

Size doesn't matter – Small cities can be smart too

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*Smart Cities Conference
National University of Political Science and Public Administration
Bucharest , December 8th – 9th*



Smart cities

- Smart city is a concept
- Most definitions includes the use of computer technology
- Main objective is to improve quality of life for its citizens
 - Provide better services
 - Reduce environmental footprint, sustainability
 - Facilitate participation



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Smart cities

“Projects of smart cities have an impact on the quality of life of citizens and aim to foster more informed, educated, and participatory citizens.

*Additionally, smart cities initiatives allow members of the city to **participate** in the governance and management of the city and become active users”*



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Smart cities

Some application areas:

- Communication
- Culture
- Energy
- Environment/climate
- Health
- Tourism
- Transport



Key question

- Does a city need to be large to be smart?
- Of course not!
- Most issues are also relevant for smaller cities.

Smaller Smart Cities

- I will try to answer the question by some questions:
 - Will a small city benefit from citizen participation?
 - Does a small city have parking problems?
 - Is environment and climate only an issue in large cities?
 - Is quality of life important in small cities?



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Size doesn't matter

- Most issues are just as important for citizens in small cities
- In literature it seems that large cities are dominant in smart city projects and research papers
- Smart city research is relevant also for smaller cities



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Holmestrand, Norway

- Population approx. 10.500
- Urban planning to build more dense around public transport stops
- Two level city: New elevator to provide access to railway station
- Upgrade of harbor area to increase attractiveness and quality of life



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Holmestrand, Norway

- Plan to reduce environmental footprint
- Home care uses electric cars
- Free charging stations
- Buses and garbage trucks run on biofuel
- Intelligent street lights
- Nursing home heated by underground heat-exchange



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Holmestrand, Norway

- Adoption of assistive technology to help citizens live in their own homes despite medical conditions

Holmestrand, Norway

- All policy proposals to city council includes section on environmental consequences
- Upgraded electronic services
- Transparency – webcasts
- Digital services - maps



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The Role of Citizens

Citizens can have different roles in the smart city:

- **Political processes and decision-making**
- Experts (sharing insight)
- Volunteers (sharing time)



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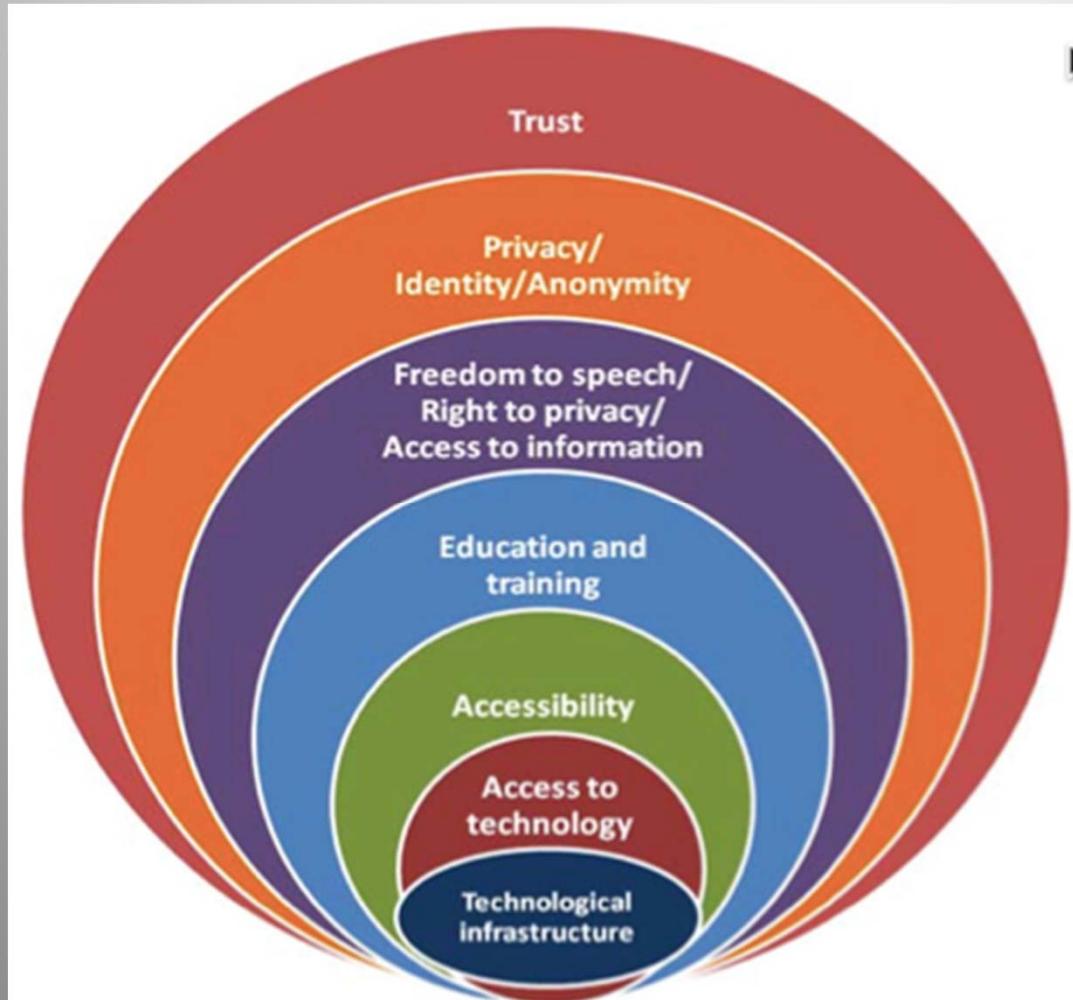
Political participation

- In order to take active part in policy-making and political processes, the citizens need access to information
- *The transparent smart city*



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Preconditions for participation



This model was presented at ICDS 2010
Berntzen, L. & Karamagioli, E.
Regulatory Measures to Support eDemocracy
IEEE Computer Society

Preconditions for user participation and involvement

Transparency

- Documents
- Meetings
- Processes
- Benchmarking
- Decision-makers and their agendas
- Disclosure



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Documents

- Access to documents used in the political decision making processes
- Mail records

Meetings

- Agendas
- Proceedings (webcasts)
- Minutes



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Meetings

Møteplan 2. kvartal 2016

Du ser her en liste over alle møtene det er sendt ut innkalling til, ordnet etter utvalg og ukenummer. Dersom du klikker på et ukenummer, får du en liste over alle møtene den uken, og ved å klikke på et møte får du mer informasjon om det.

Utvalg	14	15	16	17	18	19	20	21	22	23	24	25	26
<u>Administrasjonsutvalget</u>								X					
<u>Eldrerådet</u>					X			X					
<u>Formannskapet</u>			X					X					
<u>Hovedutvalg for drift, eiendom og næring</u>			X					X			X		
<u>Hovedutvalg for helse, oppvekst og velferd</u>			X					X					
<u>Klagenemnd</u>								X					
<u>Klagenemnd eiendomsskatt</u>													
<u>Kommuneplanutvalget</u>				X									
<u>Kommunestyret</u>						X							X
<u>Kontrollutvalget</u>	X												
<u>Legatstyret</u>					X				X				
<u>Råd for mennesker med nedsatt funksjonsevne</u>					X				X				
<u>Sakkyndig nemnd eiendomsskatt</u>					X	X							
<u>Valgstyret</u>													

[Forrige kvartal](#) | [Neste kvartal](#)



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Webcasting

Direktesending **Bystyret**

Tittel: Anskaffelse av robuste boliger for vanskeligstilte
Utvalg Bystyret
Sted: Rådhuset 20.04.2016 - 18:30
Saksnr: 045/16/16

Bystyret 20.04.2016

- Rapportering lavterskel kafè rusavhengige, boligsosial..
- Mottatt innsgjelse til område D12 Barkåker syd i komm..
- Kommuneplanens arealdel 2014-2026 - PlanID 0704 99007 ..
- Mindre justering av kommunegrensen mellom Stokke og Tø..
- Godkjenning av møtebok
- Referatsaker
- Kommunedelplan for dobbeltspor Nykirke - Barkåker, Pla..
- Interkommunal kommunedelplan for gange, sykkel og koll..
- Detaljregulering av Åsgårdstrandsveien 402. PlanID 070..
- Anskaffelse av robuste boliger for vanskeligstilte
- Avskrivning av tap på fording - konkursbo Conradis AS
- Tønsberg kontrollutvalg - årsrapport 2015
- Plan for forvaltningsrevisjon 2016 - 2019.
- Nordbyen Nedre. Innføring av boligsoneparkering.
- Godkjenning av etablering av Klokkeråsen barnehage
- Handlingsplan vold i nære relasjoner - over 18 år
- Kommunereformen. Status og vurderinger fra Tønsberg ko..



II 172:15 192:58 ↻ ↺ ↻ ↺

Kameravalg Salen Multikameravisning

Vedlegg:
Ingen vedlegg

Send på epost   v3.0.17

Løsningen levert av: **Aventia AS**
2016



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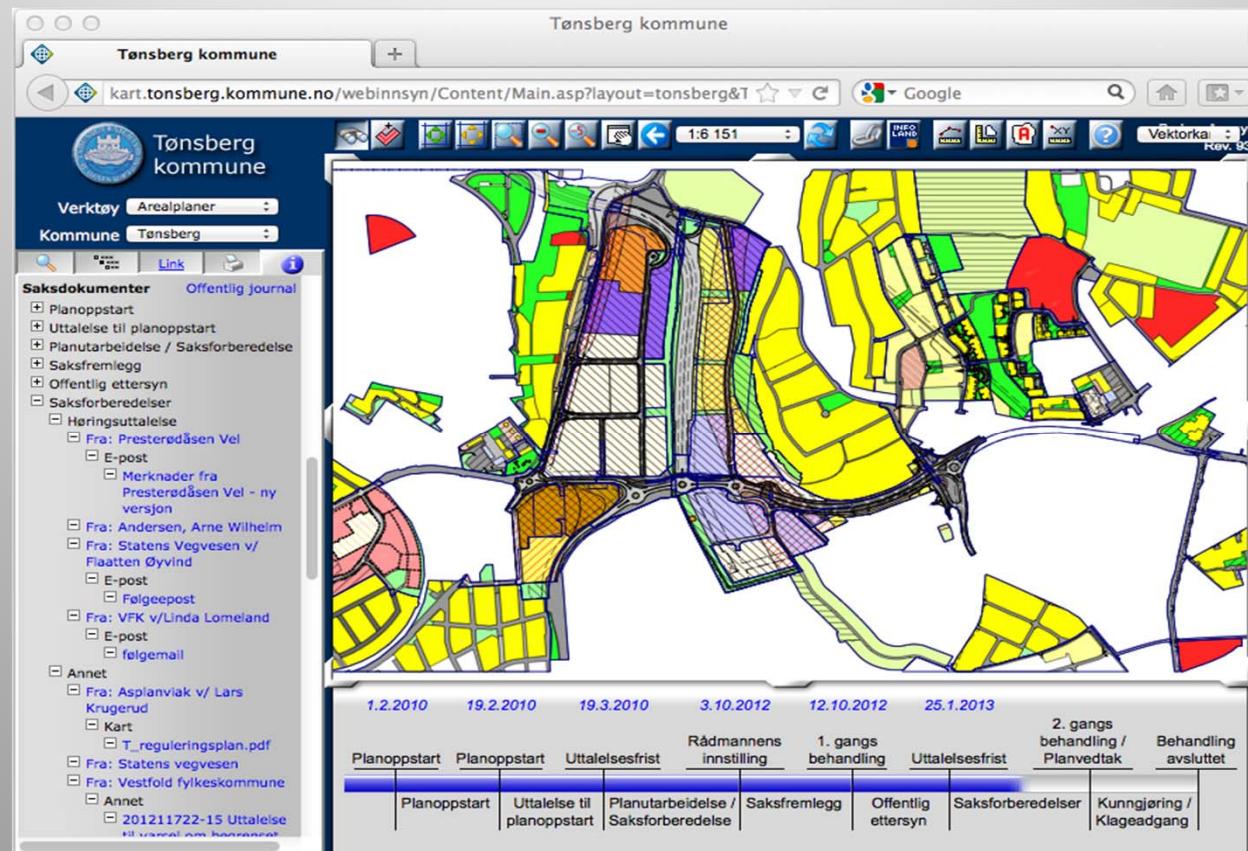
Processes

- It is important for citizens to understand the processes leading to the decisions
- Processes may be visualized as a flowchart
- Timeline



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Digital Planning Dialog



<http://nett.vregjeringen.no/digitalt-planregister-og-plandialog>

Benchmarking

- The possibility to compare how the city is doing compared to other cities.
- Indicators



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KOSTRA

Grunnskoleopplæring - KOSTRA

Lag egne tabeller og figurer

1 Velg tabell som inneholder de variablene du ønsker ➤ 2 Velg verdier fra ulike variabler ➤ 3 Se din skreddersydd tabell, eksporter eller lagre

Tabell: 04684: D. Grunnskoleopplæring - nivå 3 (K)

[Logg inn](#)

	2010	2011	2012
0701 Horten	236 984	243 098	277 328
0702 Holmestrand	96 574	105 422	104 880
0704 Tønsberg	387 122	409 789	420 104
0706 Sandefjord	473 984	475 373	503 471
0709 Larvik	428 291	427 949	437 900

Fotnote(r): En generell kompensasjonsordning for merverdiavgift innført fra 1.1.2004 kan føre til brudd i tidsserien fra 2003 til 2004 i ulike regnskapsbegreper. Ordningen vil kunne innebære reduksjon i netto driftsutgifter totalt, netto driftsutgifter på funksjon/tjenesteområde, korrigerte brutto driftsutgifter totalt, korrigerte brutto driftsutgifter på funksjon/tjenesteområde og brutto driftsutgifter på funksjon/tjenesteområde eller økning i brutto driftsinntekter på funksjon/tjenesteområde. For nærmere forklaring henvises til Faglig veiledning kapitlene 2B - 2E.

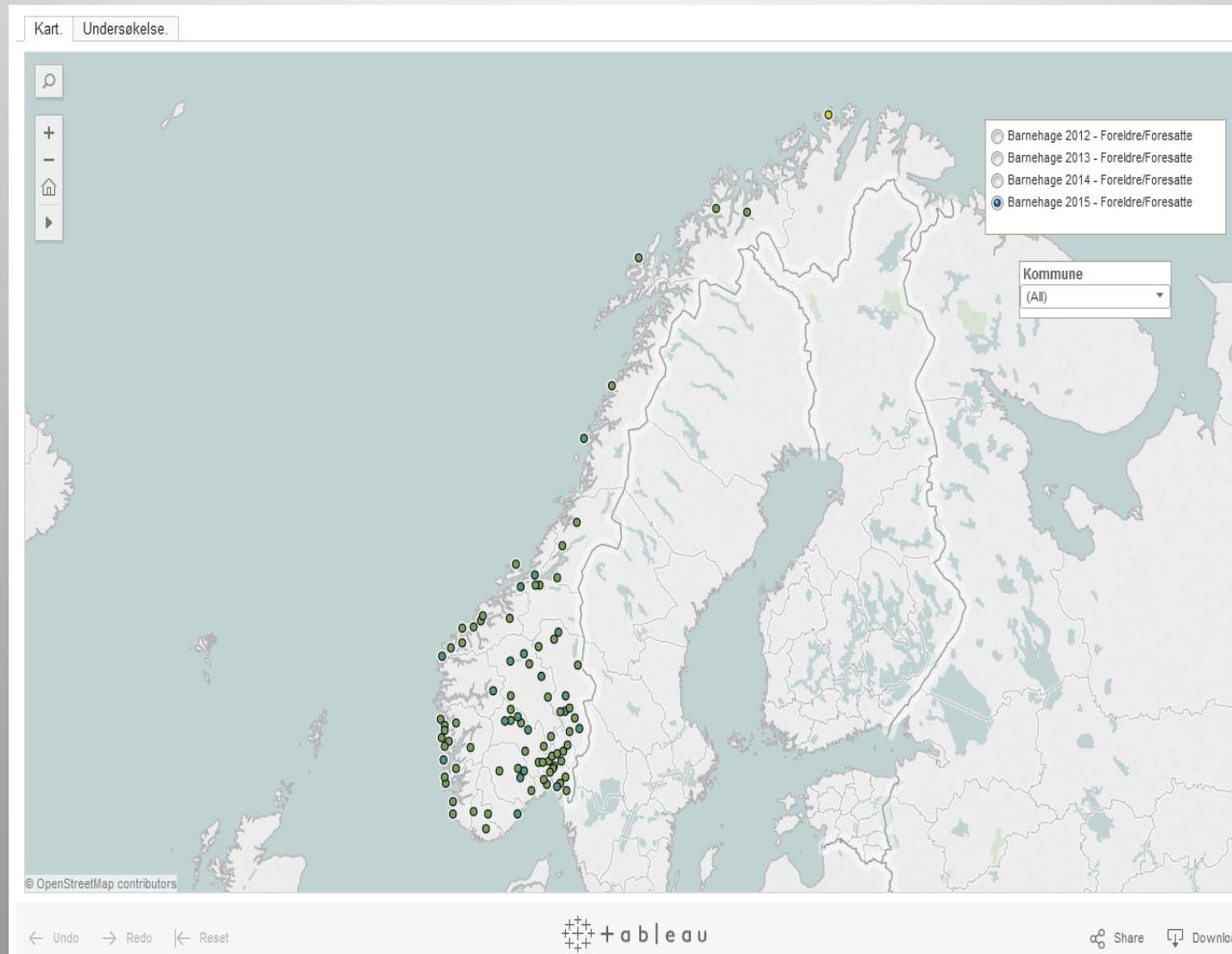
Funksjon 383 for musikk- og kulturskoler er flyttet fra tjenester for grunnskole til tjenester for kultur f.o.m 2001

[Vis i eget vindu](#) [Skriv ut](#)



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BedreKommune.no



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Decision makers

- The personal interests of decision makers should be known to the citizens



Register of interests

STYREVERVREGISTERET

|Skriv ut | Sidekart

SØK SØKETIPS FORMÅL OM REGISTERET SUPPORT REGISTRERING PRESSE KONTAKT OSS

Du er her: tirsdag, 16.apr 2013

Søk

Her kan du gjennom søk i kommune, fylkeskommune eller kommunalt eid selskap søke på personer i kommunal sektor og se deres ulike roller som blant annet folkevalgt, ansatt, styreleder, styremedlem, oppdragstaker og innehaver av andre næringssinteresser.

Styrevervregisteret er et verktøy som KS tilbyr kommuner, fylkeskommuner og kommunalt eid selskaper å ta i bruk. Det er frivillig om den enkelte kommune, fylkeskommune eller kommunalt eid selskap vil knytte seg til Styrevervregisteret, og om man vil benytte seg av alle mulighetene registeret gir. Det er videre også frivillig om den enkelte personen i kommunen, fylkeskommunen eller kommunalt eid selskap ønsker å la verv og økonomiske interesser om seg selv bli registrert. Styrevervregisteret vil derfor ikke gi en fullt ut dekkende oversikt over alle verv og økonomiske interesser personer i kommunal sektor har.

Navn: Kjendlie, Karen Anne

Kontakt oss:
styrevervregisteret@ks.no

Registrerte politiske verv, ansettelsesforhold samt andre verv og interesser:

TYPE INTERESSE	BESKRIVELSE
Folkevalgt, fast	VESTFOLD FYLKESKOMMUNE, Høyre
Utvælg	Medlem, Hovedutvalg for utdanning, VESTFOLD FYLKESKOMMUNE, Høyre
Utvælg	Medlem, Fylkesutvalg, VESTFOLD FYLKESKOMMUNE, Høyre
Utvælg	Medlem, Fylkestinget, VESTFOLD FYLKESKOMMUNE, Høyre
Folkevalgt, fast	Tønsberg kommune, Høyre
Styremedlem	Psykiatrien i Vestfold HF, far godtgjørelse. Nestleder i styret
Styremedlem	Sykehuset i Vestfold HF, far godtgjørelse.
Styremedlem	Oslofjordfondet RFF, far godtgjørelse. Regionalt forskningsfond
Styreleder	Gea Norvegica Geopark IKS, far godtgjørelse.

Ingen ytterligere verv/interesser registrert.

[Nytt søk](#) [Tilbake til søkeresultatet](#)

© Styrevervregisteret

Informasjon om informasjonskapsler.



Kontakt oss:

styrevervregisteret@ks.no

Disclosure

- Citizens should be able to ask for information regarding the running of the city.



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Information

- Information (and Transparency) is important, not only for the citizens, but for city employees, the press etc.
- **No real participation without informed citizens**



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Political Participation

- In my opinion, the “smart city” should listen to its citizens, since they sometimes have concerns that should be taken into account
- At the same time, we have to be realistic. Not all citizens have opinions on everything
- In their book “Stealth Democracy”, Hibbing and Theiss-Morse from USA support this



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“Stealth Democracy”

- *“The last thing people want is to be involved in more decision making: They do not want to make political decisions themselves; they do not want to provide much input to those who are assigned to make these decisions; and they would rather not know all the details of the decision-making process.”*
- Hibbing and Theiss-Morse build on empirical data from U.S.A.



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The Role of Citizens

Citizens can have different roles in the smart city:

- Political processes and decision-making
- Experts (sharing insight)
- Volunteers (sharing time)

Non-political participation



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Mobilization

- The smart city may use information technology to mobilize citizens to help making the city a better place to live
- I will now show a couple of practical examples on how this can be done



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Human sensors

- A “human sensor” is a person that observes some issue and reports it using some platform.
- Smart phones



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Green Watch Project

- The project distributed 200 smart devices to citizens of Paris. The devices sensed ozone and noise levels as the citizens lived their normal lives, and the results were shared through a mapping engine
- The project showed how a grassroots-sensing network could reduce monitoring costs dramatically, and at the same time engage citizens in environmental monitoring and regulation



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FixMyStreet

- FixMyStreet is an application that allows citizens to report on issues and problems through their computer or smart phone
- The application is location based, it uses the address or GPS coordinates as a tag to show the exact location of the issue or problem. Typical problems are holes in the road, broken light bulbs in street lightning, abandoned vehicles, broken water pipes etc.



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FixMyStreet

- FixMyStreet mobilizes citizens to alert the city administration when something needs to be fixed
- The application also provides feedback on status.
- It is possible to see how fast (or slow) the city is responding to reported problems



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FixMyStreet

- FixMyStreet is widely used in United Kingdom, but the software itself is open source, and has been adopted by cities all over the world. In Norway, the application has been translated into „FiksGataMi“
- In this case the citizens are acting as „human sensors“. They observe something is wrong and report it



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FixMyStreet

FiksGataMi

Rapporter et problem Dine oppdateringer Alle rapporter Lokale varsler Hjelp FORENINGEN NUUG

Manglende skilting ved kryssing av gangvei øvers i Torsrudveien

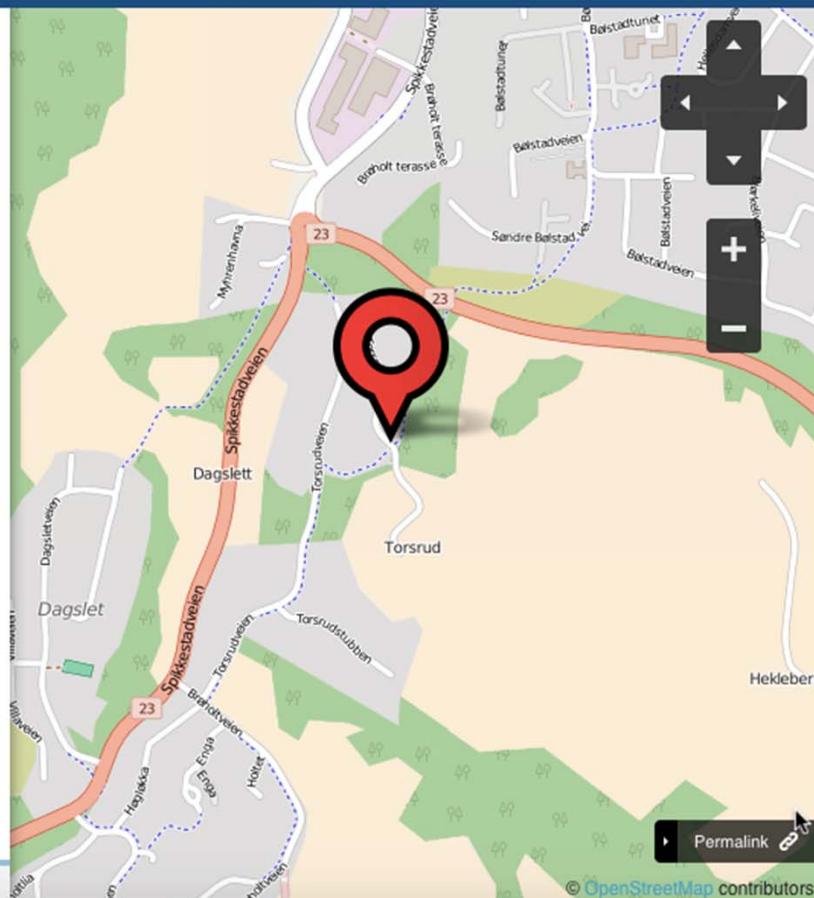
Rapportert i kategorien Trafikkskilter anonymt 16:00, mandag
Sendt til [Røyken](#) og [Statens vegvesen region sør](#) 5 minutter senere

Det er ingen skilt i Torsrudveien for bilister som krysser den. Bilveien går rett over gangveien, og det er fare for syklende og gående, særlig skolebarn. Fartsdumpen er kun på den ene siden og for langt unna, slik at bilene gir gass etter den og over gangveien.

Det er mye biltrafikk over dette gangveikrysset og farten er ofte høy.

Her trengs det tydelige skilt som forteller at man krysser en





Rapporter misbruk Få oppdateringer Problemer i nærheten



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Conclusion

- Participation is more than **political** participation
- Researchers have been too concerned with political engagement
- But participation is more than politics, it can be used to build better services and achieve better quality of life for the citizens



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Thank you for listening

If you are interested, please stay in touch

lasse.berntzen@hbv.no



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