3! Uses of Open Data in Turn by Turn Navigation
TODAY TOMTOM MAPS POWER A WIDE RANGE OF NAVIGATION AND LOCATION BASED SERVICES

Mobile Usage

Navigation

Ride Planning

EV Drive Range Calculation

Internet of Things

Autonomous Driving

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OUR CONNECTED WORLD MEANS GREATER RELIANCE ON MAPS AND OPEN DATA TO MAINTAIN THESE

THE EVOLUTION OF MAPS & LOCATION

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INTELLIGENT MAPMAKING ENABLES TOMTOM TO CONTINUALLY PUBLISH A HIGHLY ACCURATE MAP WITH **OPEN DATA** BEING A KEY INGREDIENT

Mobile Mapping  
Field Survey  
Active Community Input  
Probe Data

**INTELLIGENT MAPMAKING**

Open Data from Authoritative Sources

TRADITIONAL METHODS

Sensor Data

COMMUNITY INPUT
TODAY THE NEED FOR GREATER ACCESS TO OPEN DATA CONTINUES TO EVOLVE ALONG WITH THE MAP

- HD & ROADDNA
- ADAS
- 3D
- POI
- TRAFFIC SIGNS
- ADDRESSING
- ROAD NETWORK
- AUTOMATED DRIVING
- DRIVER ASSISTANCE
- VISUALIZATION
- SEARCH
- NAVIGATION
- GEOCODING
- ROUTING
OPEN DATA IS AN INTEGRAL PART OF THE MAP AND SUPPORTS MANY NAVIGATION USE CASES

LOCATE
- Destination Search
- Precise Geocoding

PLAN
- Accurate Customisable Routing

EXECUTE
- Professional TBT Navigation

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LINZ ADDRESS POINTS CCBY4.0 – MAP AND ADDRESS MAINTENANCE IN NEW SECTIONS
Enables
Accurate geocoding

Reverse & forward geocoding
Natural search
Search for addresses, places & cross streets
Fully configurable & localized

OVER 11 MILLION ADDRESS POINTS down to subunit across NZL and AUS all sourced from Open Data.
Currently supports navigation apps with:

Precise Exit Instruction

Lane Level Routing Instructions
Part of the sourcing mix for High Definition Maps
HV Routing is critical for Telematics applications

So we give them routes that:
• Avoid complex manoeuvres
• Avoid difficult roads (unpaved, bridges)

And take into account:
• Local legislation & restrictions
• Vehicle dimensions & cargo type
• Bridge heights, road curvature, slope, etc.
• Truck specific speed limits
• Recommended B-double Routes*
LOGISTICS ATTRIBUTION PARTLY DERIVED FROM OPEN DATA

MAJOR ATTRIBUTES (non exhaustive)

PHYSICAL
• Height
• Weight
• Length
• Width
• Weight by Axle

OPERATING RESTRICTIONS
• Hazmat and other loads
• Truck speed limits
• Truck-specific maneuvers
• Idling and compression braking

GENERAL
• Truck restricted
• Truck preferred
• Immediate access

VEHICLE TYPE
• Number of axles
• Number of trailers
• No commercial vehicles

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FUTURE OPPORTUNITIES - OPEN DATA STREAMING
THANKS TO ALL OPEN DATA CUSTODIANS LETS KEEP THE MOMENTUM AND INCREASE THE DATA EXCHANGE IN BOTH DIRECTIONS.

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LEADING THE WAY TO A FUTURE OF SMARTER MOBILITY & AUTONOMOUS DRIVING