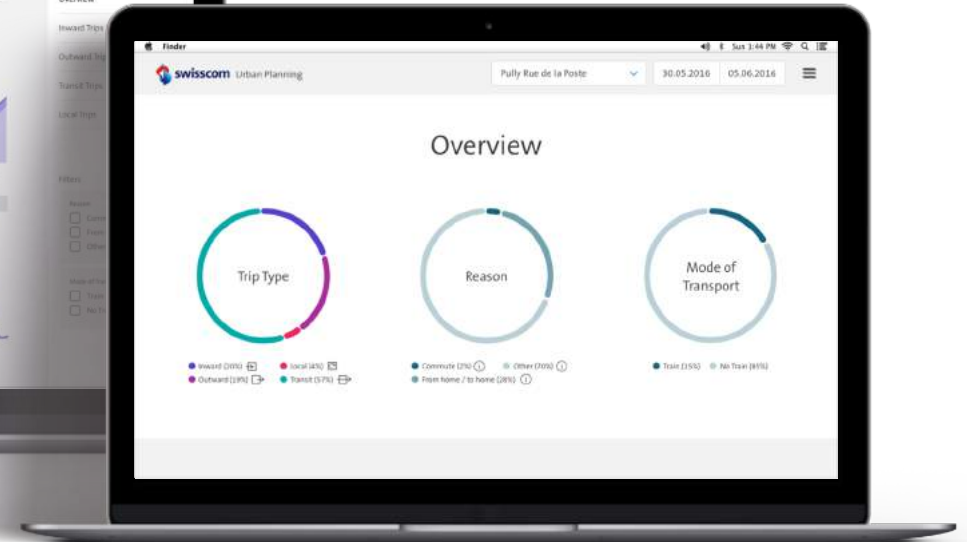swisscom

Swisscom Insights

Mobility Insights for Urban & Regional Planers, Retail Chains, Civil Defence etc.
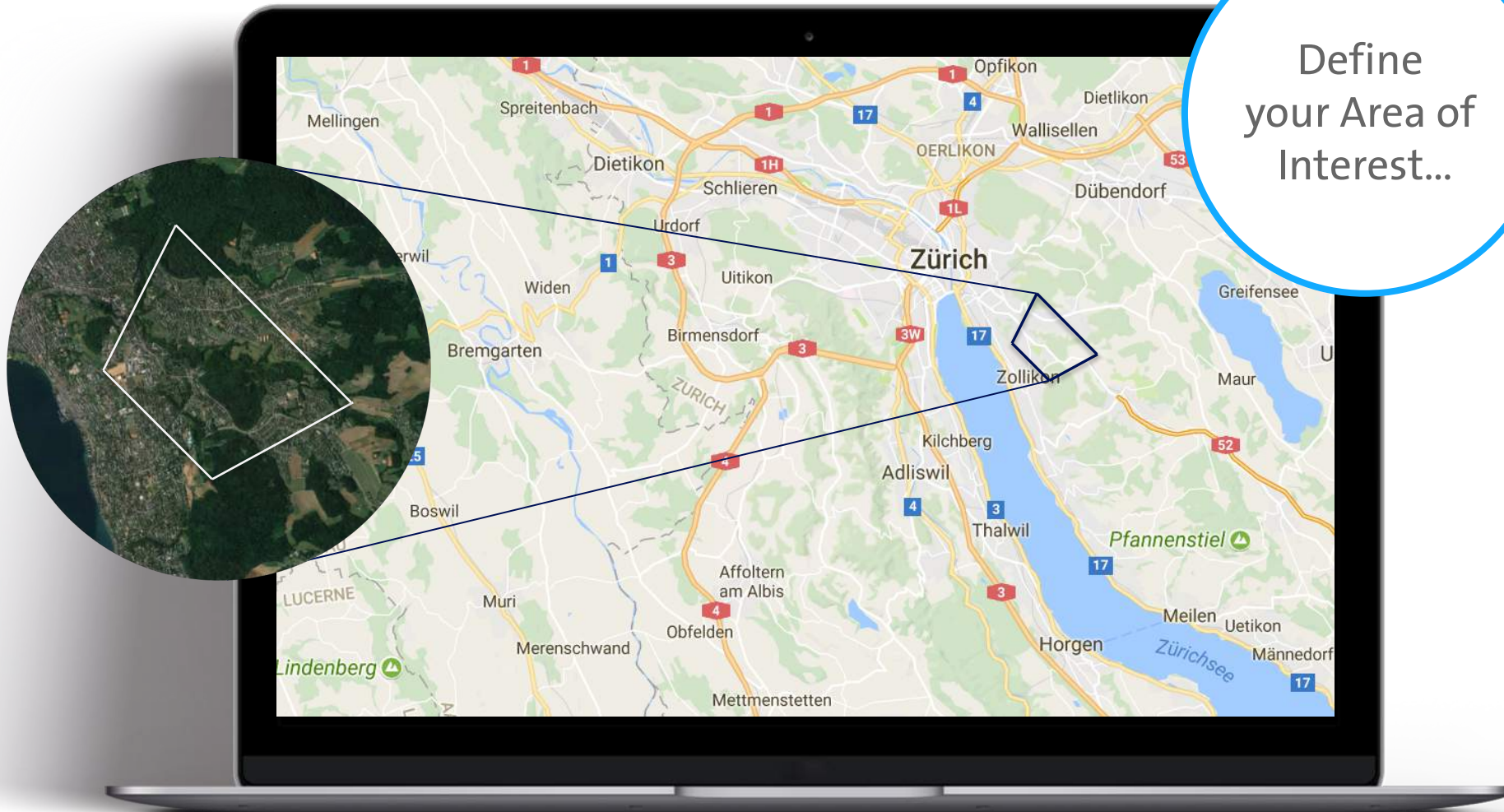

Trip Type Differentiation

Mode of Transport Detection

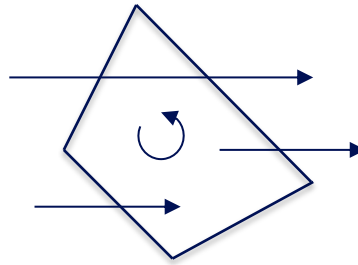**Analysis of Trip Reasons**

It all starts on a map!

Define
your Area of
Interest...
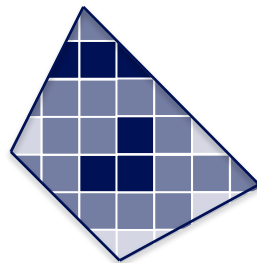
swisscom

Trips

Measure the volume of trips over time relative to a predefined area of interest

Heatmap

Measure the density of people over time within a predefined area of interest

...select your desired Type of Analysis...

Trip Analyses

Measure the volume of trips over time relative
to a predefined area of interest

**Customized
area of interest
(min. 100 x 100m)**

**Volume of trips
over time relative
to area of interest**

**Daily and hourly
granularity (2 years
back)**

**Switzerland-wide
origin/destination
information***

**Dwell time
analyses
(1 min to
1 day)**

**Trip type
differentiation
(inward, outward,
local, transit)**

**Analysis of
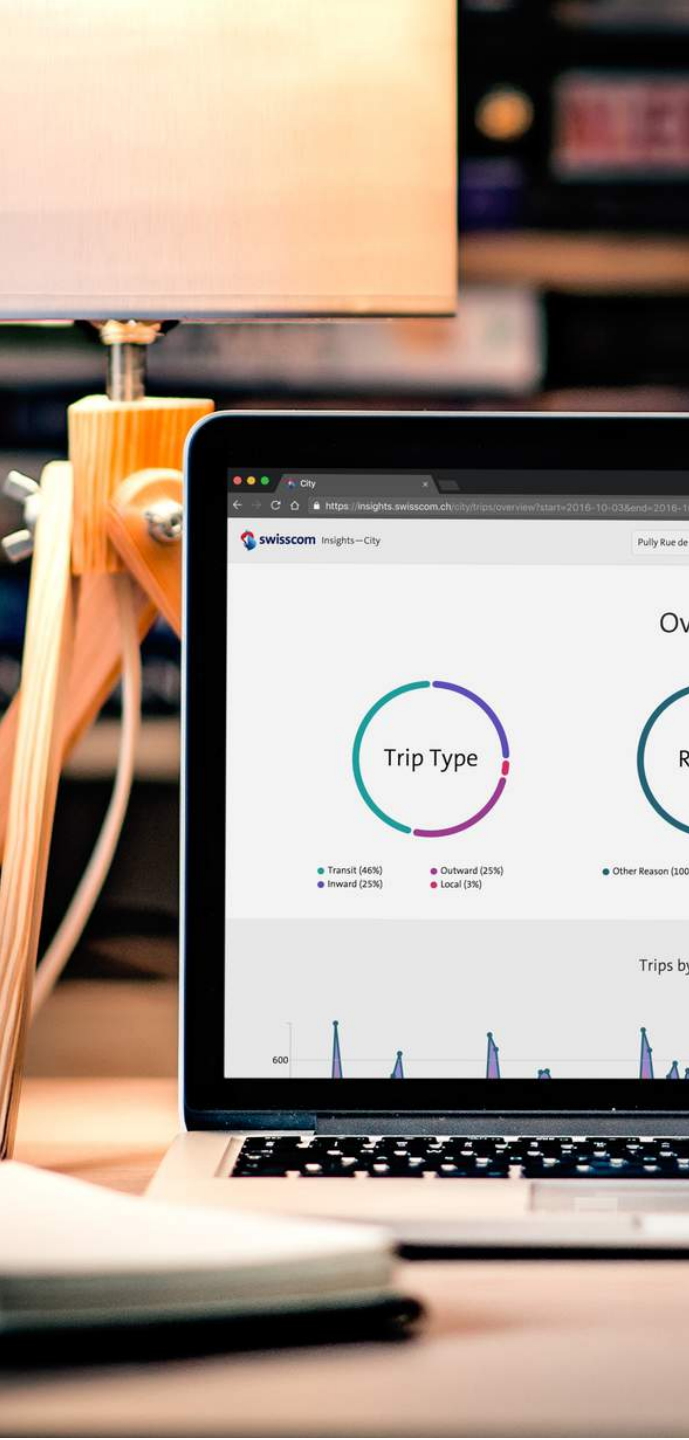trip reasons
(commute,
other)**

**Mode of
transport
detection
(train, other)**

**Socio-demographic
segmentation
(gender, age
range)**

* aggregated at municipality level, in larger areas such as cities at district level

Heatmap Analyses

Measure the density of people over time
within a predefined area of interest

Customized
area of interest
(min. 500 x 500 m)

Density of people
over time within
area of interest

Spatial resolution
of grid down to
100 x 100m

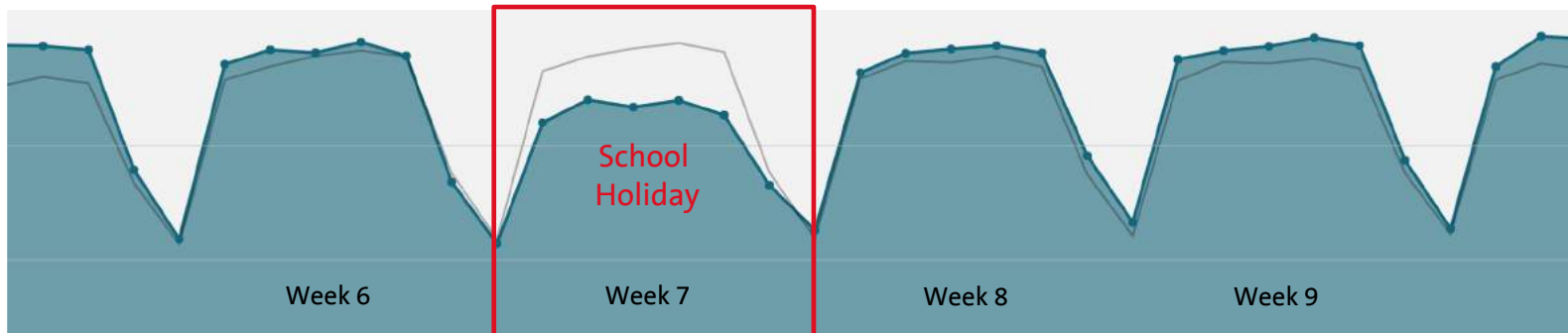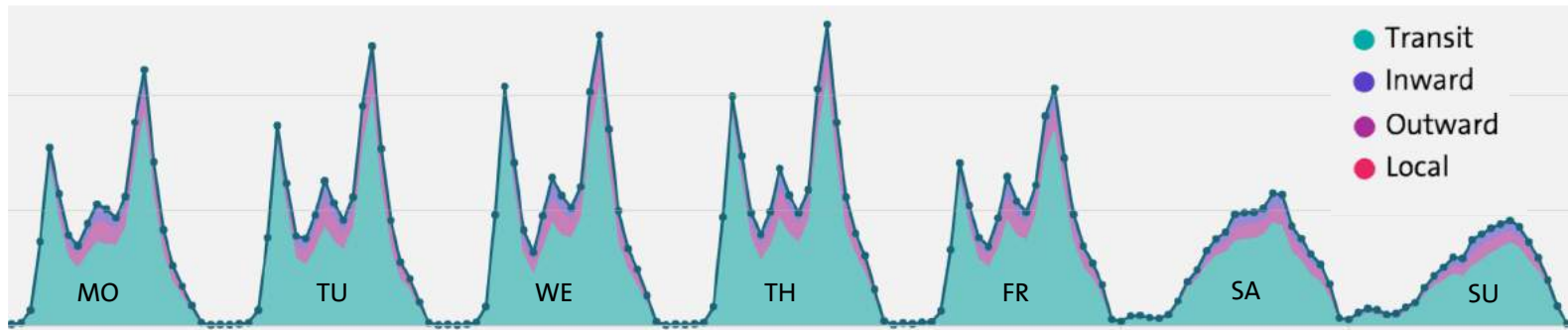Variable temporal
resolution
(15 or 60 minutes)

Socio-demographic
segmentation
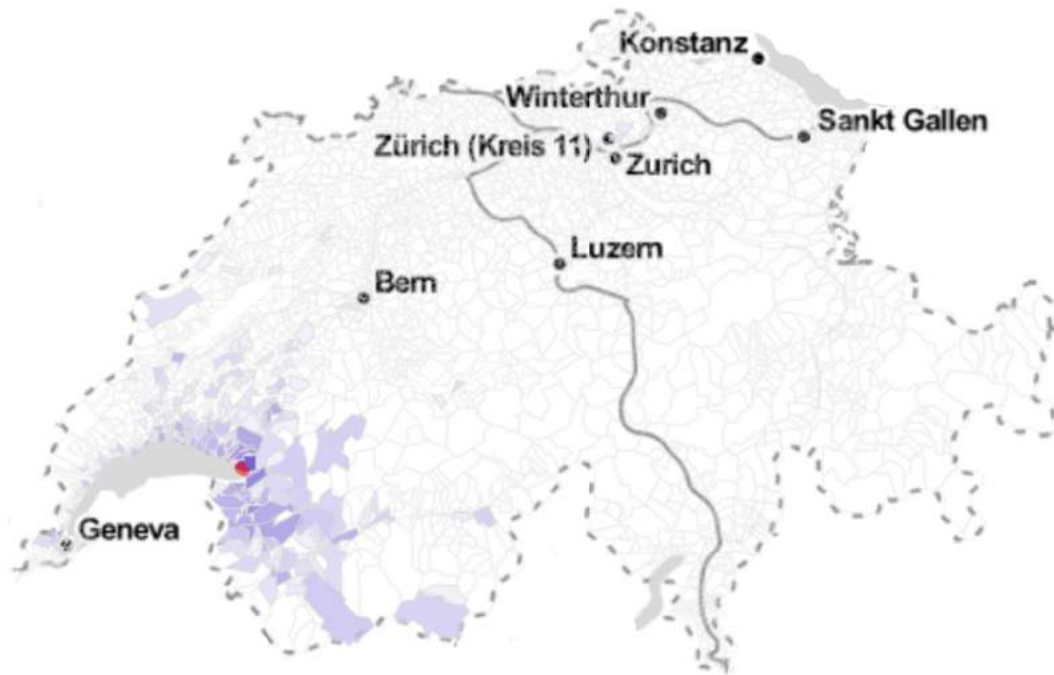(gender, age range)

Real-time
functionality
(roadmap)

Demo – Example (1/4)

Volume of trips over time, hourly and daily granularity

Legend: Transit, Inward, Outward, Local

MO TU WE TH FR SA SU

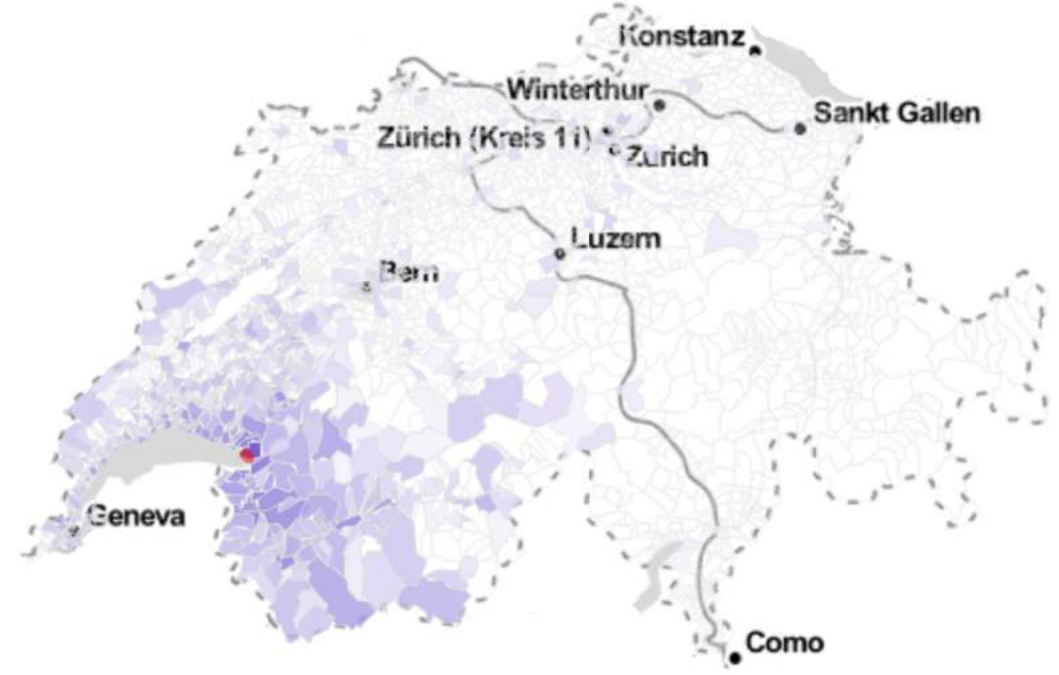School Holiday

Week 6 Week 7 Week 8 Week 9

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Demo – Example (2/4)

Switzerland-wide Origin/Destination Information

Origins of people visiting
Montreux on a weekday

Origins of people visiting
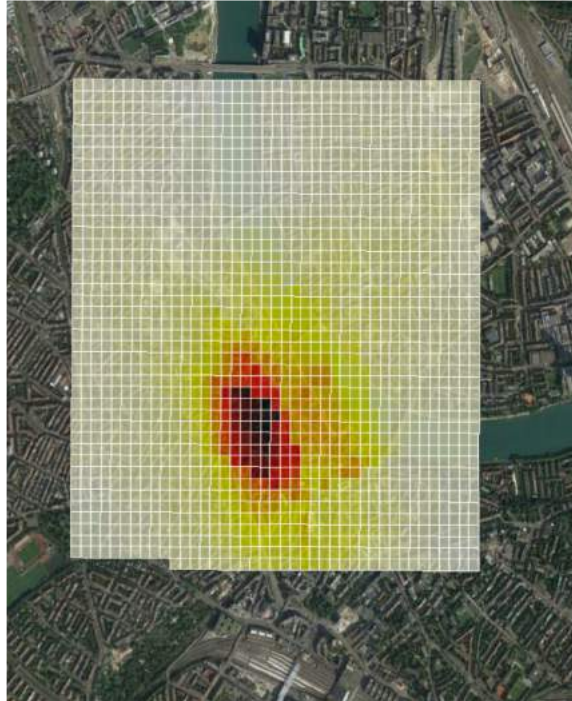Montreux over the weekend

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Demo — Example (3/4)

Switzerland-wide Origin/Destination Information — Top Transit-Routes

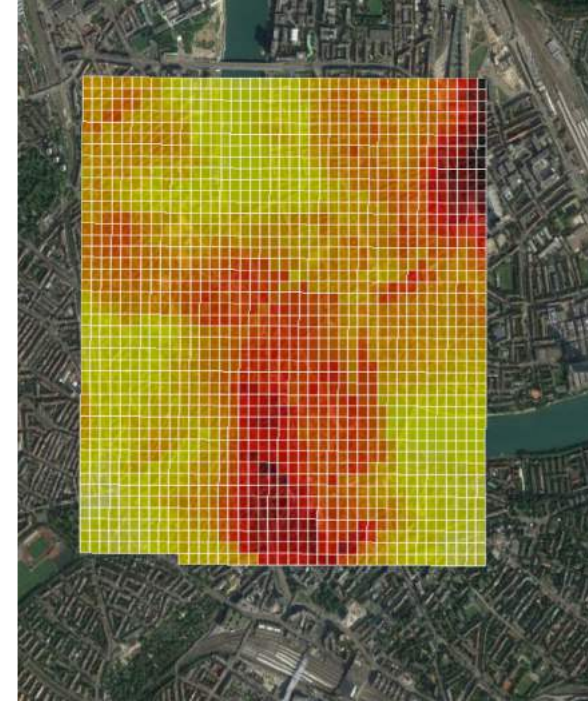# Demo – Example (4/4)

Heatmap Analyses – Carnival of Basel

**Carnival of Basel
(08.03.2017, 22.00 pm)**

**Normal Weekday
(15.03.2017, 22.00 pm)**

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Hawa Dawa und Swisscom ermöglichen neuartige Erkenntnisse zur Luftqualität

Von moneycab – 27. Februar 2018 07:35
Eingestellt unter: ! Top, Digitalisierung, IT, Startups

Karim Tarraf, CEO Hawa Dawa. (Foto: Swisscom)

Zürich – In einem Pilotprojekt für die Stadt Zürich arbeiten Hawa Dawa und Swisscom an einer völlig neuen Qualität von Umweltdaten für Smart Cities. Die Unternehmen integrieren durch maschinelles Lernen veredelte Luftqualitätsdaten aus Hawa Dawa's Environmental Data Analytics Plattform mit akkumulierten Informationen über das Mobilitätsverhalten von Menschenmengen aus Swisscom's Insights Platform.

...add further Data Sources

Happy to help with Swisscom Insights.

Andrea Schwaller
Business Developer – Swisscom Insights

079 500 45 67 | andrea.schwaller@swisscom.com

swisscom

Swisscom (Schweiz) AG | Pfingstweidstrasse 51 | 8005 Zürich
www.swisscom.ch/enterprise

Many thanks!

Zurich, March 2018

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