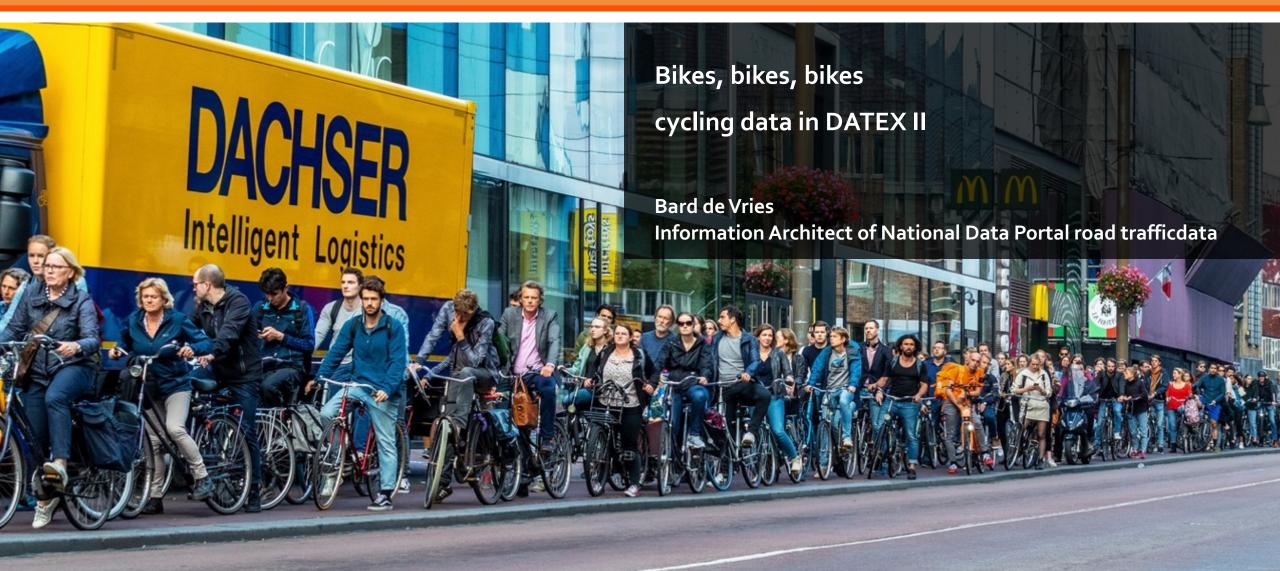
ndw



Bike data

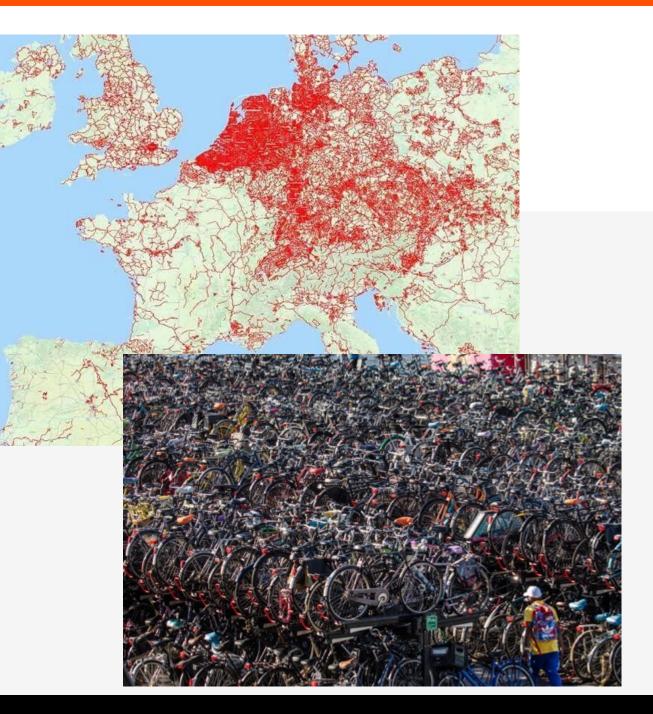
35.000 km cycle track

5.000 km roads with a bike lane

Bicycle use Amsterdam increased with 40% (over last 20 years)

32% of trips by bike (MobiliteitsPanel Nederland 2015)

Improved bike data highest priority for NDW partners



Bike data – developments

- **1.** Bike counting data
- 2. Floating bike data

Available via

National Access Point MMTIS



Application and usage

Local goverments/ road authorities:

Traffic models

Policy making

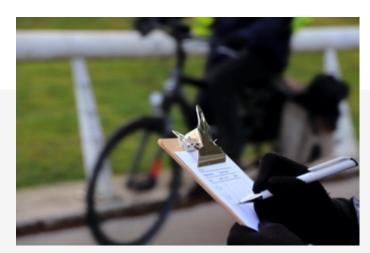
- Monitoring (policy)
- Development new routes
- Bike parking space
- Safety measures (increase safety)
- Capacity bike lanes
- Prioritize projects
- Increase bicycle use
- Connect modalities

- Flow
- Routes
- Speed
- Origin destination
- Model split (normal bike, E-bike, speed pedelec, cargo bike), delays
- Location (parking),
- Time / duration (parking),
- Target groups (parking/ bike rental)
- Delay/waiting cross sections

1) Bike counting data

Loops, road tubes, radars system, cameras, manual counting.

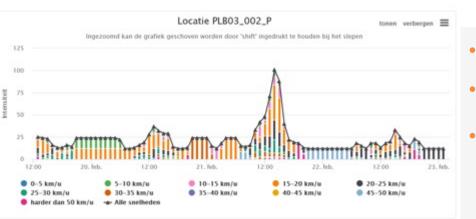
- Periodic and location based
- Traffic models and policy local governments
- Standard: DATEX II profile (automatic upload in system)
- Output: CSV, Excel or XML

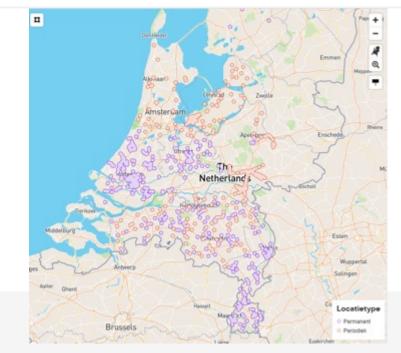






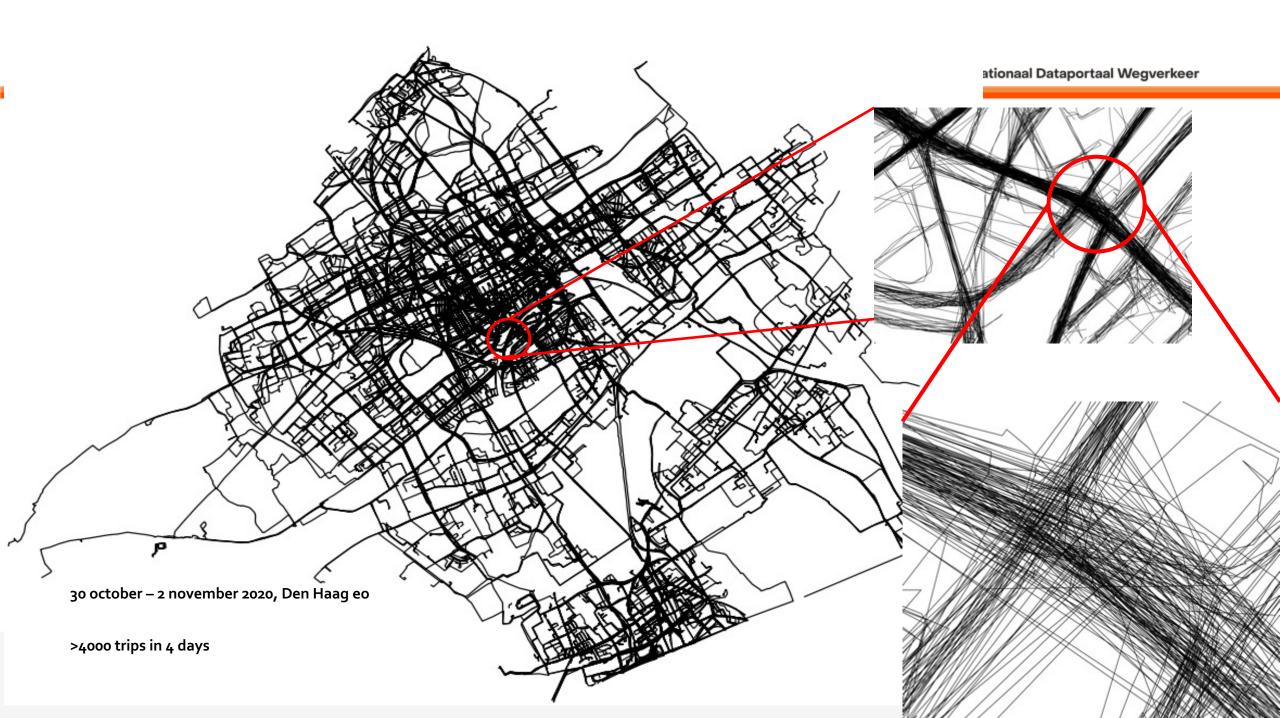
ndu Bike counting data historical dataset





- Extended version of the vehicle dataset
- TrafficFlow
- Several classifications:
 - Speed-category
 - Bike-width
 - Propulsion-type
 - (slow) vehicle classification
- Currently available:
 - 6 roadoperators up to date permanent measurement locations (soon 9)
 - 6 roadoperators up to date or historical periodic measurement locations (soon 8)

2) Floating bike data (non DATEX II)



Where were you counting?



2 extensions class TransverseSectionOfRoad «D2Class» MeasurementSiteExtended «enumeration,D2E... DemarkationTypeEnum Bike count data: «D2Relation» «D2Literal» buildingFacade class MeasurementSpecificCharacteristicsCycling fence «D2Class» gardenSeparation TransverseSectionOfRoad forestEdge «D2Class» park MeasurementSpecificCharacteristicsExtended «D2Attribute» waterFront boundaryTypeLeft: DemarkationTypeEnum privateProperty + boundaryTypeRight: DemarkationTypeEnum barrier n, index 1 guardRail curb *D2Relation* ditch dashedLine «D2Relation» shadedAreaMarking «D2Class» soundBarrier MeasuredBicycleClassifications solidLine «D2Attribute» wallTunnel «D2Class» + bicyclePropulsionType: BicyclePropulsionTypeEnum [0..1] wall GroupOfLanes + bicycleWidthClassification: BicycleWidthRangeEnum [0..1] «D2Class» unknown + legal8ikeClassification: LegalVehicleClassificationEnum [0..1] PointCoordinates:: other +midOfSection + measuredSpeedRange: SpeedRangeEnum «D2Attribute» PointByCoordinates + demarkationLeft: DemarkationTypeEnum [0..1] 0..1 + demarkationRight: DemarkationTypeEnum [0..1] «D2Attribute» + groupOfLanesType: CarriagewayEnum bearing: AngleInDegrees [0..1] + mainDirectionOfTraffic: MainDirectionOfTrafficEnum widthOfGroup: MetresAsFloat [0..1] eenumeration,D2Enu... eenumeration,D2Enumera... eenumeration,D2En... BicycleWidthRangeEnum **BicyclePropulsionTypeEnum** LegalVehicleClassificationEnum index «D2Literal» «D2Literal» «D2Literal» electricEngine agriculturalVehicle f0t75cm fuelEngine bicycle f7St150cm muscle moped f150andAbove «enumeration,D2Enu... supportingElectridEngine motorbike MainDirectionOfTrafficEnum supportingFuelEngine pedestrian «D2Class» motor SpecificLane vehicleForDisabled «D2Literal» specialMotorbike bothDirections «D2Attribute» inDirectionOfBearing laneNumber: Integer [0..1] oppositeToBearing + laneUsage: LaneEnum [0..1]

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