“Collecting data to NVDB”

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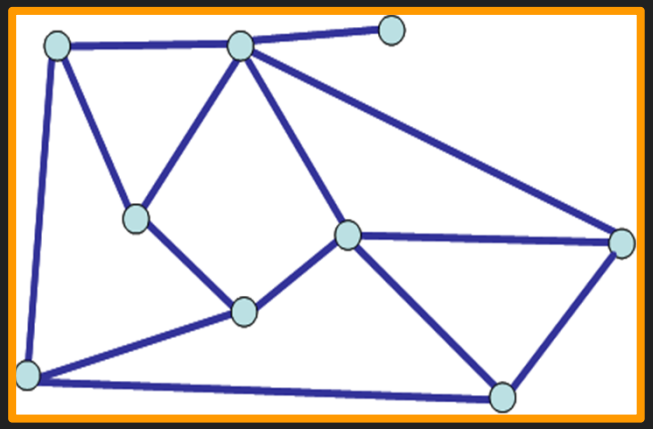
National Road Data Base (NVDB)



1. Road equipment / Road construction
2. Events
3. Statistics/Measurements (Traffic, Noise, ..)

Road Network

NVDB

Road Objects

How to collect NVDB data?

1. Capture at build-time (As Built)
2. Registration in retrospect

1. As built - documentation?


```
.HODE
..TEGNSETT ISO8859-1
..SOSI-VERSJON 8.1
..DATAKATALOGVERSJON 2.11
..SOSINVDB-FORMAT-VERSJON 1.0
..SOSI-NIVÅ 1
..TRANSPAR
...KOORDSYS 23
...ORIGO-NØ 7803700 1080244
...ENHET 0.01
...VERT-DATUM NN54
..OMRÅDE
...MIN-NØ 7803700 1080244
...MAX-NØ 7803980 1080346
..EIER "Statens vegvesen"
..PRODUSENT "NVDB Datafangst"
.KURVE 1:
..OBJTYPE StikkrenneKulvert_79
..DATAFANGSTDATO 20171101
..KVALITET 96 10 1 96 10
..Eier_7996 10724
..TypeUtløp_1940 11655
..Prosjektreferanse_11068 "Fv 354
Kongsgammedalen"
..DiameterInnvendig_3113 1000
..Vedlikeholdsansvarlig_8060 10454
..Byggeår_4556 2017
..Tverrsnittsform_6984 9130
..Materialtype_6983 9125
..TypeInnløp_1939 11744
..Bruksområde_6981 9114
..NØH
21897 7516 910
21557 10174 1050
.KURVE 2:
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..DATAFANGSTDATO 20171101
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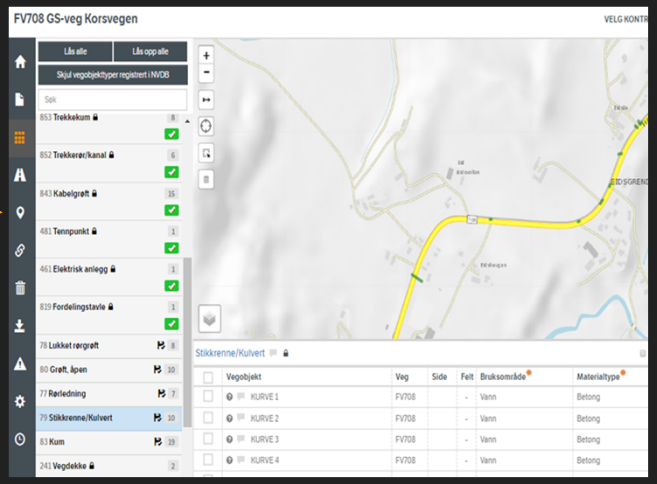
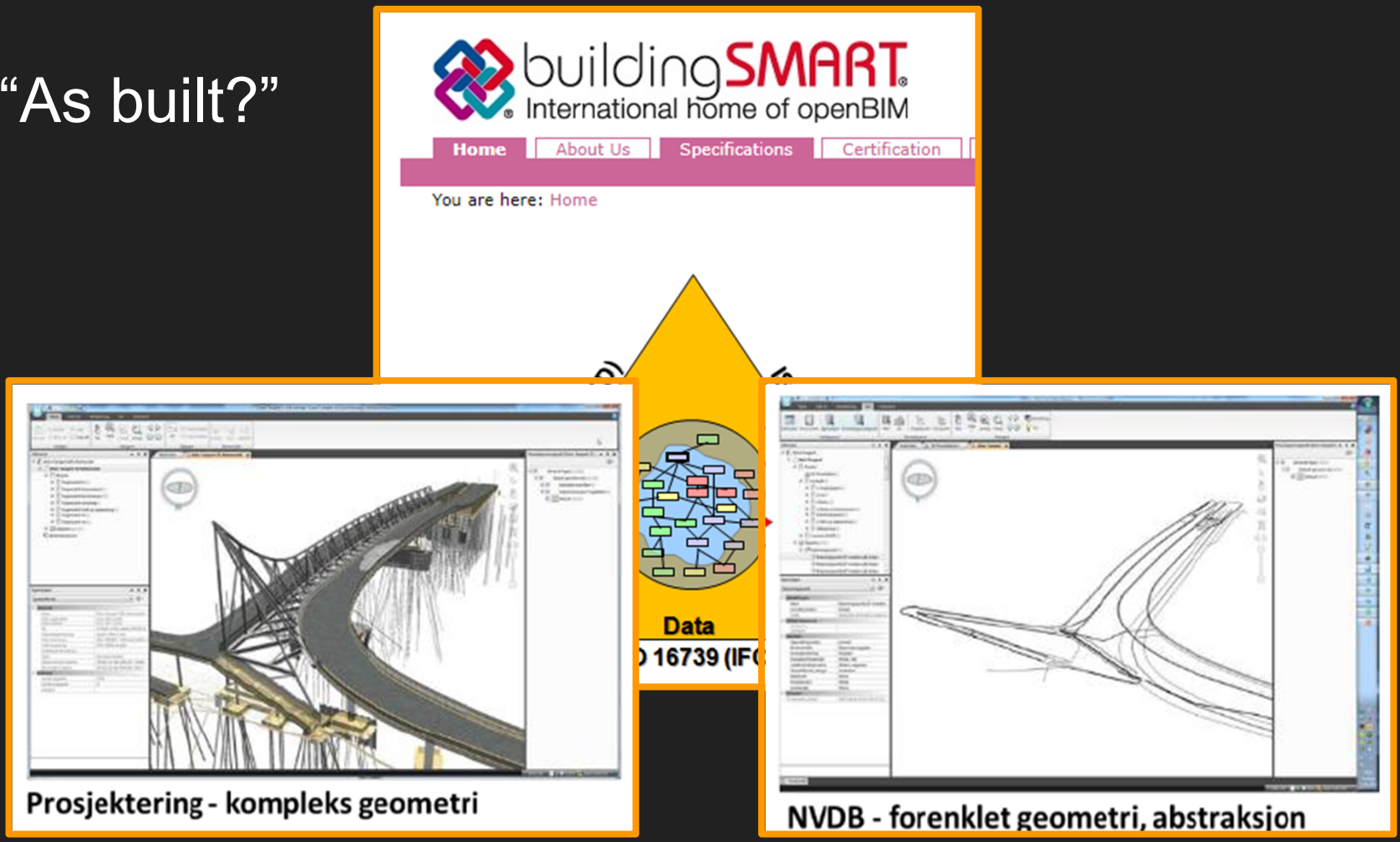
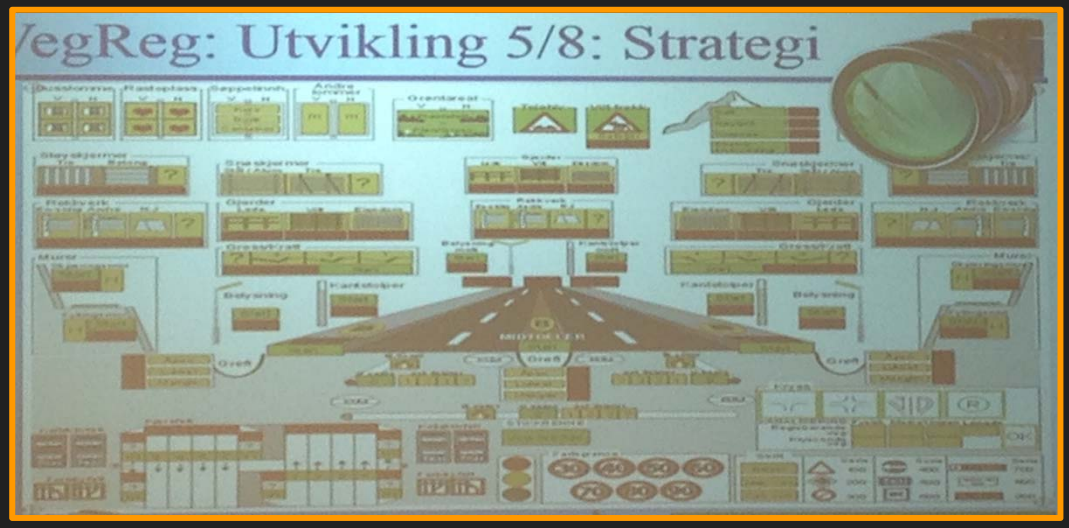


“As built?”

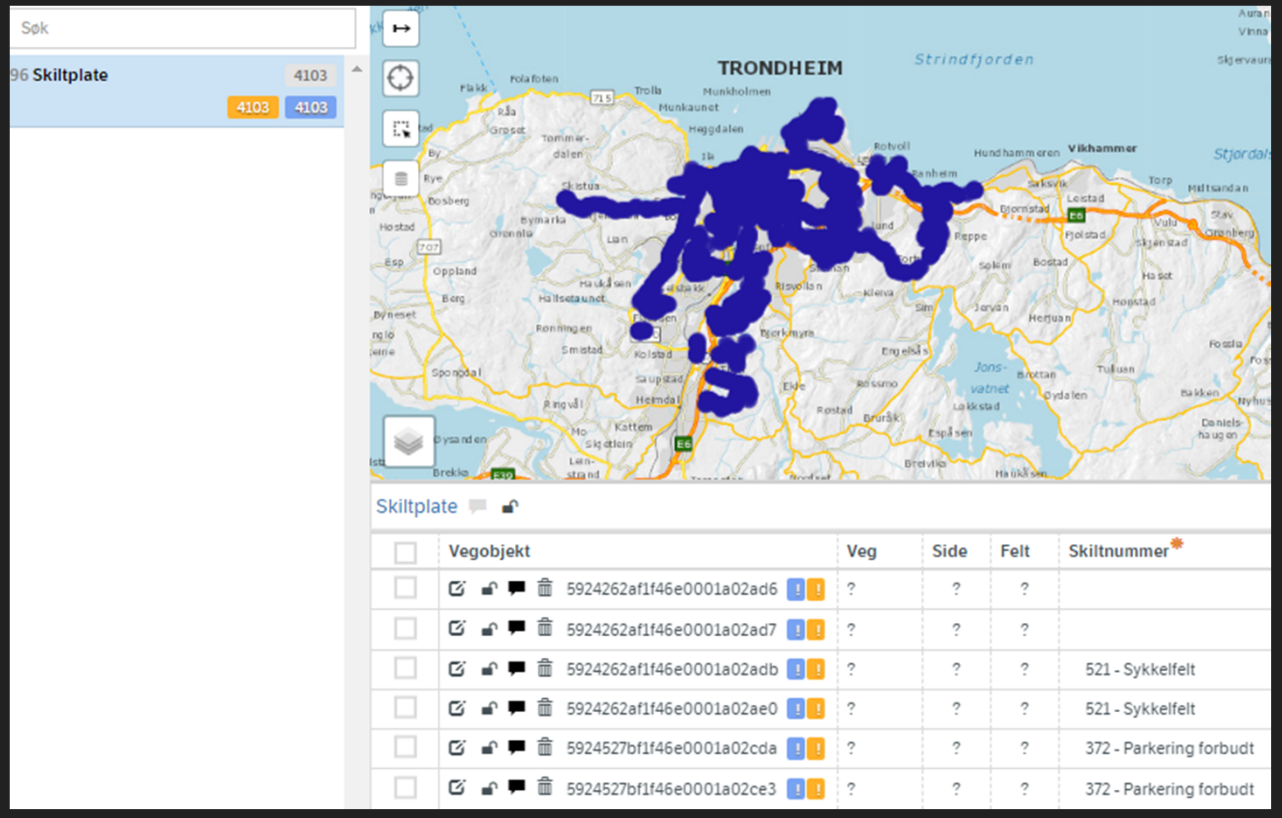

buildingSMART
International home of openBIM
Home
About Us
Specifications
Certification
You are here: Home
Data
16739 (IF
Prosjektering - kompleks geometri
NVDB - forenklet geometri, abstraksjon

Registration in retrospect?

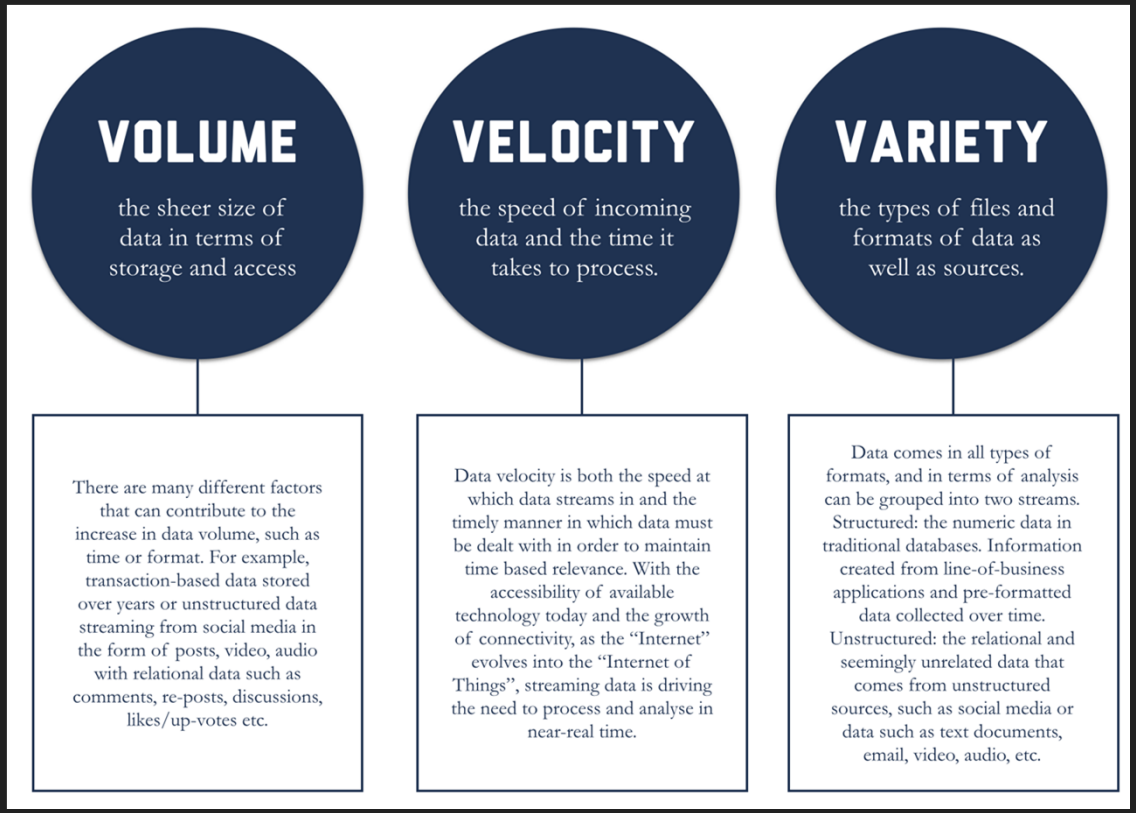
Vegreg



Today?


Søk
96 Skiltplate 4103
4103 4103
TRONDHEIM
Strindfjorden
Skiltplate
Vegobjekt
Veg
Side
Felt
Skiltnummer
5924262af1f46e0001a02ad6 ? ? ?
5924262af1f46e0001a02ad7 ? ? ?
5924262af1f46e0001a02adb ? ? ? 521 - Sykkelfelt
5924262af1f46e0001a02ae0 ? ? ? 521 - Sykkelfelt
5924527bf1f46e0001a02cda ? ? ? 372 - Parkering forbudt
5924527bf1f46e0001a02ce3 ? ? ? 372 - Parkering forbudt

Big data?


VOLUME
the sheer size of data in terms of storage and access
There are many different factors that can contribute to the increase in data volume, such as time or format. For example, transaction-based data stored over years or unstructured data streaming from social media in the form of posts, video, audio with relational data such as comments, re-posts, discussions, likes/up-votes etc.
VELOCITY
the speed of incoming data and the time it takes to process.
Data velocity is both the speed at which data streams in and the timely manner in which data must be dealt with in order to maintain time based relevance. With the accessibility of available technology today and the growth of connectivity, as the "Internet" evolves into the "Internet of Things", streaming data is driving the need to process and analyse in near-real time.
VARIETY
the types of files and formats of data as well as sources.
Data comes in all types of formats, and in terms of analysis can be grouped into two streams. Structured: the numeric data in traditional databases. Information created from line-of-business applications and pre-formatted data collected over time. Unstructured: the relational and seemingly unrelated data that comes from unstructured sources, such as social media or data such as text documents, email, video, audio, etc.

«Strategi for digitalisering»

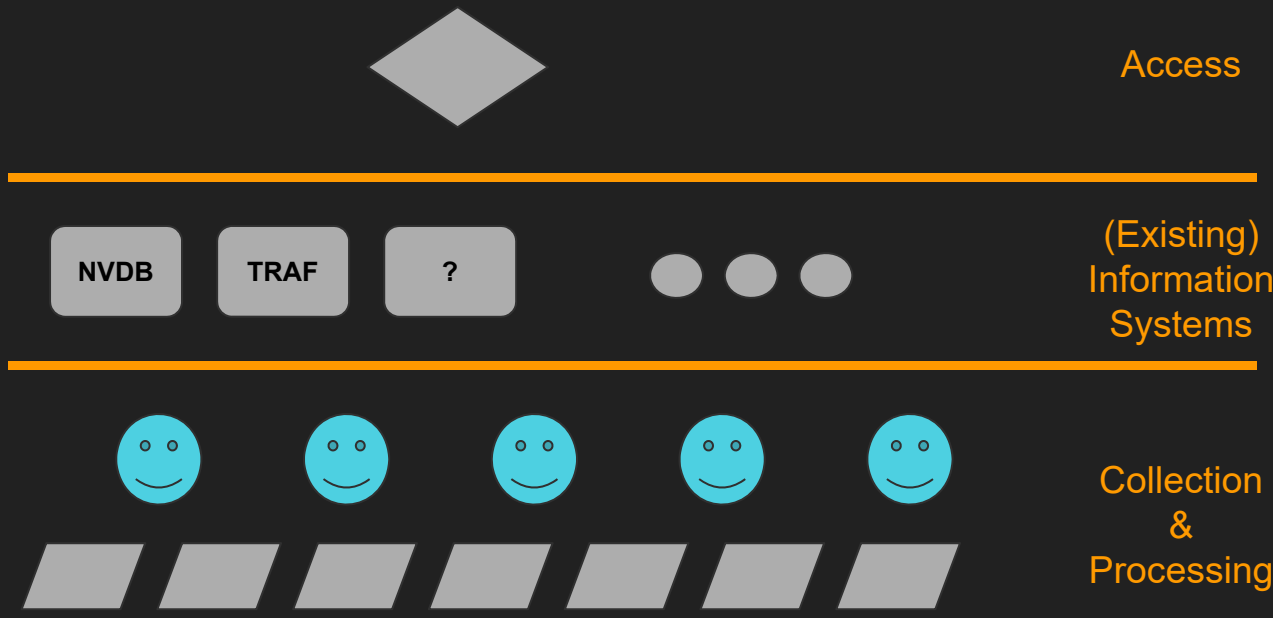
Vi skal bygge, vedlikeholde og drifte et «digitalt vegnett» som sikrer mulighet for automatisert trafikkstyring, automatisert kjøring og transportløsninger (varedistribusjon i by) og mobilitet som tjeneste* (hovedsakelig i byområder).

Vi skal utvikle en myndighets- og regulatorrolle i et helhetlig intelligent transportsystem. Dette innebærer at vi skal etablere en plattform for datainnsamling, forvaltning og formidling som sikrer:

- Effektiv datafangst fra ITS og annet vegkantutstyr som bl.a. autopasspasseringer.
- Utnytter eksterne datakilder som kjøretøy, telecomoperatører, f.eks Google og andre aktører.
- Håndterer sanntidsinformasjon og løpende analysering av data.
- Predikasjon av hendelser.
- Effektiv datautlevering (ikke sporbar/anonymisert).

Platform for collecting “all” data?

RoadNet Services



Data collection

- Common platform for data-collection
- No assumptions about format
  - E.g. use internet standards: Mime-types?
- Keep data “forever”
  - We may not be able to utilize them today, but maybe tomorrow?
  - Traceability

Data processing

- Autonomous agents
  - Stand-alone
  - Automatic?
- Autonomous?
  - “Chain” of simple processors
  - Pipeline or black-board architecture
  - Easily extendable
- Apply confidence-metrics in processing and application
  - Different applications require different data quality
- Tag’ing
  - Standard set of tags vs flexibility?
  - Minimal set of tags, e.g:
    - Location
    - Time
    - Confidence
    - Access-restriction / accessibility
  - Application specfic