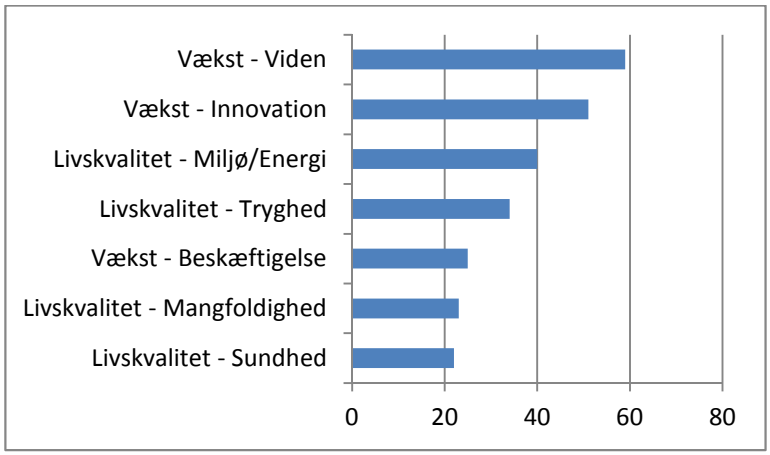
TM82B4 - Anvendelsesområder (use cases)

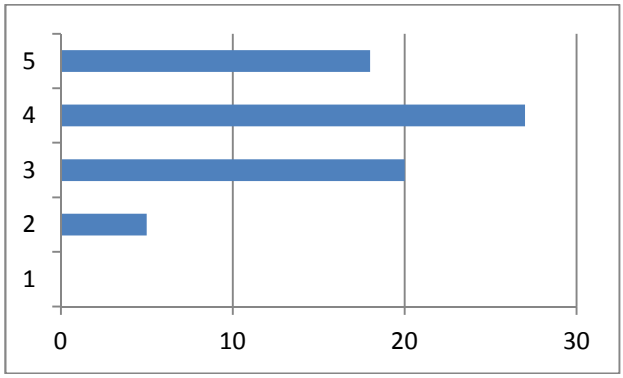
Oversigt over hvordan use cases på baggrund af Copenhagen Connecting fordeler sig på henholdsvis områderne i Københavnerfortællingen; Københavns Kommune forvaltninger; relationer til stat, region, kommune, virksomheder, vidensinstitutioner, borger; produktivitets / effektiviserings potentiale ; samt business potentiale.

Københavnerfortællingen



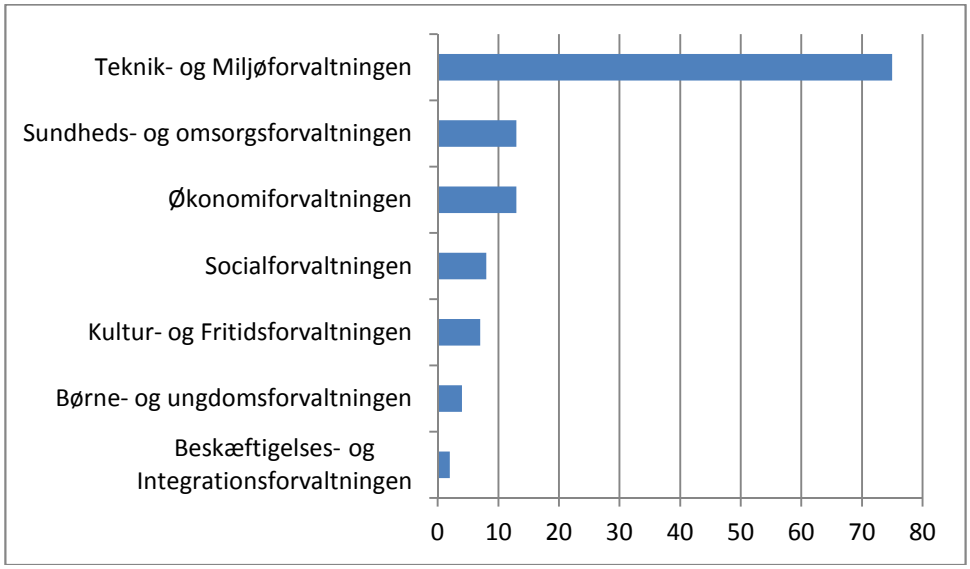
Vækst - Viden	59	23 %
Vækst - Innovation	51	20 %
Livskvalitet - Miljø/Energi	40	16 %
Livskvalitet - Tryghed	35	13 %
Vækst - Beskæftigelse	25	10 %
Livskvalitet - Mangfoldighed	23	9 %
Livskvalitet - Sundhed	22	9 %

Produktivitets / effektiviserings potentiale (1 lav; 5 høj)



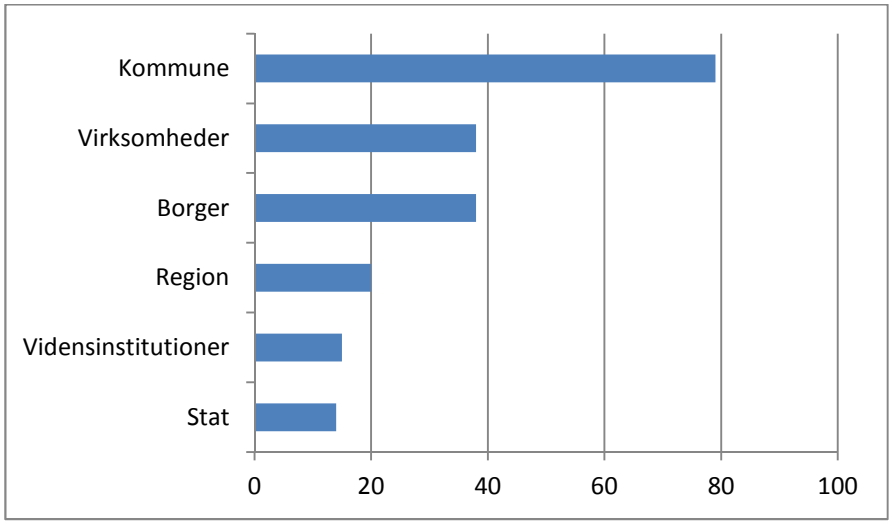
1	1	1 %
2	4	5 %
3	19	24 %
4	31	39 %
5	18	23 %

Københavns Kommune forvaltning



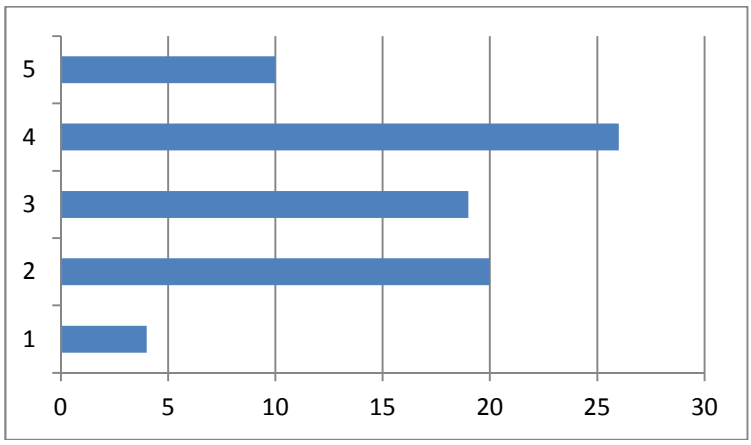
Teknik- og Miljøforvaltningen	75	62 %
Sundheds- og omsorgsforvaltningen	13	11 %
Økonomiforvaltningen	13	11 %
Socialforvaltningen	8	7 %
Kultur- og Fritidsforvaltningen	7	6 %
Børne- og ungdomsforvaltningen	4	3 %
Beskæftigelses- og Integrationsforvaltningen	2	2 %

Stat, region, kommune, virksomheder, vidensinstitutioner, borger



Kommune	71	36 %
Virksomheder	38	19 %
Borger	38	19 %
Region	20	10 %
Vidensinstitutioner	15	8 %
Stat	14	7 %

Business potentiale (1 lav; 5 høj)



1	4	5 %
2	20	25 %
3	19	24 %
4	26	33 %
5	10	13 %

Bilag 5

Samling af 79 use cases, som anvender forskellige elementer af Copenhagen Connecting. Kilder er primært TMF og DTU, hvorfor det forventes, at der er mange use cases for andre forvaltninger, der endnu ikke er afdækket.

Mobile networks data offloading	Infrastructure as a Service (IaaS). The city grid allows up to 256 SSID's; these could be sold to the telecom industry. Using the industry adopted IEEE 802.11u / hotspot 2.0 standards this allows for seamless switching between mobile networks and Wi-Fi during telephone calls and internet browsing. Less need for Femtocells and additional mobile antennas in the city.
Behavioral analysis and location based services	Ability to sell aggregated, anonymous data to private companies based on accurate flow data throughout the city. Location-related data and more detailed raw data can be sold to private stores and restaurants for use in their marketing ex. where are their customers originating from and where do they live in the city. Location based services can offer push messages to citizens about just-in-time special offers in the area. Finished analyzed data that is combined with other relevant data sources could be valuable for the assessment of where to open a new restaurant or store and its likely profitableness based on historical data about the behavior in that area and knowledge from the opening of other similar restaurants.
Optimized traffic flow	Using triangulation, the city's traffic can be monitored in real time throughout the city. Using this 'big data' set in combination with mathematical algorithms in an intelligent traffic control system (ITS) allows continuous monitoring and control of the city's traffic flow in real time, pedestrians, bikes and cars. If the ITS

	system spots possible congestion issues on the main streets, it automatically delays incoming cars slightly so that a continuous load of only 80 % of the street's capacity is maintained. Or it guides drivers through the city using only the less congested streets to lower travel time. Furthermore, data collected over a period of time can be used for general traffic-, maintenance- and capacity-planning purposes for further optimization. Current predictive model-based planning tools take years to refine whereas this setup is expected to give real valuable insight from day one. Based on historical aggregated data based on route patterns of the individual vehicles the ITS system can predict route patterns and making green light, this is especially useful during off peak traffic hours.
Dynamic pricing of parking	With the current traffic situation known at any time, it suddenly becomes possible to dynamically adjust parking prices as a way to control the traffic flow into the city. When almost all parking spaces in a given area are occupied, the price is raised in that area while lowered in adjacent areas with more available parking spaces to guide traffic to that area. With a smart phone app, road users are guided to an area near their destination that has the highest number of free parking spaces.
Roadpricing, parking payment & free parking space data	Making it mandatory for all cars driving into the city to have a low-cost passive or active RFID sticker in front window will allow for low-cost road pricing services. The setup works in synergy with optimized traffic flow control. Triangulation can detect where cars are parked enabling parking space services. The city grid provides a data infrastructure letting drivers pay for the services using their smartphone's (road pricing & parking). Dynamic road pricing would also make it possible to charge drivers for their use of the roads based upon their car (weight, pollution etc.).
Low cost communication in the field for fixed assets	Currently, all assets throughout the city that need a data connection (traffic lights, electronic road signs, parking meters, etc.) rely on a SIM-card and a data subscription with TDC. By having a city wide network we take control of these data connections in a green and cost effective way - no need for expensive subscriptions and power consuming mobile units. This also opens up for data connection in assets, where it was previously economically unwise (due to subscription costs) and technically impossible.
Traffic and Emergency Management Control Room	The creation of a massive amount of 'big data' supports a truly holistic overview of the state of the city from live traffic updates from roads, busses and emergency services, to forecasting and handling different events in and around the city. Having a shared infrastructure allows true cooperation between the operators in the city such as Movia, DSB, Metro, HOFOR and police-, emergency- and fire services.
Cheap and green asset	A city wide digital infrastructure enables green and cost effective asset tracking. Active or passive RFID tags can be installed in all the Municipality's non-fixed

tracking	assets (cars, containers, trash bins, trucks etc.) for 20-30 kr. per unit and with battery life for up to 2-3 years. No more searching for the container that a colleague placed somewhere in the city without telling anyone. If combined with a motion sensor or via triangulation, the RFID tag alerts the Municipality or the police if a container is moved or opened in the middle of the night. Imagine the potential in offering low cost, low power asset tracking throughout the city as a service to private companies as well!
A theft prevention system that works	A city wide digital infrastructure enables low cost tracking of e.g. bikes. By installing a simple, low cost RFID tag on a bike, it is possible to monitor its position throughout the city. It's even possible to get a notification if your bike is moving and you (your smart phone) are nowhere near. Fewer bikes would be stolen and bike insurance would become cheaper! This concept would of course work for other theft prevention systems as well (cars, motor bikes, hand bags, wheel chairs, and strollers). This kind of security could also be used on fixed elements such as public buildings, private buildings and work in coloration with the police, insurance companies etc.
Truly mobile and digital fleet of workers	With a city wide network the employees of KK would be truly mobile. Anywhere in the city a high speed connection with access to internal systems would be available without mobile operator restrictions or costs. We would be in full control. Consider what this would mean for the employees that spend all of their work days on the streets supervising stores, building sites, bridges, roads etc. - employees that now are offered only limited digital tools and rely on paper based note taking followed by redundant data entering back in the office. This would truly change the way we run the city.
Health monitoring of patients, disabled and elderly in their home	Using consumer-available units worn e.g. around the wrist (NIKE FuelBand, FitBit etc.) for monitoring the health conditions of patients or elderly at home, unnecessarily stressful traveling can be avoided, patients can stay at home in their preferred environment and hospitals are less occupied. With an intelligent patient monitoring system, 'early warnings' can be set off if a patient's vital signs change significantly, this alerting the nearest caretaker for quick response. Detection of falls (using e.g. the device's built in gyroscope would provide increased security for elderly or disabled citizens). Two-way communication could be built in; "John, it's time to take the blue pill" with vibration and audible alert directly from the wrist band. The city wide network would provide a low cost infrastructure for all this - a small network unit placed in the window will create a connection between the citizen and the hospital with no need for costly mobile subscriptions.
Low cost tracking of dementia patients	With a small and low cost RFID tag e.g. worn around the wrist or sewn into their clothes, dementia patients can be tracked. If they leave a predefined area, the staff is alerted and if they somehow still leave the area, they can easily be found

	again using the city wide network. This gives increased security for staff, patients and family and reduces the need for expensive police- and helicopter SAR missions. The same scenario could be applied for small children in kindergartens - Smartphone push messages to personnel if children leave the playground.
Low cost, low power sensor platform	Using the city grid as the backbone infrastructure, low cost and low power sensors (e.g. ZigBee, Arduino, Ninja Blocks or standard Wi-Fi freq.) can be implemented in different locations around the city. These sensors provide both real time and historical 'big data' on almost unlimited parameters of the city. It can also be a tremendous driver for innovation, as private partners, researchers, cleantech companies and citizens can get access to the infrastructure to develop and test new solutions. With this 'big data' knowledge and Internet of Things an insight into the 'live state' of the city at all times, dangerous situations can be avoided, citizens can be alerted, cost of maintenance can be reduced, things affecting citizens can be detected and proactively taken care of before the citizens even get a chance to complain and much more.
Improvements to Rejsekort	Wi-Fi base stations could be installed at all major public transportation stations with no need for travelers to check in/out of the transportation systems using their Rejsekort. The city grid will register and calculate the correct pricing between the start and end destination based on the Wi-Fi MAC-address on the smart phone that are registered to the travelers, either seamless or with push notifications to verify correct travel registration. The systems could also improve the standalone Rejsekort that holds a NFC chip and based on triangulation the system could detect whether the traveler is starting, in transit or ending a journey. It would be completely without the need for interaction from the traveler.
Monitoring of water and energy consumption in buildings	With the city grid, all buildings would have a common infrastructure for communicating consumption data with energy providers, and energy providers would have a city wide network for controlling or automating buildings' energy consumption. This would provide both valuable 'big data' about the state of buildings in real time, data collected over time would give insight into energy consumption patterns for the whole city as well as make the buildings' energy consumption patterns much more dynamic based on data about weather, energy prices etc.
App contests and innovation platforms spur innovation and growth	When increasing the amount of open data being collected, stored, processed and distributed, a whole new world of opportunities will open up: Innovative citizens and companies helps invent new and smart ways of solving the issues related to running a big city. Based on open date on traffic, developers can create innovative parking solutions that reduce search traffic in the city. With data on spare food being thrown in the garbage by restaurants and food stores, developers can identify the potentials in minimizing food waste or in collecting

	surplus food for social benefits e.g. for homeless citizens. Data on schools and education might result in apps that teachers can use for educational purposes or apps that help the City lower the cost of running public schools. Open data on cultural sites throughout the city would allow developers to create smart phone based tourist guides on various themes such as historical Copenhagen or famous people living in Copenhagen. Data on the City's budget might result in innovative visualizations and give the citizens valuable insight into how their tax money is spent, the cost of upcoming projects divided on different categories or lets the City's decision makers benchmark their use of money against other municipalities. Open data has value and creates insight and solutions that create even more value!
Big data' on the city's flow of people	With a city wide digital network, it is possible to follow the city's flow - pedestrians, bicyclists, cars etc. - in real time. This big data set can be used in a number of ways, e.g. for traffic flow optimization where real time data for the entire city help avoid traffic congestion, for flow prediction where data collected over time help decision makers spot patterns in the way the city is used and through that optimize the city for the benefit of the citizens, live flow data can give police better insight into people movement during big events like football matches, concerts, Distortion, carnivals, demonstrations or riots - and much more. Flow data can be sold to commercial partners for optimization of retail stores based on the number or type of people passing trough different areas of the city.
Optimized work processes in the Municipality	Understøtter smartere arbejdsprocesser i Københavns Kommunes daglige opgaveplanlægning. Monitorering af tilstand i beholdere i byrummet (affaldsspande, regnvandsbrønde, kloakker, o.l.), tankanlæg, optimering af drift – mere grøn tømning.
Bike route planner killer features	With the large amount of data collected through the city grid, routing services like the newly developed ibikecph.dk bicycle route planner app could get a huge number of highly useable features for e.g. bicyclists; It can give you a dry ride through the city based on local weather and micro climate information, optimize your route for the current wind conditions, give you the fastest route based on current traffic conditions and road works or give you the least air polluted route for when you have your kids on board – amongst others.
Intelligent Parking meters	P-automater kan rapportere status af fx møntbeholdning, uden brug af et simkort og abonnement per automat (cirka 1.600 stk.).
Parking – handheld terminals	Nye P-håndterminaler, der ikke behøves have eget data abonnement.
Giv-et-Praj – added	Synergi til Giv-et-praj, øget præcision, øget viden om bymateriel, øget viden om

features and faster completion	nærmeste KK medarbejder med rette kompetencer, materiel og ressourcer.
Parking control	Løsningen kan innovere p-kontrol på forskellig vis samt beboerlicenser. Eksempelvis kan der installeres billige sensorer på alle gadeparkeringspladser, så status på alle p-pladser kendes i realtid. Biler med fx beboerlicens kan også automatisk registreres, så kontrol og fakturering kan tilpasses efter ønske.
Automatic calculation and billing of waste collection	Sensors in garbage collection facilities can detect the level of content and automatically bill the user based on weight or composition of the garbage collected.
Automatic park hydration control	Hydration of trees, bushes and park areas can be automated based on sensors monitoring hydration levels and actuators controlling the flow of water.
Tracking of dangerous waste or chemicals	Tracking og monitorering af beholdere med farligt affald som kommunen indsamler. Kan udvides som service til private og andre off. institutioner.
Increase road safety with car-to-car and car-to-infrastructure communication	Tovejskommunikation mellem biler og vejstrækninger, advarsel ved hårde opbremsninger forude, isdannelse på kørebanen (ud fra sensorer).
Micro climate forecasts	Meteorologiske studier på mikroniveau, forbedret lokal forecasting vedr. vejrforhold, der påvirker veje/trafik og hermed optimering af fx snerydningsindsats, sensorer på risikosteder for isdannelse på vejbanen.
Disaster and emergency management	Styring af tilgængelige ressourcer i krisesituationer, mulighed for høj grad af automatisering (mindre krise: hvor er nærmeste hjemmehjælper til ældre-alarm?/større krise: skybrud, storbrand, terror).
Intelligent street lighting	Belysning, der tilpasser sig behov, både realtid og give aggregeret data til input til nye belysningsregler og –principper.
Dynamic car sharing	Mere fleksibelt udlån af køretøjer, som man ikke er bundet op på bestemte parkeringspladser/cykelholdere, men kan parkere hvor det passer (indenfor specificeret område) og så får næste lejer besked om placering (kræver måske lidt mere buffer i lånetid).
Supporting research with cheaper data sources and better data	Infrastruktur der understøtter mange forskellige slags forskning ved at give validt datagrundlag, og billigere muligheder for at afprøve hypoteser i virkeligheden.
Crime investigation support	Støtte til opklaring af forbrydelser (mønstre i adfærd, asset tracking, åbne registrer for politi, o.l.) Støtte til opklaring af bortkomne personer (hvor er de sidst registreret, med

	hvem, hvor var de op til forsvinden (værtshus) o.l.).
Detection of illegal drugs or weapons in public spaces	Detektering af forbudte stoffer i luften (giftgasser, narkotika, sprængstof, våben) på højrisiko steder (offentlig transport o.l.).
Food health monitoring	Monitorering af faciliteter hos virksomheder, der tilbereder fødevarer til brug af Fødevarestyrelsen og evt. realtidsinfo til borgere (køle- og fryseskabe, luftfugtighed, luftkvalitet (forskellige gasser), rumtemperatur, o.l.).
Optimized citizen transportation via real time data	Mest effektive offentlige transport ud fra min placering, tid og destination og realtidsdata på lokalisering af toge, S-toge, og metro.
Connecting needs with services based on real time data	Automatisk videreformidling af behov mellem borgere i byen og private (fx info til taxiselskaber om stor samling af mennesker, der begynder at kommer ud fra spillested; eller info til Renhold om stor samling mennesker over længere tid på uventet sted, der at indikere øget behov for renhold).
Transportation services – food, medications etc.	Hvor er min pizza: tracking af udbringning af mad (offentlig og privat) med info om forventet levering til modtagere og melding når levering er x minutter væk. Mulighed for info om vibrationer på turen (fx ved transport af dyr vin), medicinudbringning (track hele vejen og minimer tyveri af visse typer medicin).
Garbage/waste sorting	Affaldssortering ud fra passive RFID tags i emballage, der registreres ved affaldsafhentning (afhængig af udbredelse af RFID i indpakning).
Fleet Management	Fleet Management, optimering af materiel-udskiftning m.v. Viden om alle køretøjer i kommunens eje; deres brug, brugsområder, tilstand - for at forudsige reparationer og udskiftninger, samt se muligheder for deling af køretøj med andre kommunale instanser i samme område med matchende brug på andre tidspunkter.
Detection of illegal vehicle use	Detektering af biler på vejene, der kører uden indregistrering. Monitorering via nummerpladegenkendelse eller via enhed i bil.
Screening af boliger for optimering af energiforbedringer.	Brug af Smart Meters - eller blot hyppige aflæsninger - giver mulighed for relativt let at finde ud af hvor det er mest tiltrængt med en energirenovering. DTU har udviklet metoder som kan anvendes til at opsplitte det totale energiforbrug i en del som kan tilskrives bygningen og en anden del som kan tilskrives beboerne. Hermed får man et godt indblik i bygningens termiske performance (eller mangel på samme). Screeningen vil vise i hvilke bygninger der bør foretages en energirenovering. Connecting Copenhagen vil kunne levere og samle disse data til en effektiv databehandling.
Automatisk	Der er udviklet metoder som automatisk (på grundlag af data) kan give en mere

energisignatur (energimærkning)	pålidelig energimærkning. Forudsætter data fra Smart Meters.
Forbedret energirenovering	DTU har udviklet metoder som pga. af hyppige aflæsninger af forbruget kan anvendes til at identificere hvordan de enkelte bygninger bør energirenoveres (er det taget som bør efterisoleres, er der utætte vinduer, eller er det døren mod vest, ...) Forudsætter data fra Smart Meters.
Smart integration af vedvarende energi i bygningers energiforbrug	Dynamiske energisignaturer for boliger kan bruges til en aktiv deltagelse i integrationen af den fluktuerende vedvarende energi (vind og sol), og dermed kan der opnås besparelser i omkostninger til energiforbruget. Dette har DTU demonstreret ifm. projekter i USA, men danske boliger har et endnu større potentiale.
Optimering af fjernvarmesystemer.	På DTU har man udviklet metoder som kan anvendes til en betydelig sænkning af temperaturer i fjernvarmesystemer. Metoderne leder typisk til en reduktion i varmetabet på 10-20 pct. De bedste løsninger opnås såfremt der er adgang til online målinger ude i fjernvarmenettet - dette må forventes at kunne etableres med Connecting Copenhagen.
Bedre styring af afløbssystemer	DTU er gang med at udvikle systemer (i samarbejde med bl.a. Kruger) til en bedre styring af afløbssystemer. En optimal løsning vil drage stor nytte af målinger ude i nettet, som formodentlig let vil kunne etableres under Copenhagen Connecting.
Bedre håndtering af skybrud	I forbindelse med bedre afløbssystemer er DTU ved at undersøge hvorledes adgang til flere data (eksempelvis fra vejrradar-systemer) kan give en bedre håndtering og varsling ifm. kraftig nedbør.
Optimal 'through-put' ved evakuering	På DTU Compute har man udviklet dynamiske metoder som kan give en meget hurtige evakuering og afvikling af fodgængertrafik i særdeleshed, ud fra flow data.
Midlertidige trådløse sensorer til specielle events og forhold	Med en citywide digital infrastruktur, kan man anvende ”midlertidige trådløse teknologier” for specielle events og forhold. Antag at der skal sprænges nede i metroen, eller at der skal sprænges et højhus i Rødovre, eller at der er et gasudslip som man skal monitorere nu og her, og så aldrig mere. Her kan man bruge billige trådløse sensorer f.eks. for det sidste eksempel ved at smide dem ud af en flyver og så måle med dem, hvor sensorerne sender data til den digitale infrastruktur.
Måling af vand med billige sensorer	Billige sensorer (enten permanente og stationære, eller midlertidige), der kan sende data via en digital infrastruktur kan hjælpe alle aspekter i at styre byens vand: Bedre og billigere vand til borgerne, mindre vandspild, mere genbrug af vand, overvågning og styring af afstrømning, varsling og styring ved oversvømmelser, bedre og mere vand til vådområder, vandløb og badevand.

Bedre positionering end med GPS	Der vil kunne tilbydes positionering på meget præcis niveau som er meget bedre end nuværende GPS. Dette kan udnyttes til vejvisning, tilbud af services der er i nærheden (nærmeste hjertestarter, cykel) – alle slags af de teknologier som Google har sat sig på. Positionering kan bruges til alt mulig. Byen kan vide hvor deres køretøjer er lige nu, hvor der slås græs, div. facility og personale management opgaver.
Gamification and crowdsourcing	Brug åben data om byen, bl.a. fra sensorer og anonymiseret flow data, og vis det eksempelvis ude i byrummet, til brug ved både gamification, kunst og muligheder for crowdsourcing. Det kan både være augumented reality til brug for kunst eller information til turister via smart phones, eller visualisering af problemer i byen (fx affald) for at gøre opmærksom på problemet og finde frem til løsning ved at crowdsource løsningsopgaven. Det kan også være gamification af løsningsopgaver, fx "Red København fra skraldet".
Hold rottebestand nede og test tiltag	Med forskellige billige sensorer kan man registrere hvor rotter er, og dette koblet med andet data (fra borgere fx via borgerservice og Giv et Praj; geospatial visualisering af byen med bl.a. huller i ledningsnetværket; og rotters gang til føde - fx affald), så man kan se hvor man skal sætte ind og man kan teste hvordan forskellig bekæmpelsestiltag reelt virker (fx dør rotter eller flytter de et andet sted hen?).
Monitorering af luftkvalitet i forhold til åndedrætslidelser	Åndedrætslidelser som fx astma, er overordnet set dyrt for samfundet og hæmmer livskvalitet for den enkelte. Hvis man kan samle data om luftkvalitet i hele byen kan man både give et øjebliksbillede til interesserede om optimale ruter gennem byen, og man kan ud fra opsamlet data se hvor de værste kilder til luftforurening er, så man kan gøre noget ved dem. Data kan også bruges som input til hvor astma-lidende vil bosætte sig i byen.
Monitor noise levels	Real time and aggregated data provide insight into noise levels around major building sites (e.g. Metro) or bars.
Early warning in case of air pollution	Sensors monitoring current air quality around plants or industrial sites provide early warning in case of air pollution and along with data on current weather conditions and wind direction alerts citizens in a given area as well as providing emergency services with a evacuation plan taking different factors into calculation.
Monitor CO2 emissions	Sensors monitor a plant's allowed CO2 emissions and alerts the Municipality if it is exceeded.
Monitor bridges and buildings with Corrosion and vibration sensors	Corrosion and vibration sensors provide data on the state of bridges and buildings limiting the need for physical monitoring, and enabling a higher degree of knowledge about the structural condition which is hard to monitor, making it safer and cheaper to maintain the bridges and buildings.

Provide 'micro climate' waether info to citizens	Weather sensors provide citizens with insight into the 'micro climate' in their buildings' court yards and gardens. E.g. temperature, UV rating, humidity (air and soil), rain fall, etc.
monitor radiation levels from mobile masts	Radio noise detectors monitor radiation levels from mobile masts on top of buildings.
Quality of surface water	Water sensors continuously monitor the quality of the water in the lakes and the harbor on a number of parameters.
Prevent or minimize flood damages	Humidity and water sensors can detect surface water in critical areas of the city and buildings, alerting in case of flood damages, both from cloudbursts and slow leaks not easily detectable. Damage to property could be prevented and slow damage to e.g. building can be discovered and dealt with.
Detect tank leakages or broken pipes	Moisture- and pressure sensors installed near pipes or tanks provide early warnings to emergency services in case of tank leakages or broken pipes in e.g. the water- or sewage systems.
Fire prevention	Detection of smoke and fires in and around different areas or buildings.
Motion detection to combat vandalism, crime or acts of terror	Motion sensors detect if people are entering dangerous or restricted areas or areas of interest to people wanting to commit vandalism, crime or acts of terror.
Efficient trash collection and other collection tasks	Monitoring the state of trash cans, rain water wells, sewage etc. for early warning purposes or to optimize maintenance (the system plans a route that lets you empty only trash cans that are actually full), making the city's task completion more efficient and playing into green mobility with less CO2 emissions.
Alert nearest first responders in case gunfire, explosions or car crashes	Detection of noise from shots fired in high-crime areas to alert nearest police and other first responders. Eksplosions or car crashes are other scenarios.
Monitor UV levels	Monitor UV levels to better inform citizens and lower cancer rates.
Monitor pollen for allergic citizens	Real time, area specific data on pollen for allergic citizens.
Hurtigere udrykningstider	Hurtigere udrykningstider for politi og redningsfolk, da der altid er et opdateret øjebliksbillede af trafiksituationen i hele byen. Viden kan også sælges eller tilbydes gennem gratis åben data til private, som kan undgå køer o.l.
Billigere og bedre overvågning	Infrastrukturen kan anvendes til kameraer i byrummet i den grad det ønskes og tillades. Disse kameraer behøves således ikke et separat netværk til at sende

	data, og kan opsættes billigere og på steder hvor det tidligere ikke var muligt (yderområder, hvor det ikke var muligt at lægge net). Kameraer kan være af forskellig slags, fx infrarød, så personer ikke kan genkendes, men man fx kan se bevægelsesmønstre eller øget varmeudvikling ved opståede brande.
Politi og redningstjeneste kan tilgå byens kameraer fra deres mobile enheder	'Eyes on the street'. Mulighed for politi og redningstjeneste at tilgå byens kameraer fra deres mobile enheder, da infrastrukturen har viden om placering af kameraer og kapacitet til at live-streame video til mobil enhed.
Monitorere brug af mekanisk materiel for at få bedre vedligehold	Billige sensorer på al kommunens materiel, så mekaniske funktioner kan overvåges og vedligehold kan planlægges efter brug og ikke bare tid - og dermed kan man forebygge dyre nedbrud og dyre reparationer. Det kan være antal rotationer på en fejekost, så 500.000 rotationer giver melding om behov for ny smøring. Fx på al vintertjenesten materiel (saltspredere, plove, fejekoste), materiel i Renhold (fejekoste), materiel på byggepladser, materiel i bygninger o.l.
Handle proaktivt på hærværk	Sensorer til proaktivt at detektere graffiti-hærværk (lyd, bevægelsesmønster), hvilket åbner op for at forebygge via eksempelvis besked fra højttalere, alarm (lyd, lys), og alarmere nærmeste relevante person (politi, Renhold, parkeringsvagt). Eksempler på denne slags overvågning findes fx fra England.
Hvor er sneploven/skraldebilen?	Realtid lokalitet af fx sneplove og skraldebiler på deres planlagte ruter, så borgere og virksomheder kan få et estimat på, hvornår vi kommer forbi deres adresse. Kunne mindske en del opkald omkring skraldbiler. Kunne også være tjeneste som borger og virksomheder abonnerede på, så de fik besked (SMS), når skraldebilen er på vej.
Realtid lokalisering af offentlig transport og taxier	Realtid lokalisering af al offentlig transport og taxier og præcist estimat af hvornår transporten kommer til borgerens lokalitet.
Sikring af materiel på bestemt lokalitet	Sikring af at nødvendigt flytbart materiel ikke fjernes eller stjæles fra bestemt lokalitet i byrummet (fx skraldespande på hjul eller søjler til afmærkning af huller i fortov (hvor der er tilsynspligt 1 gang i døgnet)). Hvorvidt tilsynspligten kan opfyldes med data om lokalitet og eventuel videoovervågning, er ikke undersøgt. Tjenesten kan sælges til andre aktører med flytbart materiel i byrummet (entreprenører o.l.).
Er broerne oppe?	Sensorer der monitorere om broerne er oppe og melder det ind til kommunen (vigtig ved fx udrykninger) og stiller til rådighed for fx GPS systemer (åben data) til brug for borgere og virksomheder.