ULaaDS

URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Welcome to the ULaaDS Final Event

16.11.2023

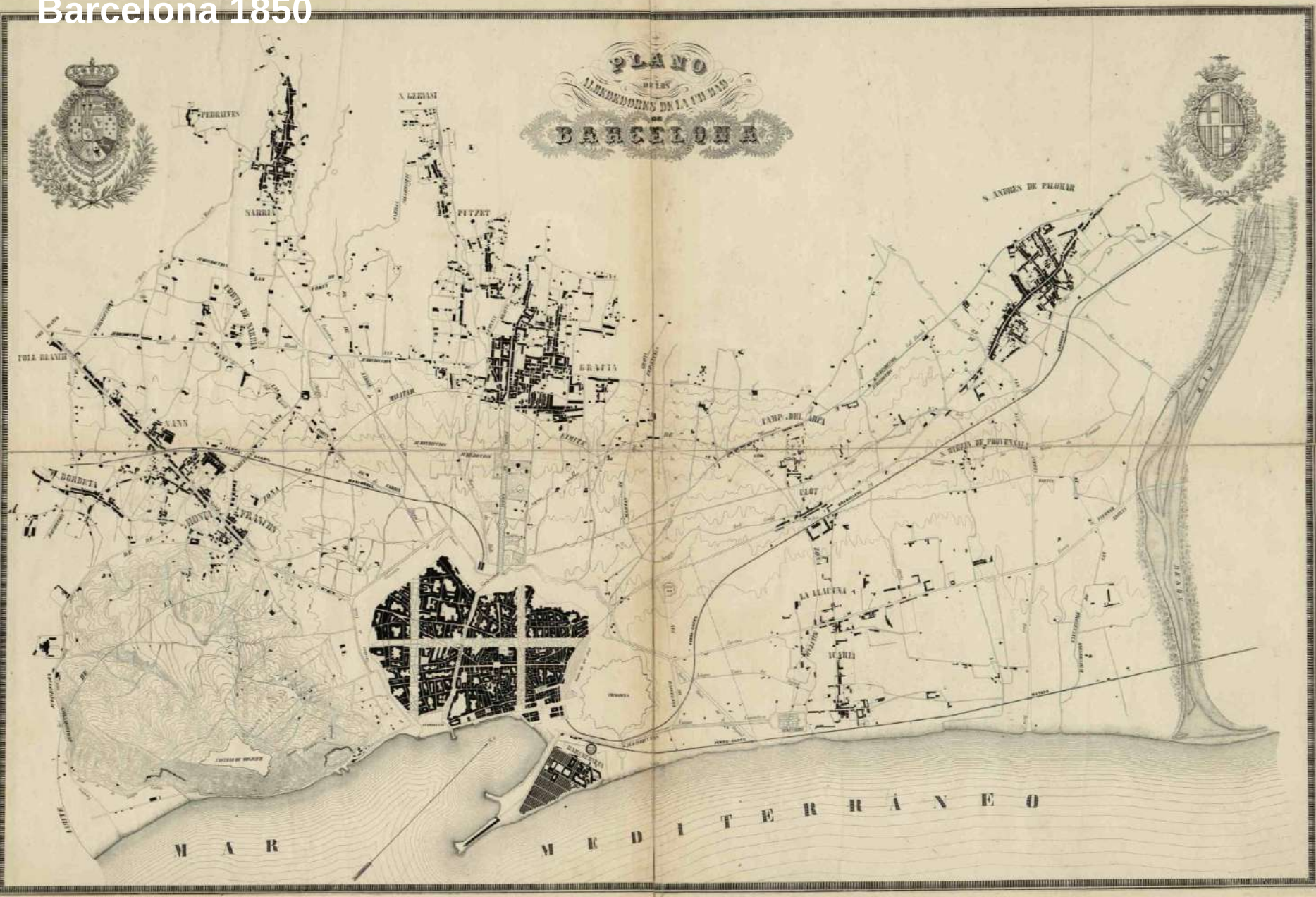
Ajuntament de Barcelona

Superblocks

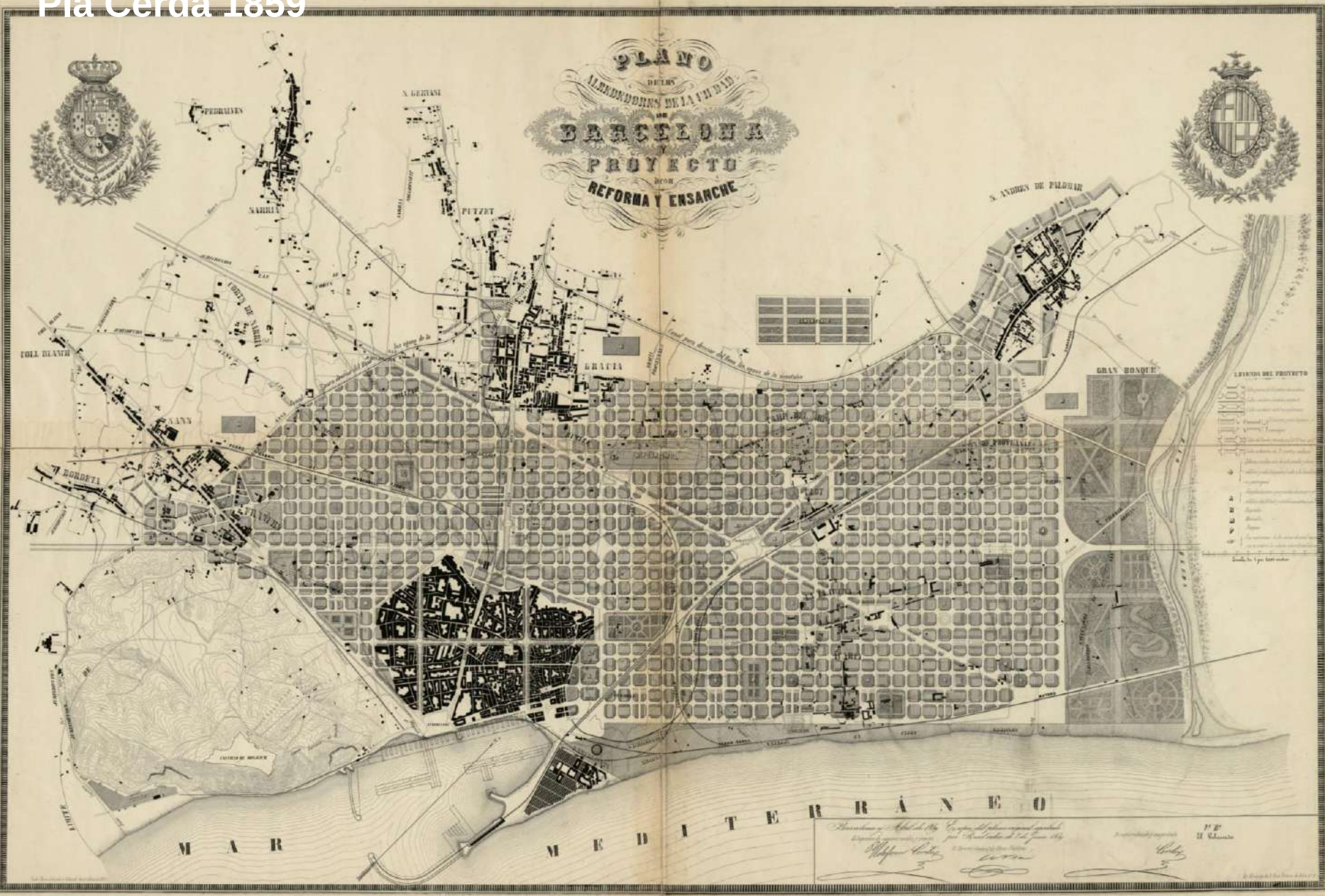
Departament d'Estratègia de la Mobilitat

November 2023

Barcelona 1850



Pla Cerdà 1859

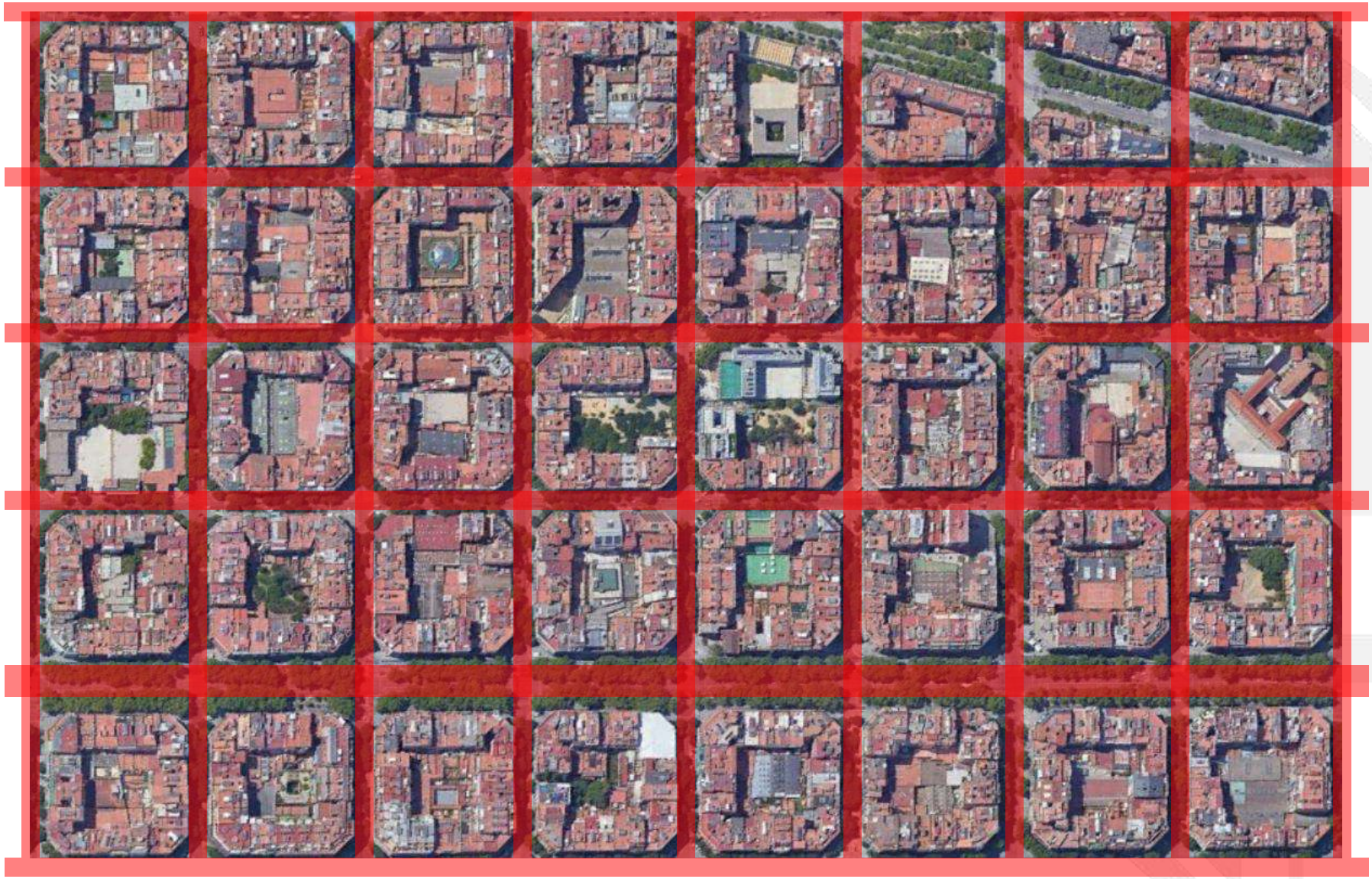


Barcelona and l’Eixample

Barcelona and l'Eixample

Superblock idea

Superblock idea



Superblock idea

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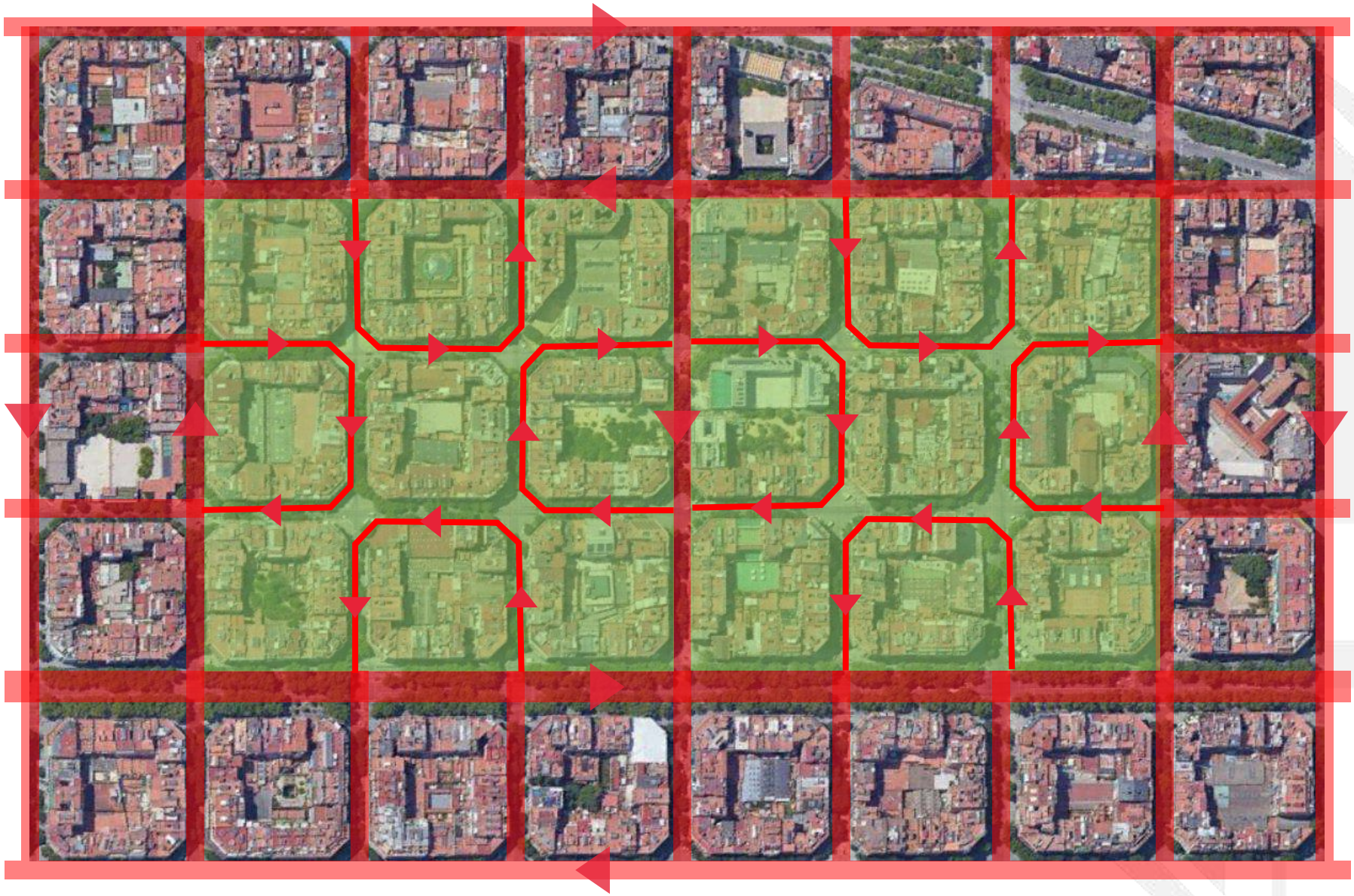
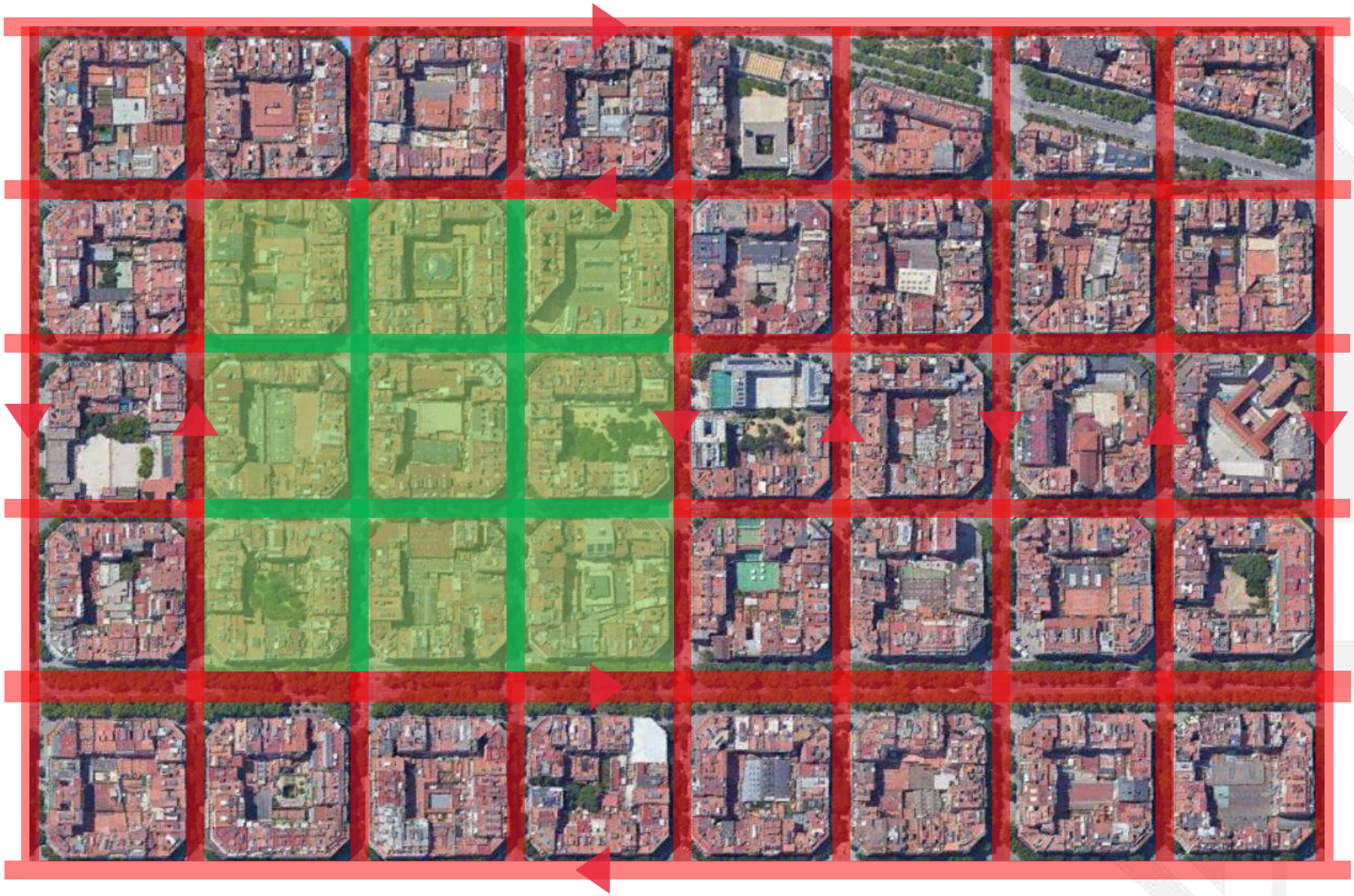


How do we apply it?



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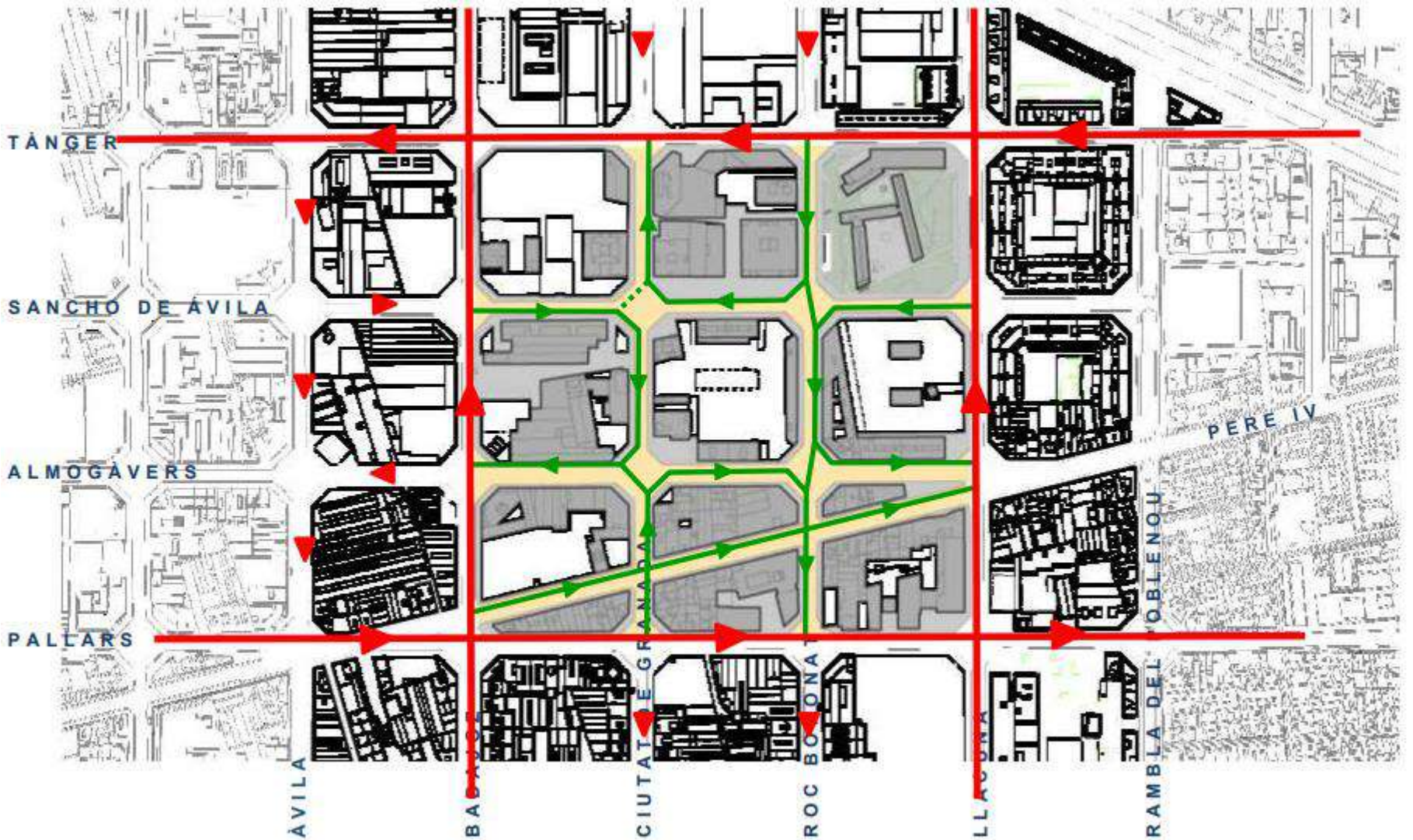
Poblenou



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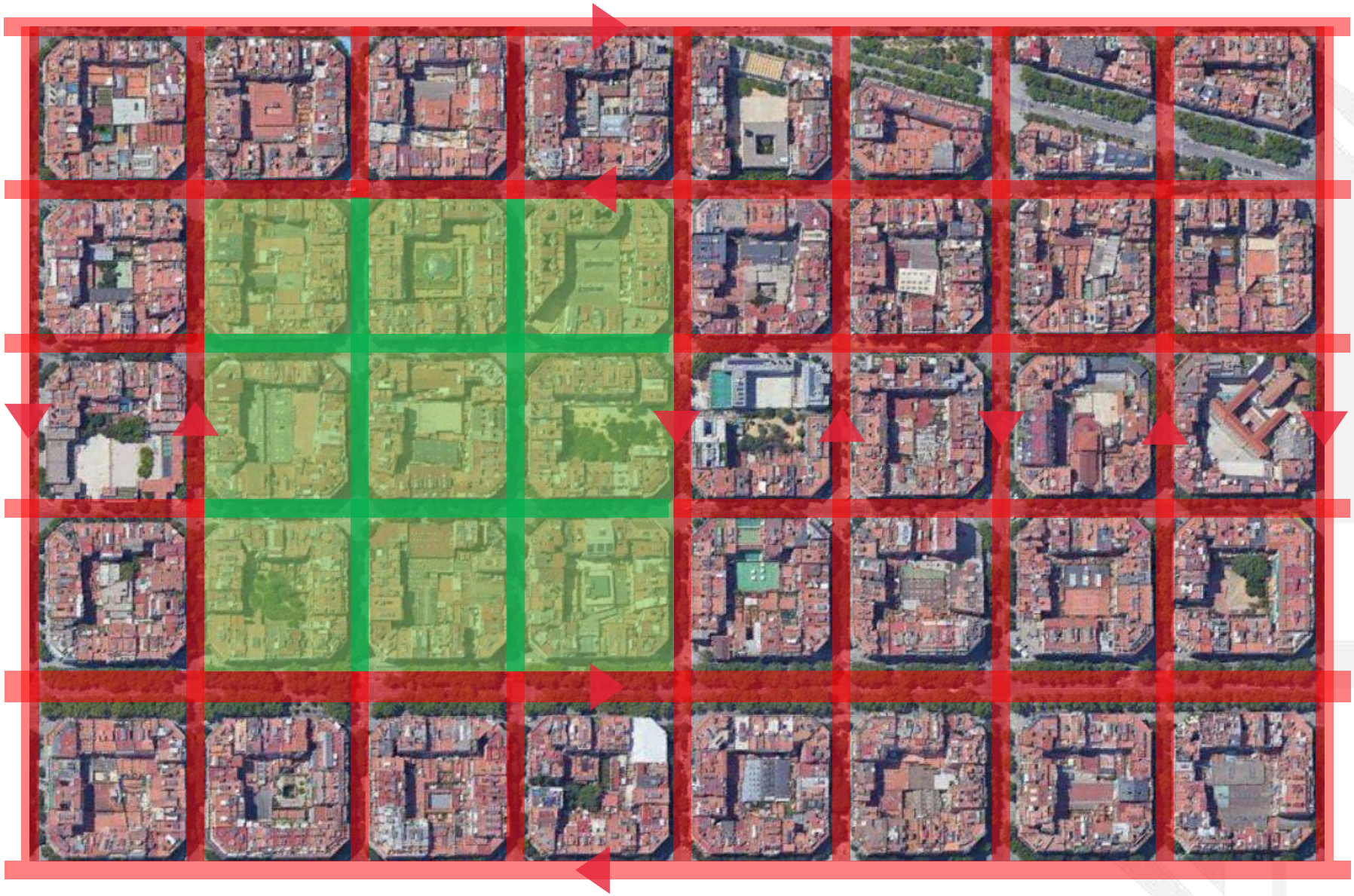

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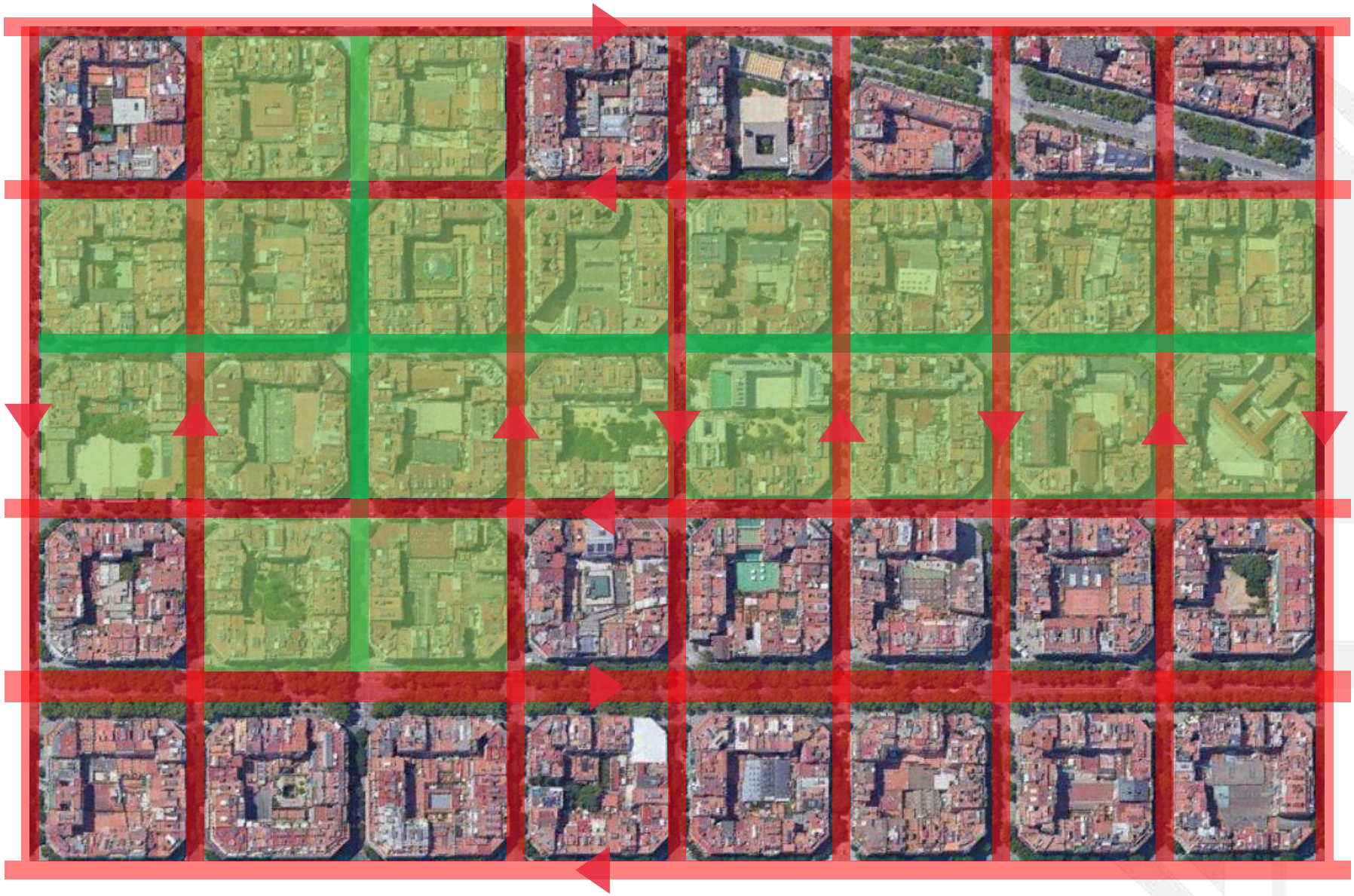
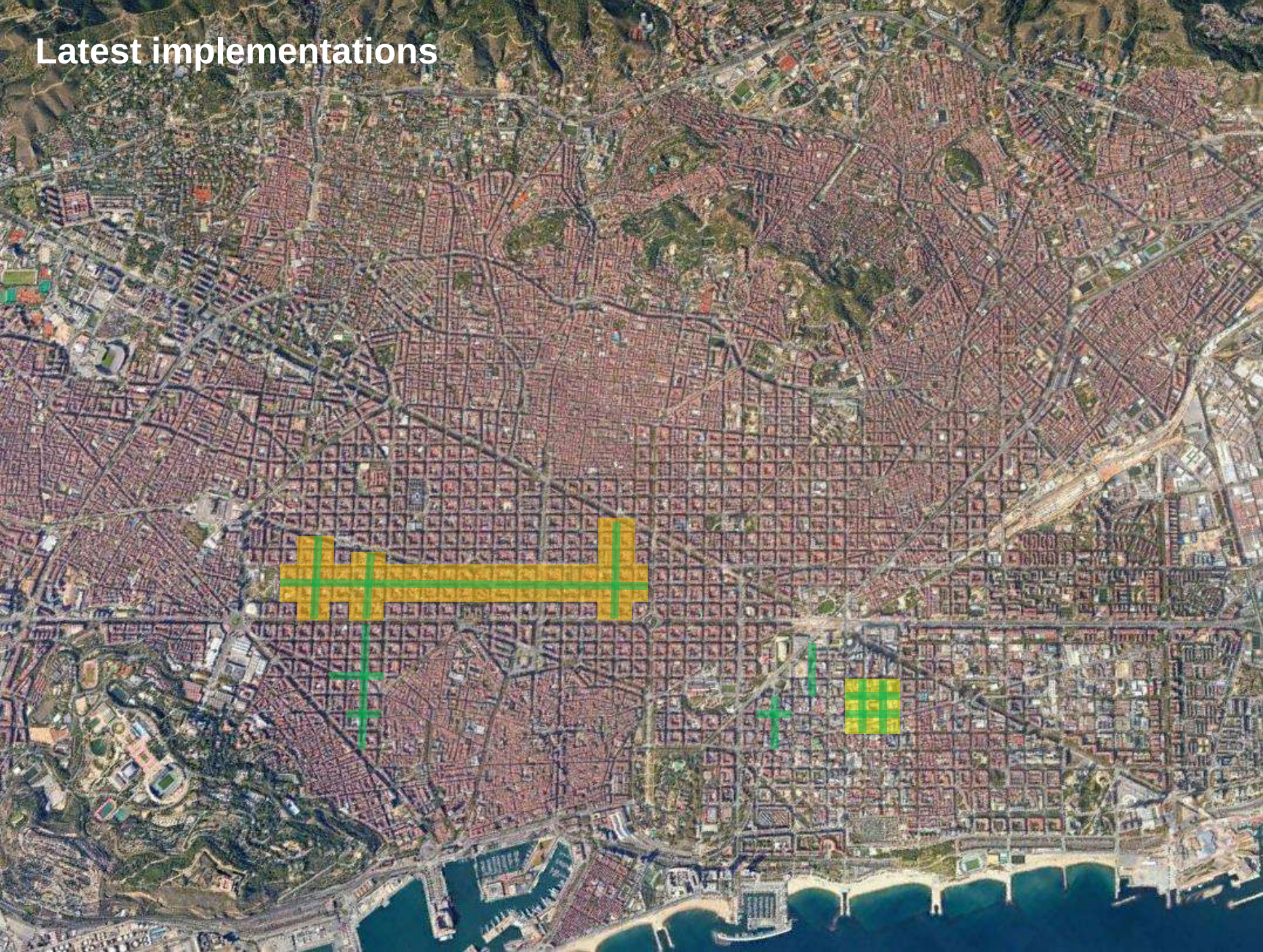
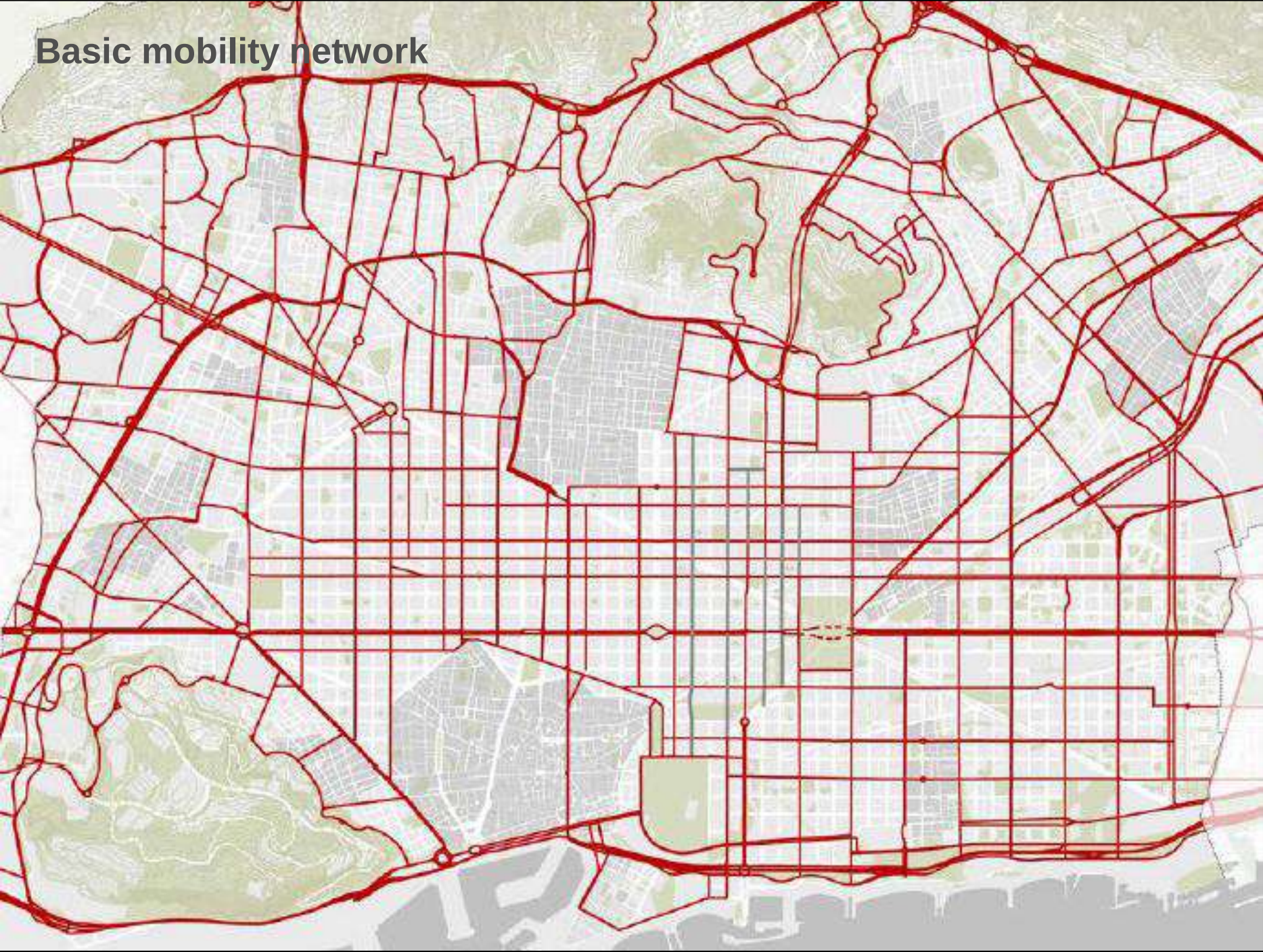


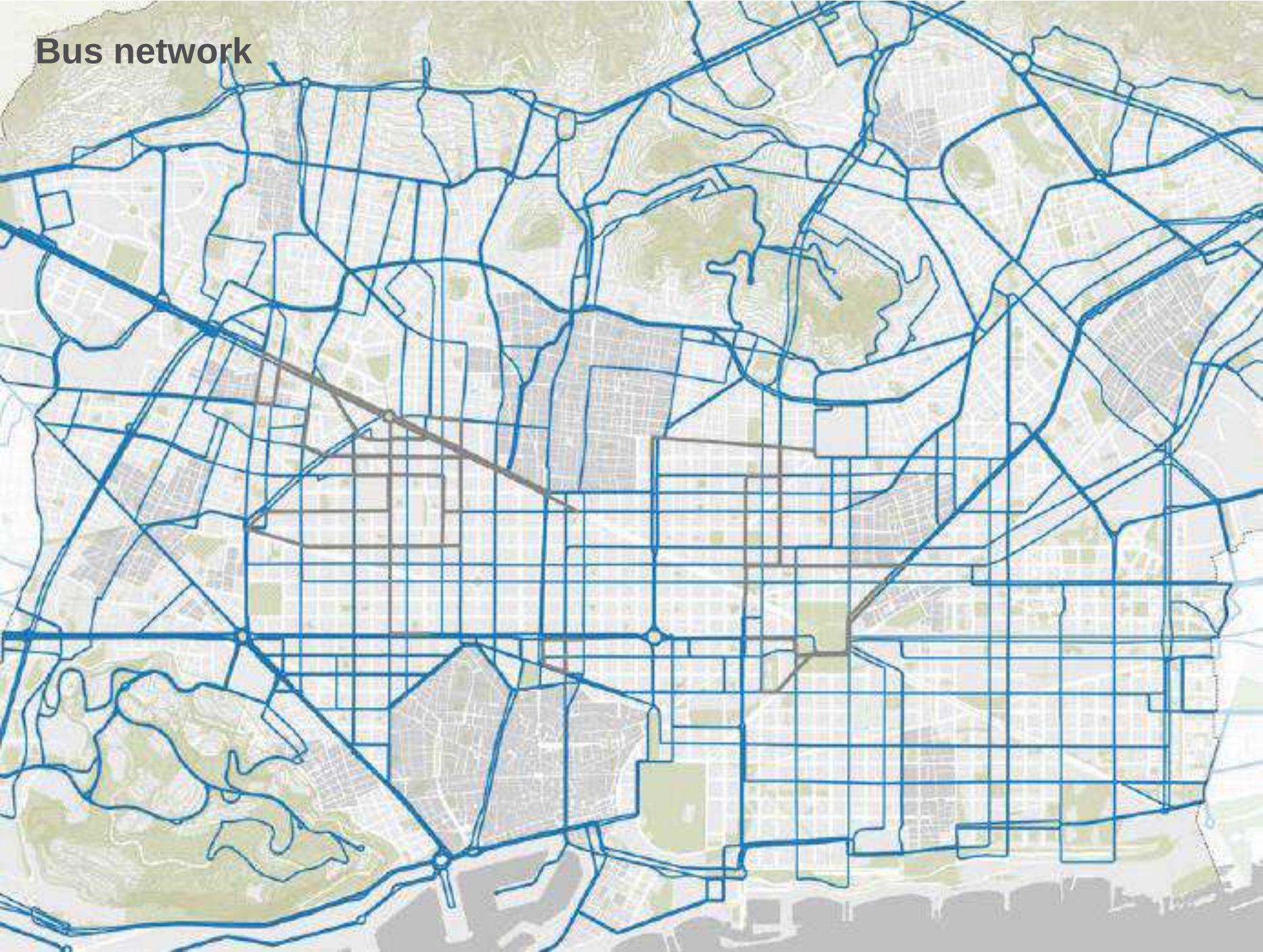
Latest implementations



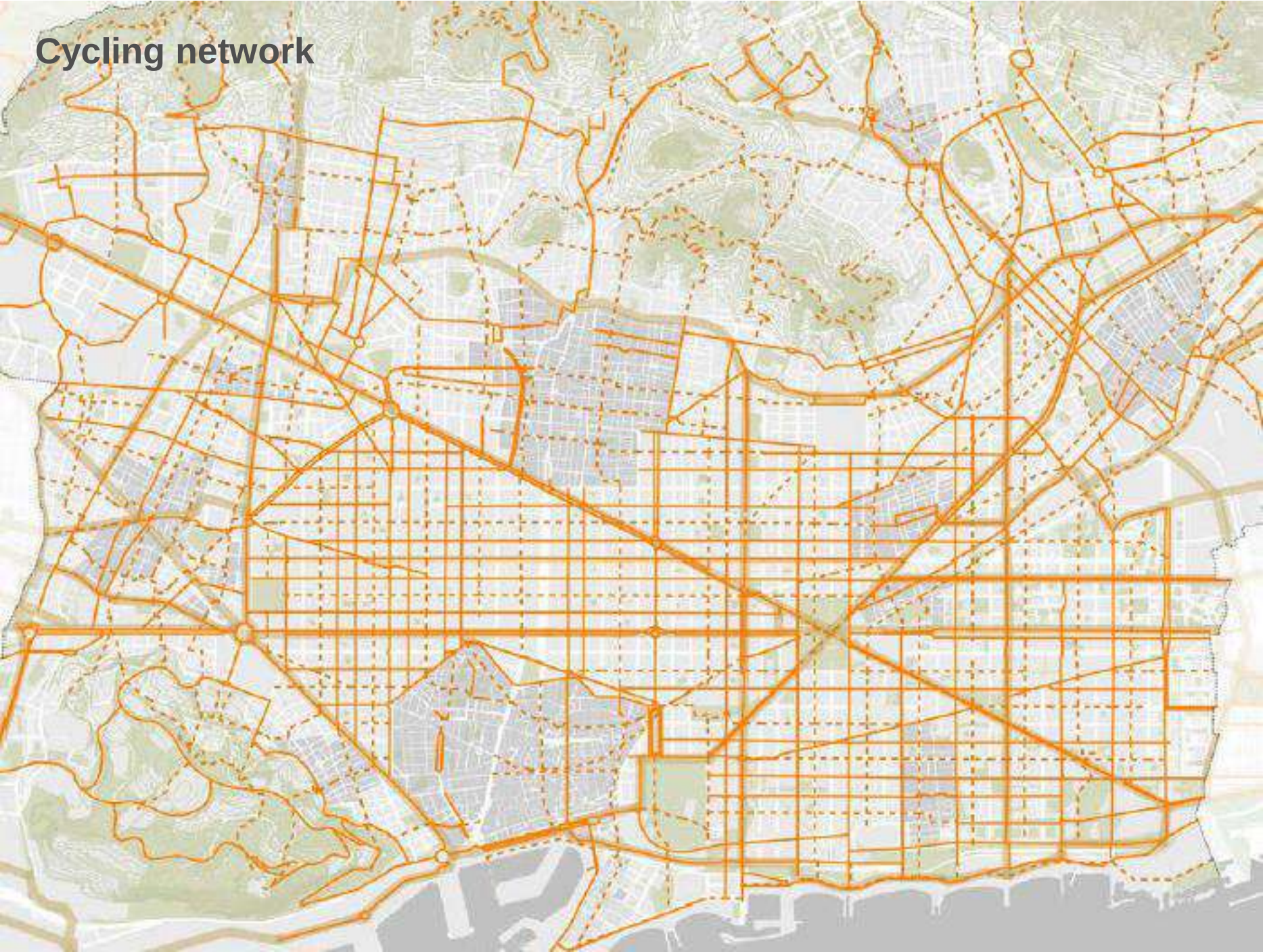
Basic mobility network



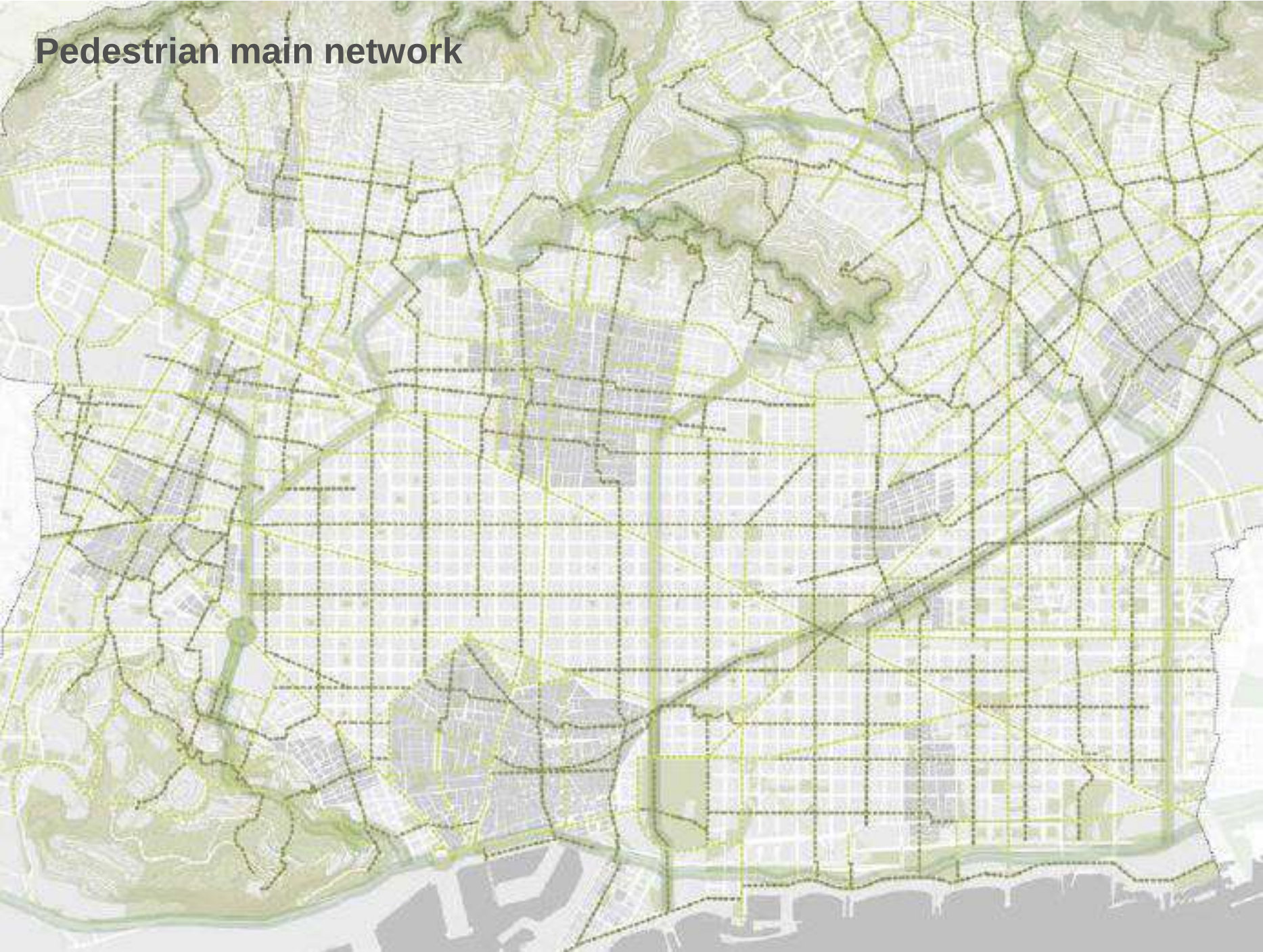
Bus network



Cycling network



Pedestrian main network



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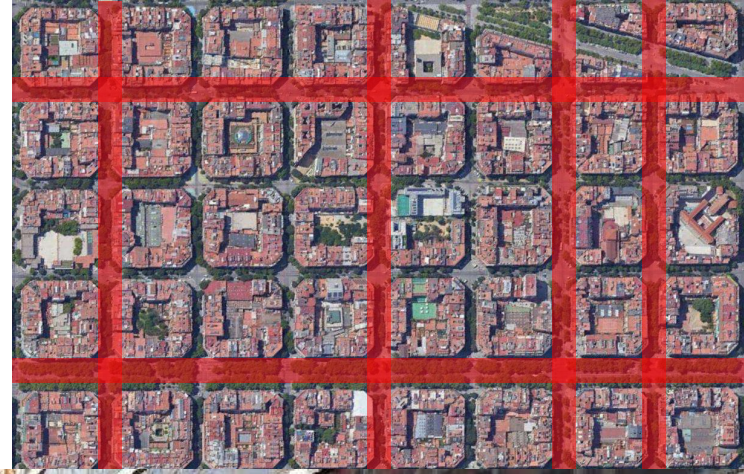
Type of roads

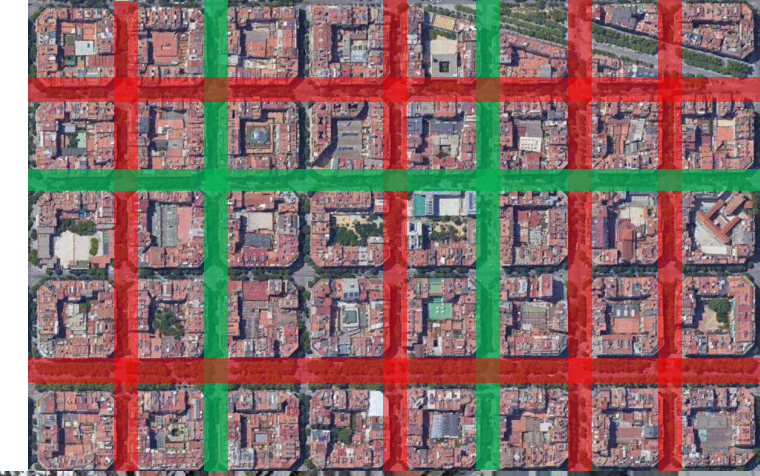
Basic road:

Basic mobility network with global connectivity



Ajuntament de Barcelona

Type of roads



Neighborhood street:

Calm streets with stay areas and pedestrian network

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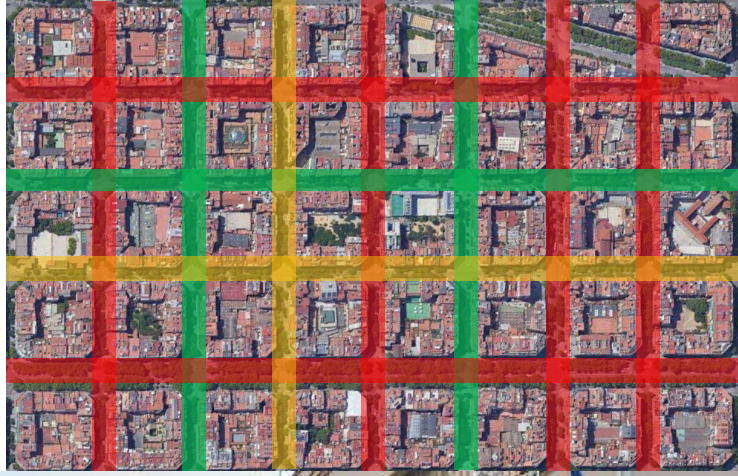
Type of roads

Local road:

Local mobility, 30 km/h streets, service lanes

Ajuntament de Barcelona

Type of roads



Local road:

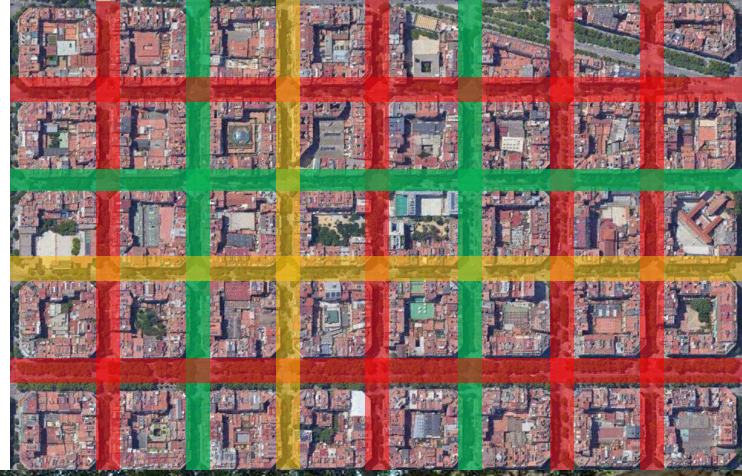
Local mobility, 30 km/h streets, service lanes

Ajuntament de Barcelona

Type of roads

Local road:

Local mobility, 30 km/h streets, service lanes



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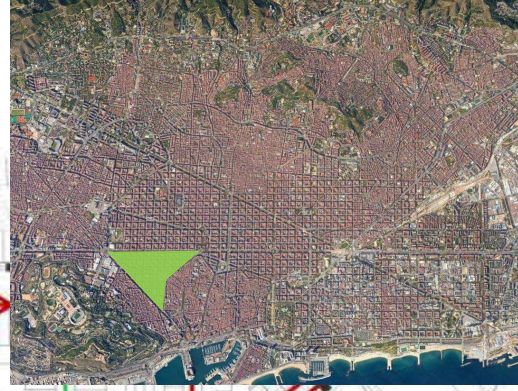
Sant Antoni



GRAN VIA DE LES CORTS CATALANES

C/ URGELL

'INGUDA DEL PARAL·LEL

'DA. DE MISTRAL

C/ LLANÇÀ

C/ VILAMARÍ

C/ ENTENÇA

C/ ROCAFORT

C/ CALÀBRIA

C/ VILADOMAT

C/ BORRELL

RDA. SANT PAU

C/ MANSO

C/ VILLAROEL

C/ CASANOVA

C/ MUNTANER

C/ ARIBAU

C/ SEPÚLVEDA

C/ FLORIDABLANCA

C/ TAMARIT

C/ PARLAMENT

C/ M. DE CAMPO SAGRADO

C. ALDANA

Llegenda

- Via bàsica (VB)
- Via local (VL)
- Via veïnal (VV)
- Sentit del viari

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Hostafrancs

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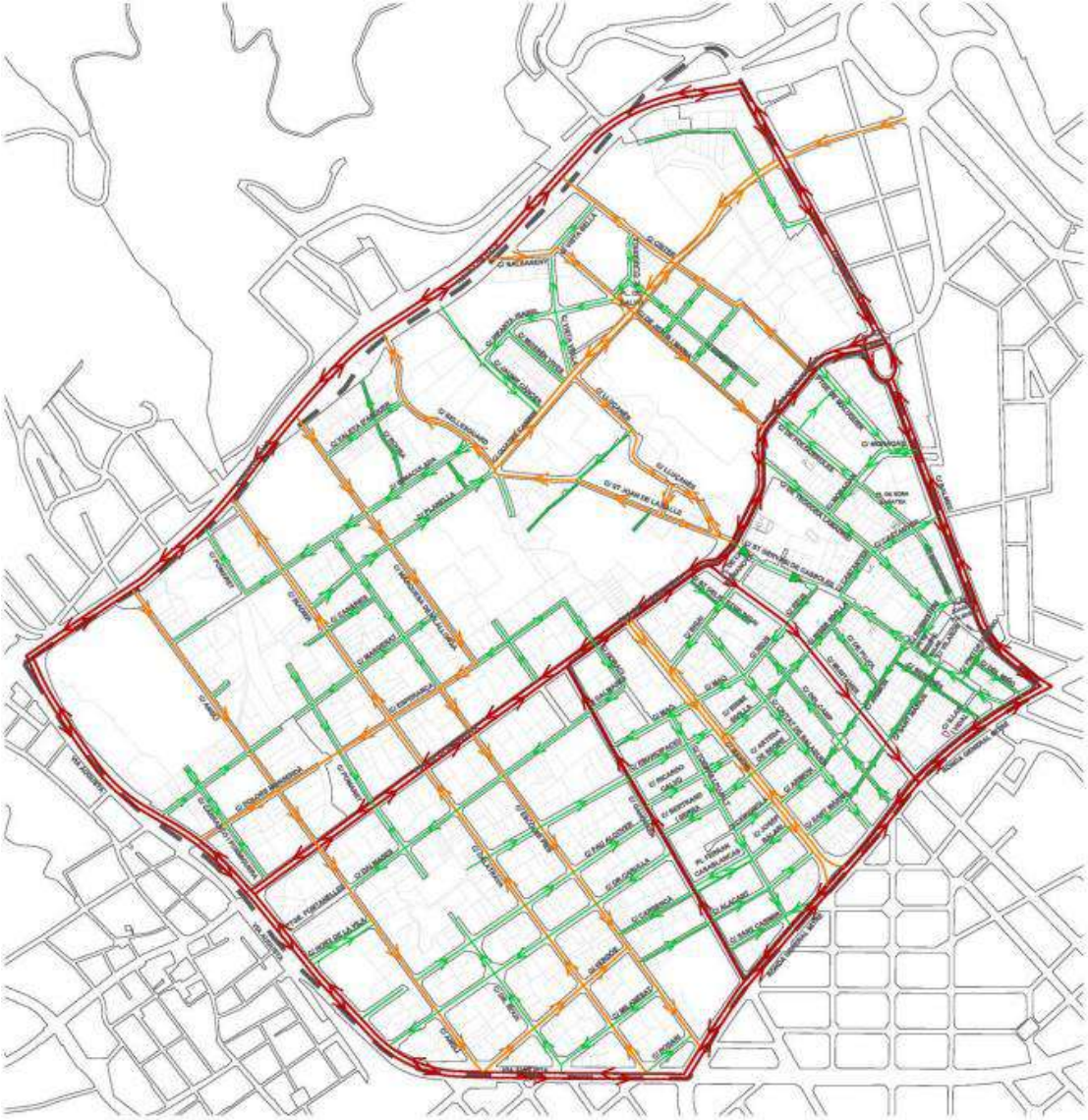
Sant Gervasi – La Bonanova



Llegenda

- Via bàsica (VB)
- Via local (VL)
- Via veïnal (VV)
- Àmbit de superilla
- Sentit del viari
- Proposta canvi de sentit
- Tall de continuitat

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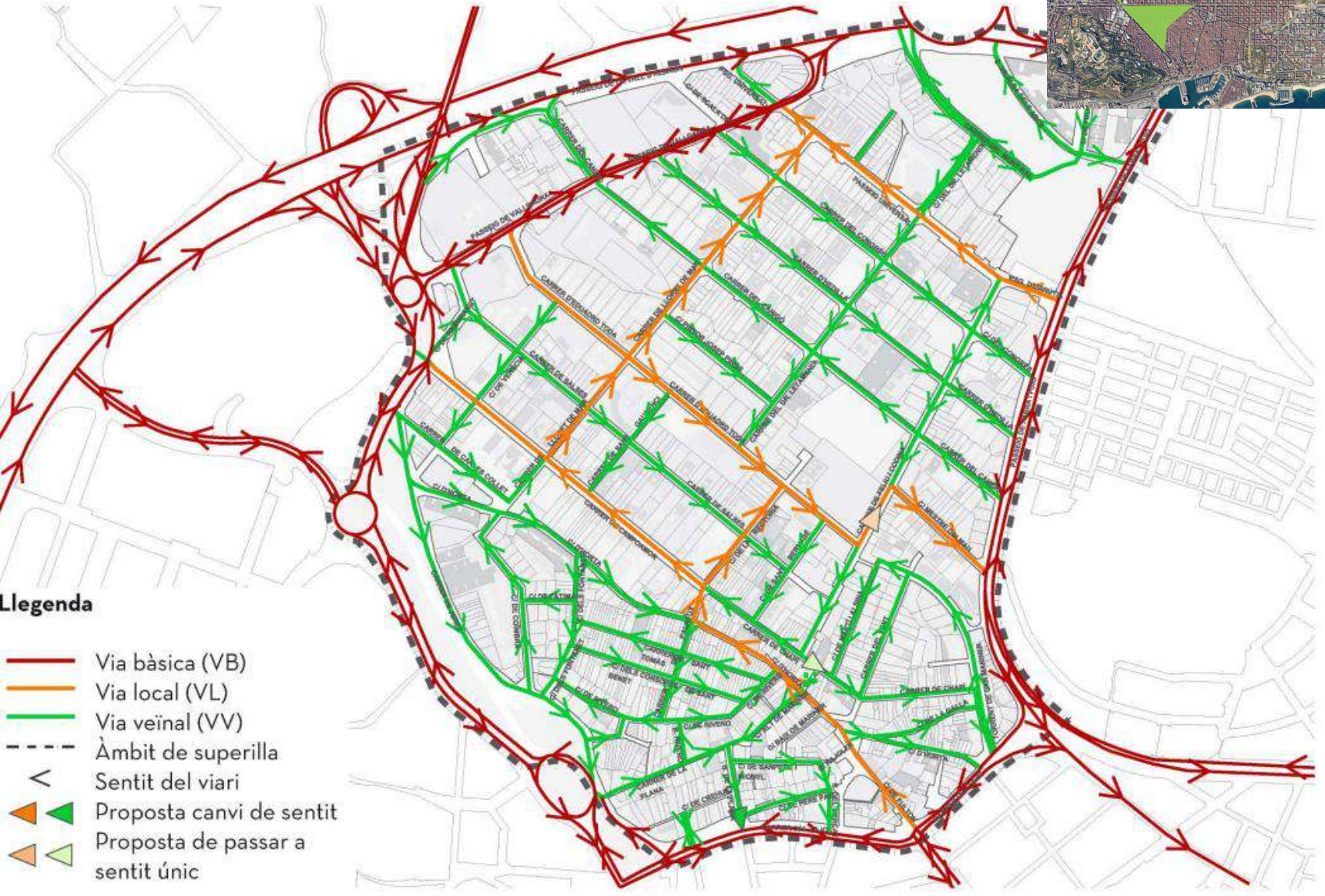
Horta

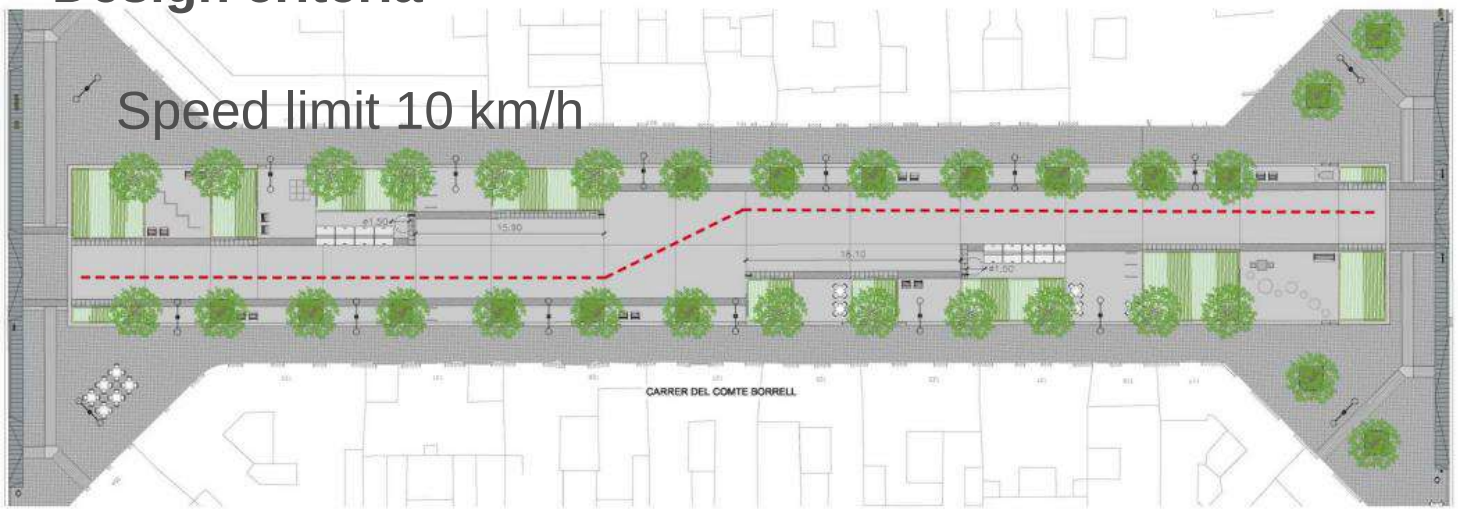


Design criteria

Single platform with pedestrian priority

Design criteria

Speed limit 10 km/h




Design criteria
Bikes allowed in both directions

Design criteria

Urban distribution

Design criteria

Tactical urbanism: Superilla Poblenou

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Superilla Sant Antoni

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Superilla Sant Antoni

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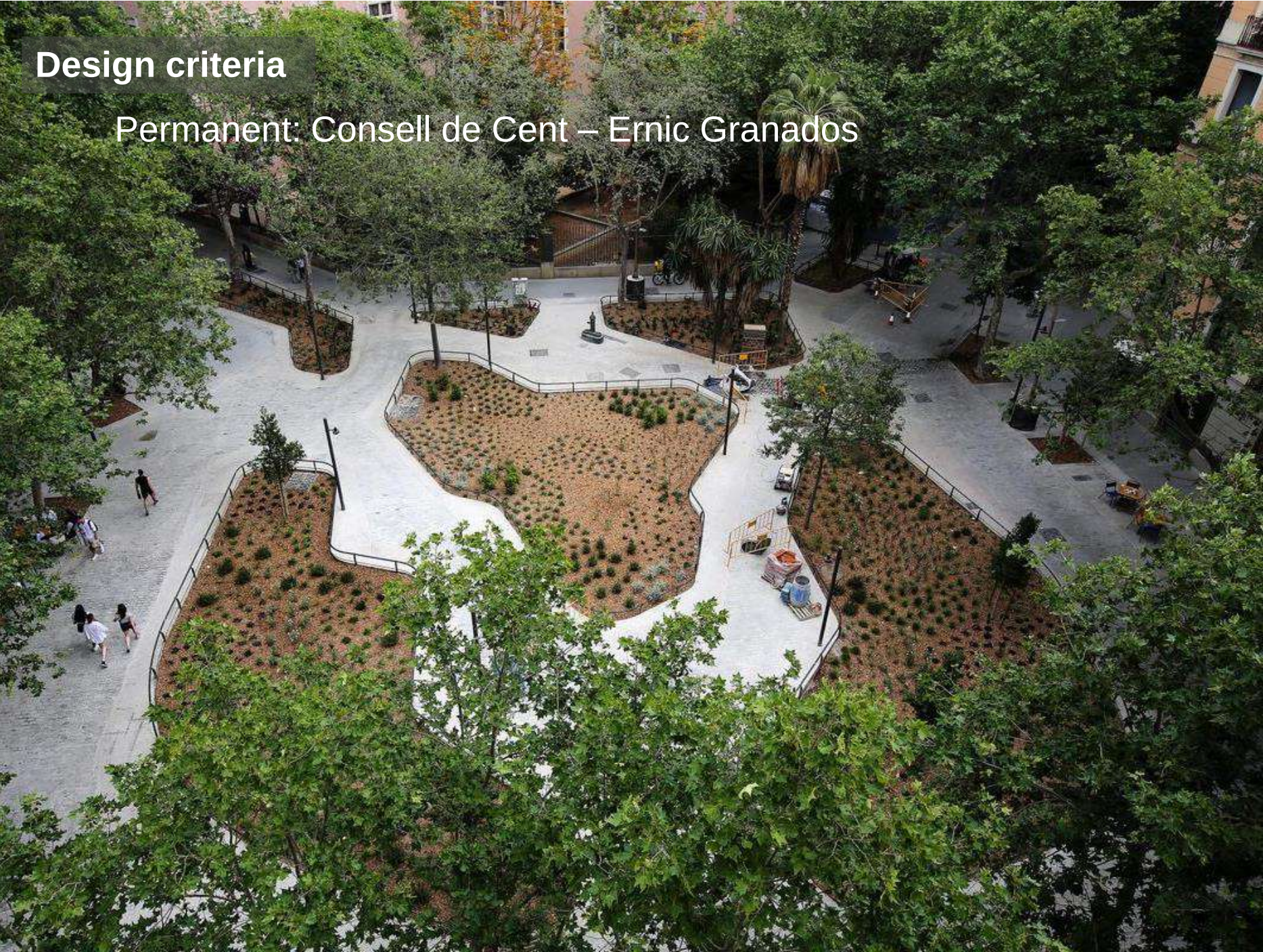
Superilla Sant Antoni

Design criteria

Permanent urbanism: Almogàvers

Design criteria

Permanent: Consell de Cent – Ernic Granados



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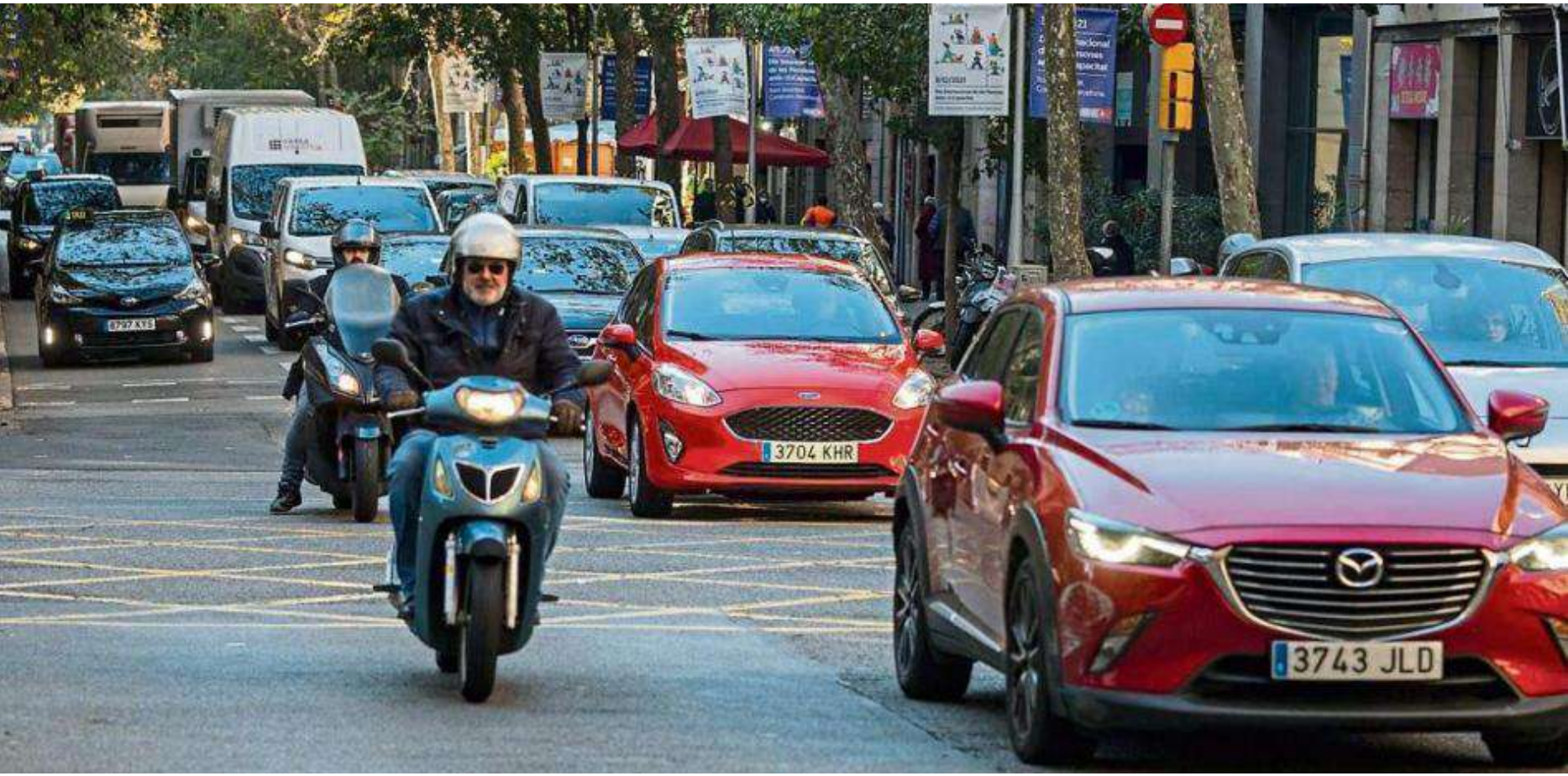
Challenges:

Increase in traffic on other streets



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Challenges:

Motorcycles on sidewalks

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Challenges:

Urban freight distribution

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Challenges:

Indiscipline

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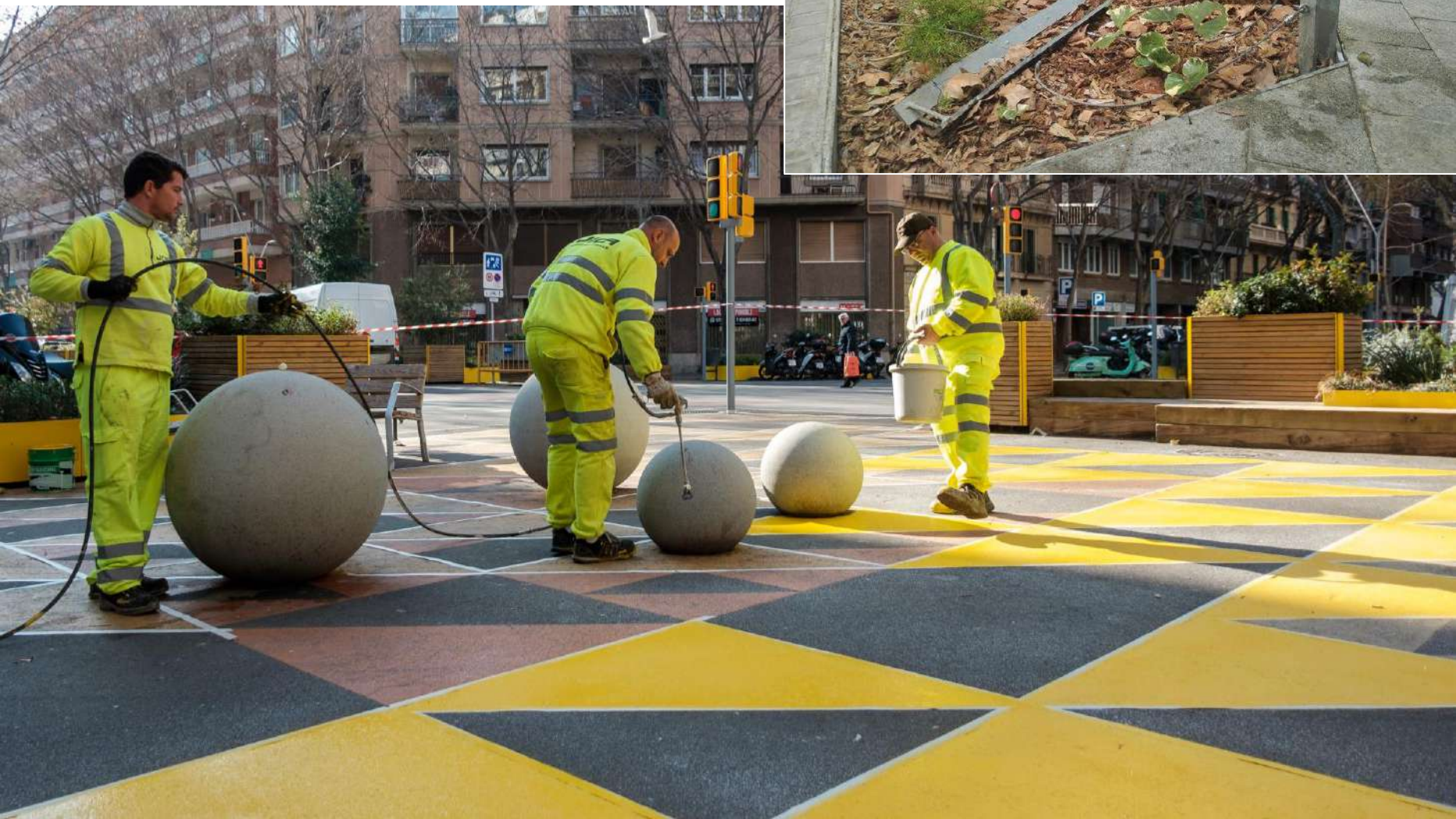
Challenges:

Street maintenance




JULIO
C. del Cons
Google

SUPERILLA BARCELONA

Initial Design

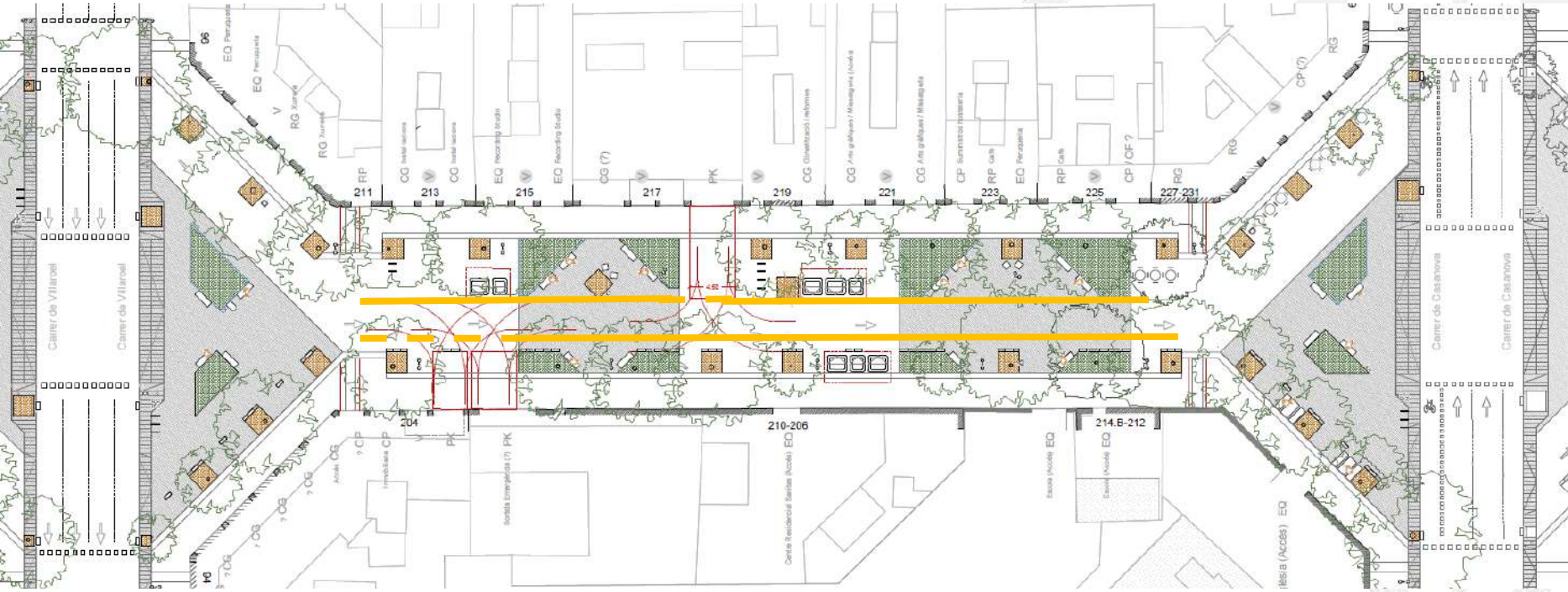
In the first implementation of the Sant Antoni superblock, specific spaces were incorporated for carrying out UFD operations. Initially, a split schedule was proposed (8-11 a.m. and 3-5 p.m.), analogous to the current schedule in the old town of the city (an area with a high impact of tourism). A 4.60 meter wide road was proposed, which widened up to **6.8 meters** in the UFD areas.

Initial Design. Inconveniences

- Poorly intuitive schedule, with a break
- Low capacity at peak hour
- DUM out of the enabled spaces
- Irregular parking of private vehicles
- Empty spaces and a wide road that bring high circulation speeds

Green Axes design

The Green Axes project proposes a different approach to the UFD, based on the **flexibility of the use of public space**. During the authorized hours, loading and unloading is allowed at any point within the section of about 80 meters in length, so that the operations can be done as close as possible to the establishments, so reducing their occupation time. There is only one road width of **5.20 meters**.



Green Axes setting

A schedule is proposed **from 9:30 a.m. to 4:00 p.m**., which allows the UFD in the hours of maximum demand for space for loading and unloading and is prohibited in the hours when there are more pedestrians, such as the entrance to schools or during the afternoon.

Green Axes setting

Outside of the mentioned hours, you can use the **UFD areas on the perimeter** with general hours from 8:00 a.m. to 8:00 p.m.

Deliveries can also be made in the restricted area on foot, by bicycle or by scooter; for these delivery modes there is no time restriction. We want to promote delivery with low-impact modes: **convenience points, nocturnal UFD, logistics microplatforms**.

Communication Campaign– Informers feedback

- Forces carriers to make a change in their routes
- Stops of less than 5 minutes that do not validate with SPRO
- Complaints that AreaDUM alternative is too far or crowded
- Lack of knowledge of how to perform DUM operations in the afternoon

Topics for follow-up and next steps

- UFD early morning or night, as a request from commercial establishments.
- Urban distribution of Services, long stay in public space
- PMR parking.
- Short parking spaces without validating SPRO
- Behavior of private vehicles on weekends.
- Parking uses in the exclusive pedestrian space

Gràcies!

URL: barcelona.cat/distribuciomercaderies

oficinamercaderies@bcn.cat

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Get to know the ULaaDS Lighthouse cities

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Get to know the ULaaDS Lighthouse Cities: Bremen

Michael Glotz-Richter, City of Bremen

16 November 2023

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861833

Die Senatorin für Bau, Mobilität und Stadtentwicklung

Freie Hansestadt Bremen

CIVITAS
Sustainable and smart mobility for all

Welcome to Bremen

Harbour city and logistics hub

graph: wfb Bremen

Harbour city and logistics hub

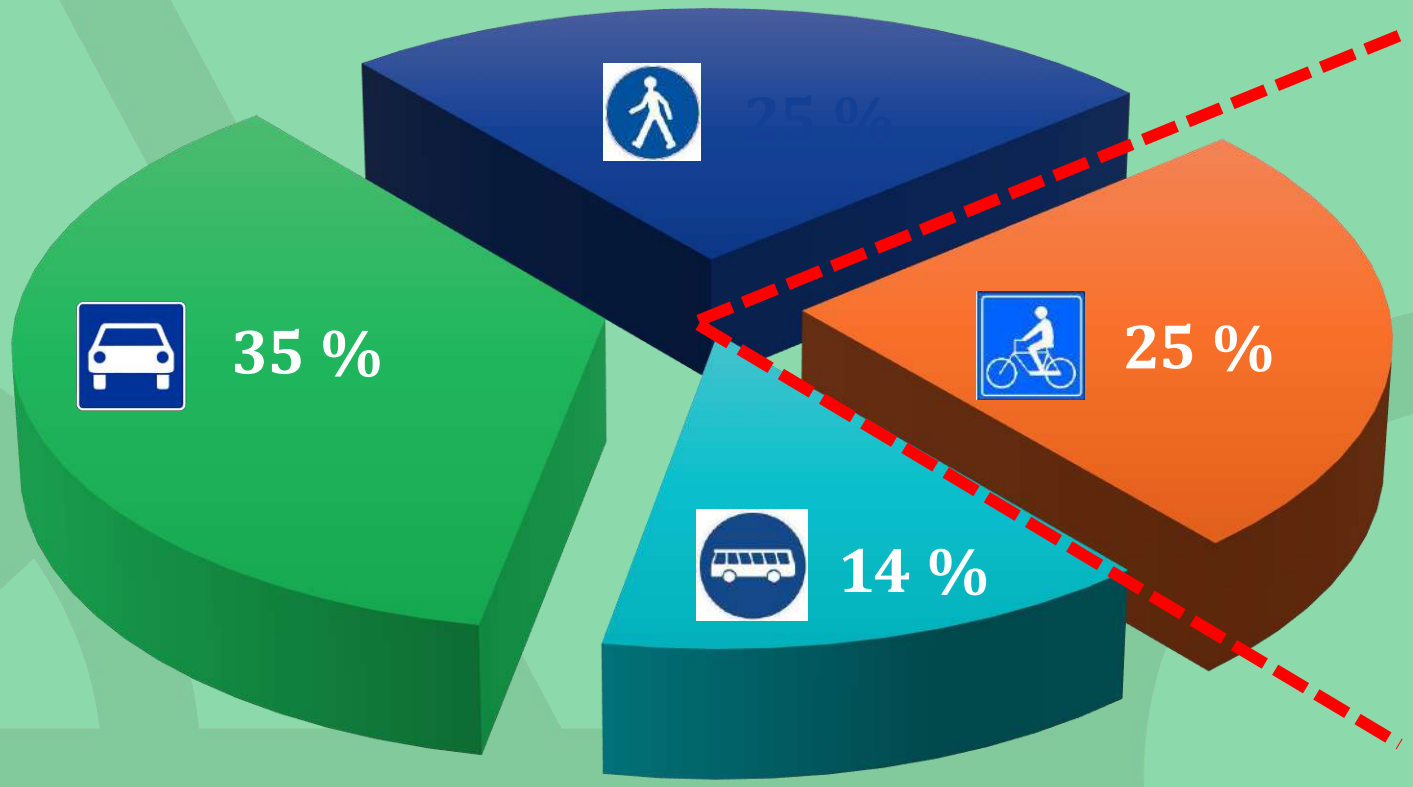
Liveable city

Cycling city

Bremen - urban logistics

Cycling city

25%
cycling



all trips of Bremen citizens; source: SrV 2018

Deliveries as challenge for everyone

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

1.
Containerised microhubs and bike logistics

2.

Cargo-hitching with on-demand passenger service (ViaVan)

3.
Cargo bike sharing for private micro-logistics

ULaaDS trials Bremen

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

1. Containerised microhubs and bike logistics

Microhubs / containerised bike logistics

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- Rytle heavy-duty (modular) cargo bikes
- containerised (pre-consolidation possible)
- also Euro pallettes

Microhubs / containerised bike logistics

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Microhubs / containerised bike logistics

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Delivery in (pedestrianised) city centre of Bremen

Microhubs / containerised bike logistics

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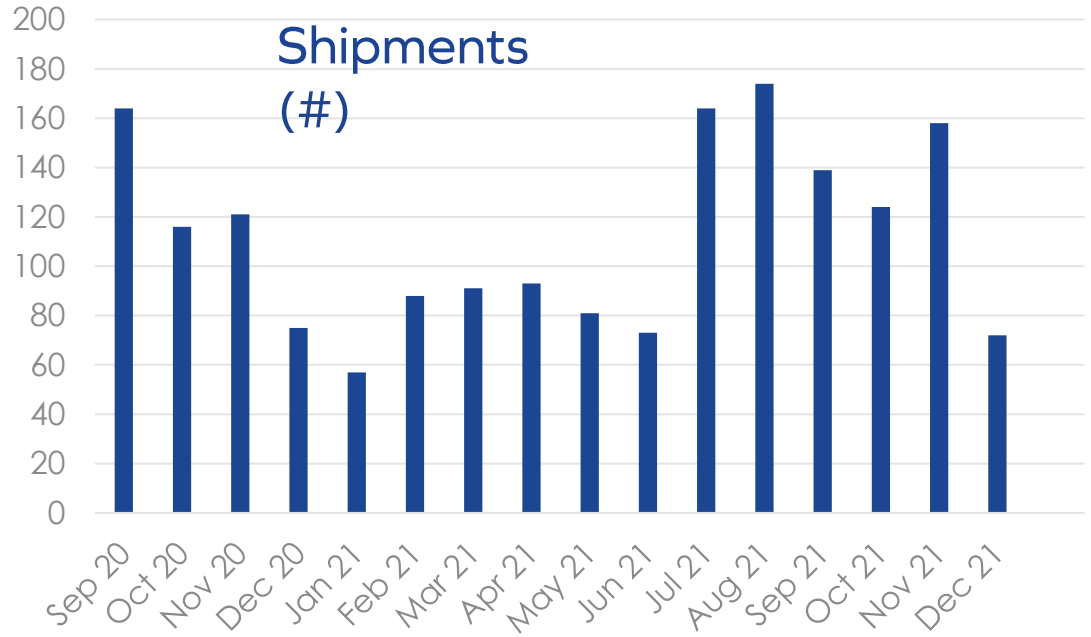
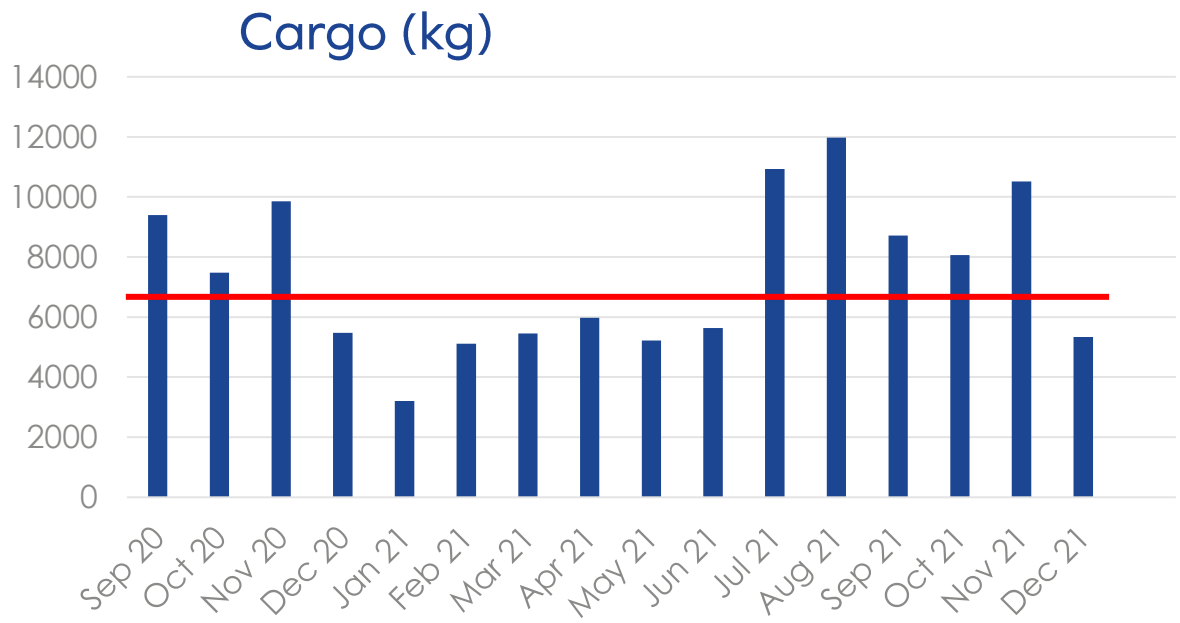
Development of freight volume (no CEP)

2,629 shipments



63.8 kg average weight per shipment



Microhubs / containerised bike logistics

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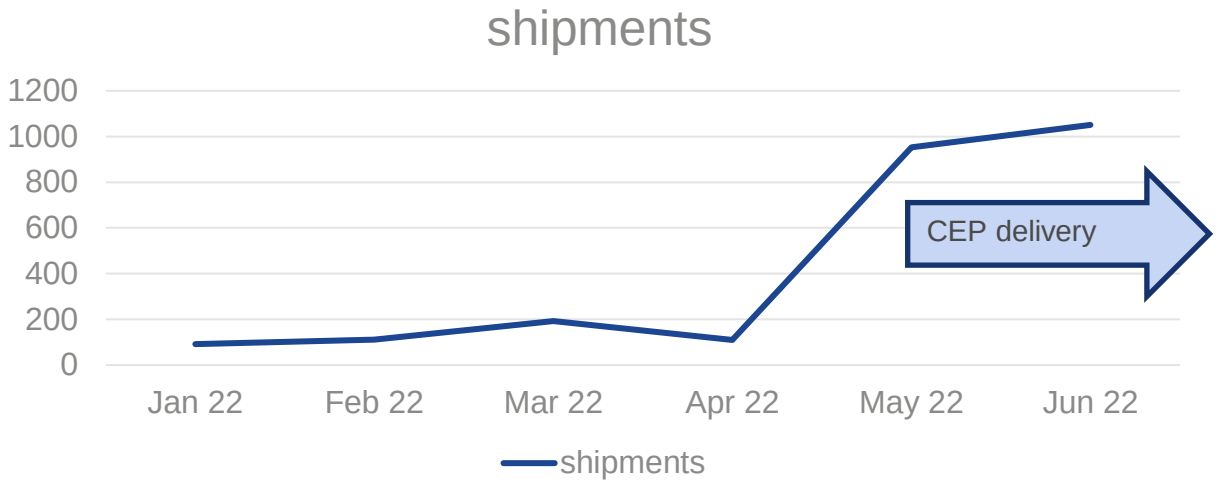
Development of freight volume (CEP joint in May 22)



2022	Number of shipments / packages	Total weight (kg)	Number of operating days	Shipments / packages per day	Average weight (kg)
January	92	5.432	15	6	59,0
February	112	8.155	20	6	72,8
March	193	14.040	23	8	72,7
April	110	7.425	19	6	67,5
May	952	11.872	21	45	12,5
June	1.050	10.864	21	50	10,3

Microhubs / containerised bike logistics

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Lessons learnt

Inner-city microhub suitable for courier, express, parcel services (CEP)

Inner-city microhub also suitable for heavy items

microhubs economically rather difficult outside city centre

General support for cargo bikes: Good cycling conditions

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2.

Cargo-hitching with on-demand passenger service (ViaVan)

Existing (Via) on-demand passenger service on Mercedes plant

Considered combination with transport of (smaller) freight items

Practical problems (+Covid) encountered

Simulation to evaluate potential

Cargo-hitching trial

Via on-demand passenger service
@ Mercedes plant Bremen

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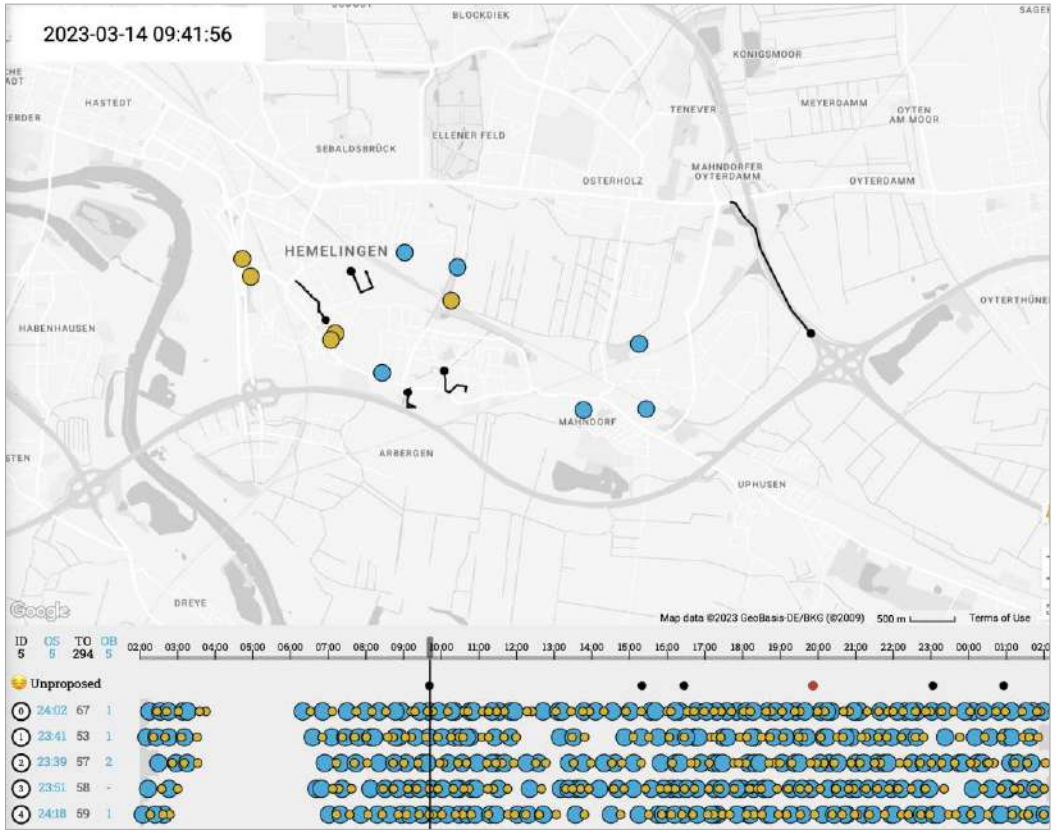
Main barriers encountered:

- Organisational
  (e.g. who brings transport items to vehicle / to recepient? – limitations of drivers)
- Practical
  (e.g. additional time needed)
- Legal
  (how to deal with subsidised on-demand passenger services)

Cargo-hitching simulation

URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Via (ride sharing) ran a virtual trial on different models of **combined passenger and parcel transport** in a residential area in Bremen.



Cargo-hitching trial

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Lessons learnt

Potential
but not profane to be exploited

Slowing down the passenger service?

Many practical barriers:

- How do logistics items get to the van?
- How to get it into and out of the van?
- Additional work for driver?

Legal questions

Public Transport regulations

Competition fairness when subsidised or advantaged Public Transport

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

3.
Cargo bike sharing for private micro-logistics

30% of all trips related to shopping
17% of total mileage driven
10% of transport-related CO2 emission

Potential for cargo bikes ?

Exploitation by cargo bike sharing

Operated as non-profit service by ULaaDS partner ADFC (Cyclists‘ Federation)

Cargo bike sharing

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Cargo bikes available for individuals and commercial users – reducing car trips

adfc
Bremen

Cargo bike sharing

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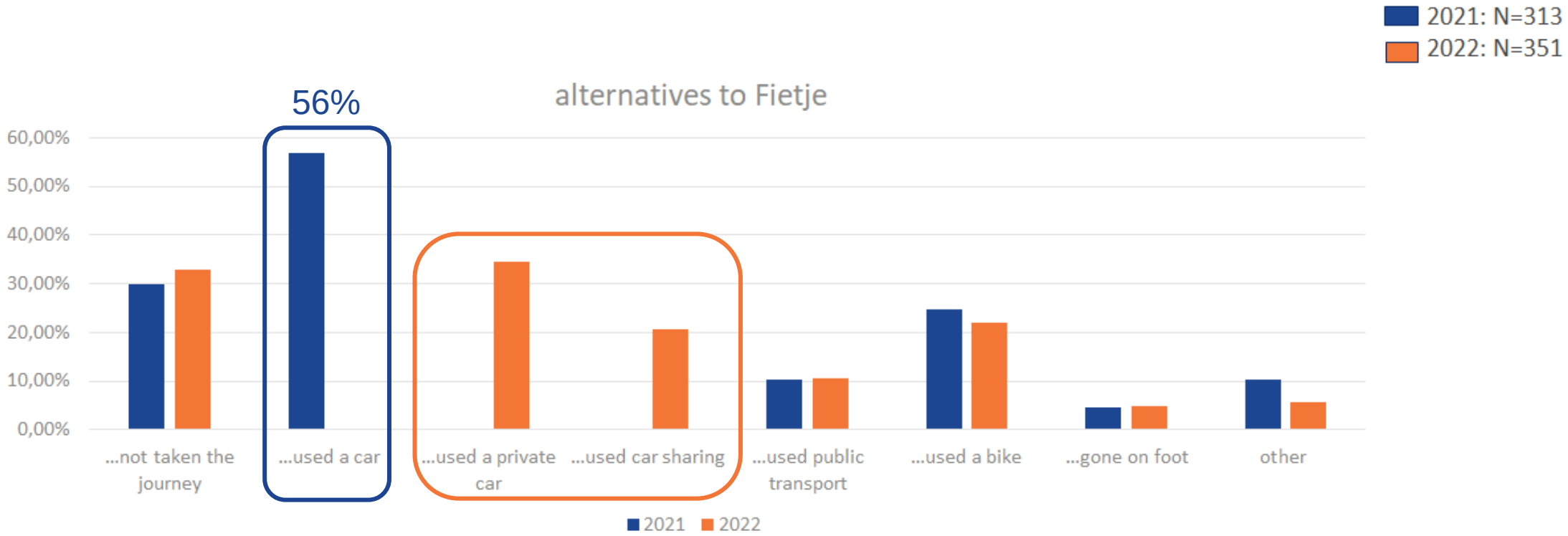
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Cargo bikes available for individuals and commercial users – reducing car trips

Without Fietje, I would have...



More than 50% of cargo bike trips replaced car trips

Cargo bike sharing

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Lessons learnt

Private micro-logistics: substantial contribution to GHG emission and transport problems

Cargo bike sharing operators: economic sustainability in question

Cargo bike sharing: high potential to substitute private car trips

Cargo bike sharing: (public) funding ?

Outlook

CYCLE FRIENDLINESS

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Lessons learnt

Outlook

SULP is not SUMP

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Lessons learnt

Outlook

SULP is not SUMP

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Lessons learnt

Market competition requires non-discriminatory treatment of market players (incentives, permits, …)

All kinds of restrictions (UVAR, parking) politically sensitive

Street space – limited resource
Urban logistics vs. other uses

Outlook

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Revision of German Highway Code:
Delivery zone to be introduced

Will only work with strict enforcement

So stellt sich der BIEK eine Ladezone für Paketzusteller vor. Quelle: BIEK-Erklärfilm

Media reaction to conversion opf car-parking to delivery zone for clean delivery vehicles:
„car drivers annoyed by eco-parking space“

Outlook

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Lessons learnt

Urban logistics established as topic

WIRTSCHAFT 17
DIENSTAG 20. JULI 2021

Kühlschrank per Fahrrad

Bilanz zu Logistikideen für Bremens Innenstadt – verschiedene Akteure arbeiten beim Experiment zusammen

VON LISA ROKKHOFF

Bremen. Lübecker Straße 37. Zum Wesentlichen ist es von hier nicht weit. Gleich um die Ecke das pralle Leben im Bremer Viertel, doch der Parkplatz vor Ort ist nicht gewöhnlich – eine unspektakuläre Kulisse. Bisher zumindest. Seit Kurzem steht im äußersten Winkel ein Container herum. Anwohner haben sich schon gefragt, was es damit auf sich hat. Obwohl der Container recht unscheinbar aussieht, verbirgt sich in seinem Innern nicht weniger als ein Experiment zur Innenstadtlogistik der Zukunft in Bremen.

Worum es hier geht? Speditionslieferungen sollen aufs Lastenrad gebracht werden. Das Bremer Projekt läuft seit 2019. Der Standort im Viertel ist neben einem in der Innenstadt der zweite dieser Art. „Das ist sehr erfolgreich und hat sich gut eingespielt", sieht Marcel Thielbar, der Geschäftsführer der Bremer Radkuriere, für das Experiment heute Bilanz. Die Alternative zum Lastwagen komme bei den Kunden gut an. „Die freuen sich natürlich, wenn ein Rad in die schmale Seitenstraße fährt statt ein 7,5 Tonner."

Bis zum Sommer konnten über den ersten Standort insgesamt etwa 1300 Sendungen geliefert werden mit rund 120 Tonnen Gewicht. Vor dem Hintergrund des Klimawandels und der Debatte über autoarme Zentren bekommt das Projekt zusehends Relevanz. Allerdings zeigt sich, dass es derzeit immer noch an einigen Partnern fehlt, die sich die Projektverantwortlichen vor zwei Jahren bereits erhofften. Die Förderung läuft Ende des Jahres zunächst aus.

Drehkreuz im Miniaturformat

Der Container ist eine Art Drehkreuz für Speditionsgüter im Miniaturformat. Denn von hier aus übernehmen die fünf Radkuriere die berühmte letzte Meile für die Unternehmen Hellmann Worldwide Logistics und die BHS Spedition und Logistik GmbH – mit einem Lastenrad mit E-Antrieb. Gewöhnlich müssen die Touren Lastwagen übernehmen. Die Lieferung per Rad soll eine umweltfreundliche Alternative sein und den Verkehr entlasten.

Kai Hasenpusch von Hellmann Worldwide Logistics spricht jedoch von Vorbehalten in der Branche: „Es ist Skepsis da." Akzeptanz für das E-Lastenrad-Projekt sei wichtig, um wirklich etwas zu bewegen. Er wünscht sich weitere Partner. Gehr es nach den beteiligten Akteuren, soll es weitere Container in der Hansestadt geben.

Hellmann ist von Anfang an dabei. Schon vor mehr als zehn Jahren habe das Unternehmen Anläufe unternommen, um Logistik in Bremen ökologisch sinnvoller zu organisieren: Gütertransporte sollten gebündelt werden und so weniger Lkw vom Güterverkehrszentrum (GVZ) in die Stadt fahren. „Das ist damals gescheitert wegen wirtschaftlicher Interessen", erinnert sich Hasenpusch. Auch mit der Brexpark, die heute den Platz für den Container stellt, habe man mal das Gespräch gesucht.

Constantin Schulz von den Bremer Radkurieren an seinem neuen Arbeitsplatz im Viertel: Vom Container aus werden die Speditionsgüter per Lastenrad an die Kunden vor Ort geliefert. FOTOS: CHRISTINA KUHAUPT

Thomas Nobel

Kira Pieninig

Nun der dritte Versuch. Der soll klappen. Und mit BHS Spedition und Logistik hat sich seit Projektbeginn ein weiteres Unternehmen dem Vorhaben angeschlossen. Im GVZ werden die von BHS und Hellmann ausgelieferten Waren gesammelt und gemeinsam in die Container gebracht. Kira Pieninig von BHS findet es wichtig, Lieferungen auf die Räder zu schaffen, selbst wenn das derzeit noch überschaubar ist: Von täglich 500 Sendungen bei BHS landen fünf bis zehn auf dem Rad.

Pieninig hofft, dass der Anteil steigt. Das Gebiet zum Auftakt sei zunächst eng umrissen gewesen: „Wir haben mit der Postleitzahl 28195 angefangen," jetzt liefert BHS auch im Viertel auf drei Rädern aus. Die Resonanz sei sehr positiv – gerade bei den Privatkunden. „Die sind alle motiviert begeistert", sagt die Managerin. Das Modell wolle man weiter verfolgen, um die Innenstadt und Wohngebiete zu entlasten. „Wir versprechen uns davon schon einiges." Außerdem wisse man nicht, ergänzt Pieninig, ob vielleicht irgendwann doch Fahrverbote für Lkw im Zentrum kämen.

Darauf weist auch Thomas Nobel von der Dachorganisation der deutschen Güterverkehrsunternehmen (DGG) hin. Die Branche müsse hier Antworten haben. „Wir müssen als Logistikbranche zeigen, dass wir Innovationen anschieben."

180 Kilo kann das Lastenrad des Bremer Unternehmens Rytle transportieren und 1,80 Meter Höhe – auf einer Europalette. So können auch größere Lieferungen an Restaurants oder den Einzelhandel übernommen werden. Kommoden oder Kühlschränke für Privatpersonen lassen sich so bis an die Haustür transportieren. Das Rad sei ein Hingucker, bemerkt Constantin Schulz, der für die Bremer Radkuriere arbeitet. „Damit kriegt man eigentlich fast jeden Blick." Schon seit ein paar Tagen fährt er im Viertel Lieferungen mit dem E-Lastenrad aus.

Die DGG begleitet das Projekt wissenschaftlich. Das erste Mikrodepot zeigt dabei im Schnitt werden 70 Kilo ganz Lieferung bewegt. Nobel erinnert sich an die Zweifel im Vorfeld: „Als wir das Projekt gestartet haben, haben alle gesagt: Was wollt ihr mit Paletten und Fahrrädern? Das ist doch viel zu schwer! Das schaffen die gar nicht!"

Experimente zur Innenstadtlogistik

Das Projekt wird vom Bremer Wirtschaftsressort mit einer Summe von 230.000 Euro gefördert. Teile davon kommen von der EU. Die Unterstützung läuft noch dieses Jahr. Gespräche über eine weitere Förderung beginnen nun, erklärt Hans-Georg Tschapke vom Wirtschaftsressort. Wichtig sei beim Projekt die Frage, wie die Geschäftsmodelle der Partner zusammenfinden. „Am Ende geht es nicht nur um Dekarbonisierung, sondern auch um wirtschaftliche Arbeitsplätze." Die Nachfrage nach klimaneutraler Zulieferung steige künftig. „Auf einen solch wachsenden Markt muss man sich vorbereiten." Die GVZ Entwicklungsgesellschaft Bremen koordiniert das Projekt.

Bremen engagiert sich zudem bei einem EU-Projekt zu urbaner Logistik. Daran wirken 25 internationale Partner mit. Koordiniert wird es vom Mobilitätsressort von Maike Schaefer (Grüne). Das Fahrrad spiele auf der letzten Meile eine große Rolle, sagt der Referent für nachhaltige Mobilität im Ressort, Michael Glotz-Richter. Das werde in der EU wahrgenommen. „Ich glaube, dass es wichtig ist, dass wir hier nicht mit den Gedanken allein stehen." Die Bremer Ansätze seien eingebettet in lokale, nationale und europäische Politik.

Wichtig seien jetzt weitere Partner, damit das Projekt nameus „Urban-EAT" sich nach der Anschubfinanzierung durch Bremen alleine rechnen könne. Nobel hofft es für sinnvoll, dass neben den Speditionen auch Paketdienste einsteigen. „Um die Auslastung noch zu erhöhen. Und um deutlich zu machen: Es geht beides."

Für Hellmann ist das Projekt laut Hasenpusch aktuell in etwa kostenneutral. Doch das liegt an der Förderung. Der Manager geht davon aus, dass es sogar kostengünstiger werden könnte, wenn genug Unternehmen einsteigen, wenn gleich 40 oder 50 der Räder im Einsatz sind und Lkw nicht mehr nötig. „Deswegen brauchen wir Nachahmer," im Sinne der Nachhaltigkeit müsse hier der Wettbewerbsgedanke in den Hintergrund treten.

Wirtschaft im Aufschwung

Bundesbank ist optimistisch

Frankfurt/Main. Die deutsche Wirtschaft hat nach Einschätzung der Bundesbank im Frühjahr das Corona-Tief hinter sich gelassen. „Die Wirtschaftsleistung in Deutschland nahm im zweiten Quartal 2021 wohl wieder kräftig zu", heißt es im Monatsbericht Juli der Notenbank, der am Montag veröffentlicht wurde. „Sie dürfte den im Winterquartal vor allem aufgrund der zeitweilig wieder verschärften Pandemie-Schutzmaßnahmen erlittenen herben Rückschlag in etwa wettgemacht haben." Erste Daten zur Entwicklung des Bruttoinlandsproduktes (BIP) im Zeitraum April bis einschließlich Juni veröffentlicht das Statistische Bundesamt Ende kommender Woche.

Im vergangenen Jahr hatte die Corona-Pandemie die deutsche Wirtschaft in die tiefste Rezession seit der globalen Finanzkrise 2009 gerissen. Die Wirtschaftsleistung brach 2020 real um 4,6 Prozent ein. Zu Jahresbeginn 2021 brummten neue Einschränkungen im Zuge der Bekämpfung des Coronavirus unter anderem Gastgewerbe und Teile des Handels aus, das BIP schrumpfte im ersten Quartal zum Vorquartal um 1,8 Prozent.

Getragen werde die aktuelle Erholung zu einem großen Teil vom Dienstleistungssektor, analysierte die Bundesbank. Die Einschränkungen etwa in Handel und Gastgewerbe würden ab Mai schrittweise wieder gelockert. Die Industrie dagegen klagt über Lieferengpässe und Materialknappheit. Dennoch bleiben die Volkswirte zuversichtlich: „Sofern es mit Blick auf die Pandemie zu keinen nennenswerten Rückschlägen kommt und die Lieferengpässe in der Industrie zumindest schrittweise nachlassen, dürfte das gesamtwirtschaftliche Expansionstempo im Sommerquartal noch stärker ausfallen, und das reale Bruttoinlandsprodukt könnte schon im dritten Vierteljahr sein Vorkrisenniveau wieder erreichen." DPA

GASTGEWERBE

Umsatz wächst, liegt aber noch unter dem Vorjahr

Wiesbaden. Die Umsätze im Gastgewerbe erholten sich nur langsam von den Corona-Einschränkungen im Frühjahr. Zwar verbuchten Gastwirte und Hoteliers im Mai sowohl preisbereinigt (plus 13,7 Prozent) als auch nominal (plus 14,2 Prozent) mehr Erlöse als im April dieses Jahres, wie das Statistische Bundesamt mitteilte. Im Vergleich zum Mai 2020 jedoch lagen die Umsätze nach Berechnungen der Wiesbadener Behörde preisbereinigt (real) um 1,7 Prozent niedriger. Auf Jahressicht bleibt die Branche insgesamt noch deutlich hinterher: Von Januar bis einschließlich Mai 2021 lagen die Umsätze real um 46,6 Prozent unter dem Niveau der ersten fünf Monate 2020, nominal betrug das Minus 44,6 Prozent. DPA

STRATEGIEWECHSEL BEI VW

Passat-Produktion in den USA wird eingestellt

Herndon. Volkswagen will die Produktion seines Mittelklassemodells Passat in den USA einstellen. Nach dem Modelljahrgang 2022 sollen im Werk Chattanooga

Weserkurier 20.07.21

Lastenrad statt Lkw

Wie die Zukunft des Lieferverkehrs in Bremen aussehen könnte

VON FELIX WENDLER

Bremen. Mehr als vier Milliarden Pakete werden in Deutschland jährlich verschickt. Die Bestellfreude der Menschen stellt die Städte vor Herausforderungen. Parkende Lieferwagen blockieren die engen Straßen, wie es sie in Bremen in vielen Quartieren gibt. Mitunter wird auch auf Fuß- und Radwege ausgewichen. Nach alternativen Lösungen sucht seit drei Jahren das „Ulaads"-Projekt. Die Abkürzung steht für „Urban Logistics as an on-Demand Service" – es geht also um den Lieferverkehr im urbanen Raum. Wie kommt das Paket innerhalb der Stadt bis zur Haustür? Welche umweltfreundlichen Verkehrsmittel taugen dafür?

„Ulaads" ist ein europäisches Forschungsprojekt unter Bremer Vorsitz. In dieser Woche haben sich rund 50 Projektpartner aus elf Ländern in der Hansestadt getroffen. Diskutiert wurde laut Michael Glotz-Richter, Referent für nachhaltige Mobilität im Bremer Verkehrsressort, unter anderem über Lastenräder. Die drei Modellstädte des Projekts – neben Bremen gehören dazu das niederländische Groningen und Mechelen in Belgien –, sind laut Glotz-Richter „besonders fahrradfreundlich". Dementsprechend verwundere es nicht, dass Lastenräder und auch sogenannte Mikro-Hubs (Umladepunkte zwischen Lkw und Lastenrad) in allen Städten eine Rolle spielten. Im Rahmen des „Ulaads"-Projekts werden in Bremen Waren beispielsweise vom Jakobikirchhof aus auf die „letzte Meile" mit dem Lastenrad geschickt. Den „Ulaads"-Daten zufolge waren es von Mai 2022 an rund 1000 Sendungen pro Monat mit einem Durchschnittsgewicht von etwa zehn Kilogramm.

Auch der private Warenverkehr mit Lastenrädern habe sich in Bremen etabliert, so Glotz-Richter. Er verweist auf die „Fietje"-Lastenräder, die der ADFC verleiht. Während man beim Radverkehr Vorbild für Projektstädte wie Rom oder Alba Iulia in Rumänien sei, könne Bremen an anderer Stelle noch viel lernen. So fehle in Deutschland die Möglichkeit, Lieferzonen auszuweisen. In Barcelona gebe es hingegen ein digitalisiertes System für Lieferwagenfahrer, sagt Glotz-Richter. Dort müsse beim Anliefern niemand in zweiter Reihe parken.

FOTO: MICHAEL GLOTZ-RICHTER/SKUMS

Vom Container auf das Lastenrad: Sogenannte Mikro-Hubs wie der am Jakobikirchhof könnten den städtischen Lieferverkehr verändern.

Weserkurier 31.03.23

Outlook

ULaDS
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Lessons learnt

Urban logistics established as topic

Exchange with business community, within administration and with resea

Cargo bike for the *very* last mile

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Die Senatorin für Bau, Mobilität und Stadtentwicklung
Freie Hansestadt Bremen

to-be-now-logistics-research-gmbh

adfc Bremen

RYTLE

Thank you for your attention

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861833

Contact:
ulaads@bau.bremen.de

ULaDS
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Get to know Groningen

Sjouke van der Vlugt
Jeroen Berends
Jacky van Geffen

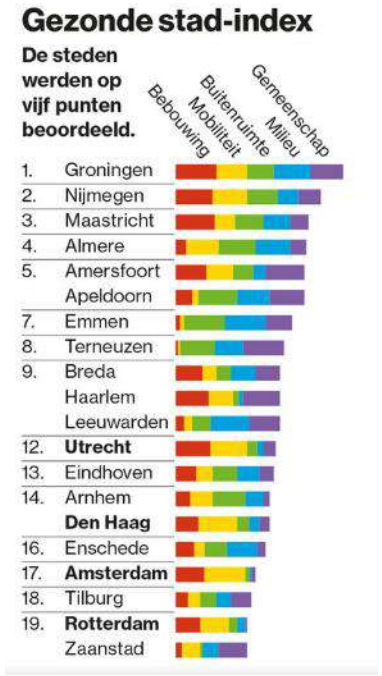
City of Groningen
16-11-2023

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861833

CIVITAS
Sustainable and smart mobility for all

About Groningen

Population 2022	235.000
Population 2035	250.000
Daily Urban System	500.000
Jobs	140.000
Students	60.000
Of which internationals	8.000
Average age	36.4 years



#Green City
#Happy City
#Healthy City

40 years tradition of compact city

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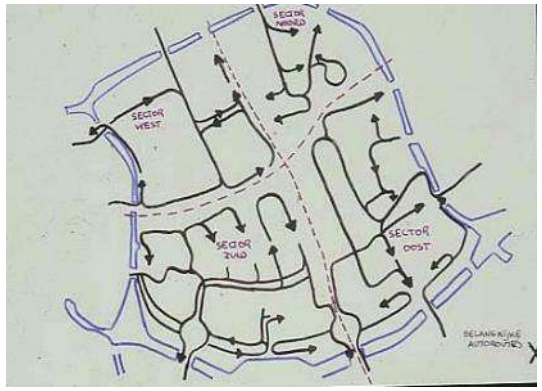
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

1977
Trafic circulation plan



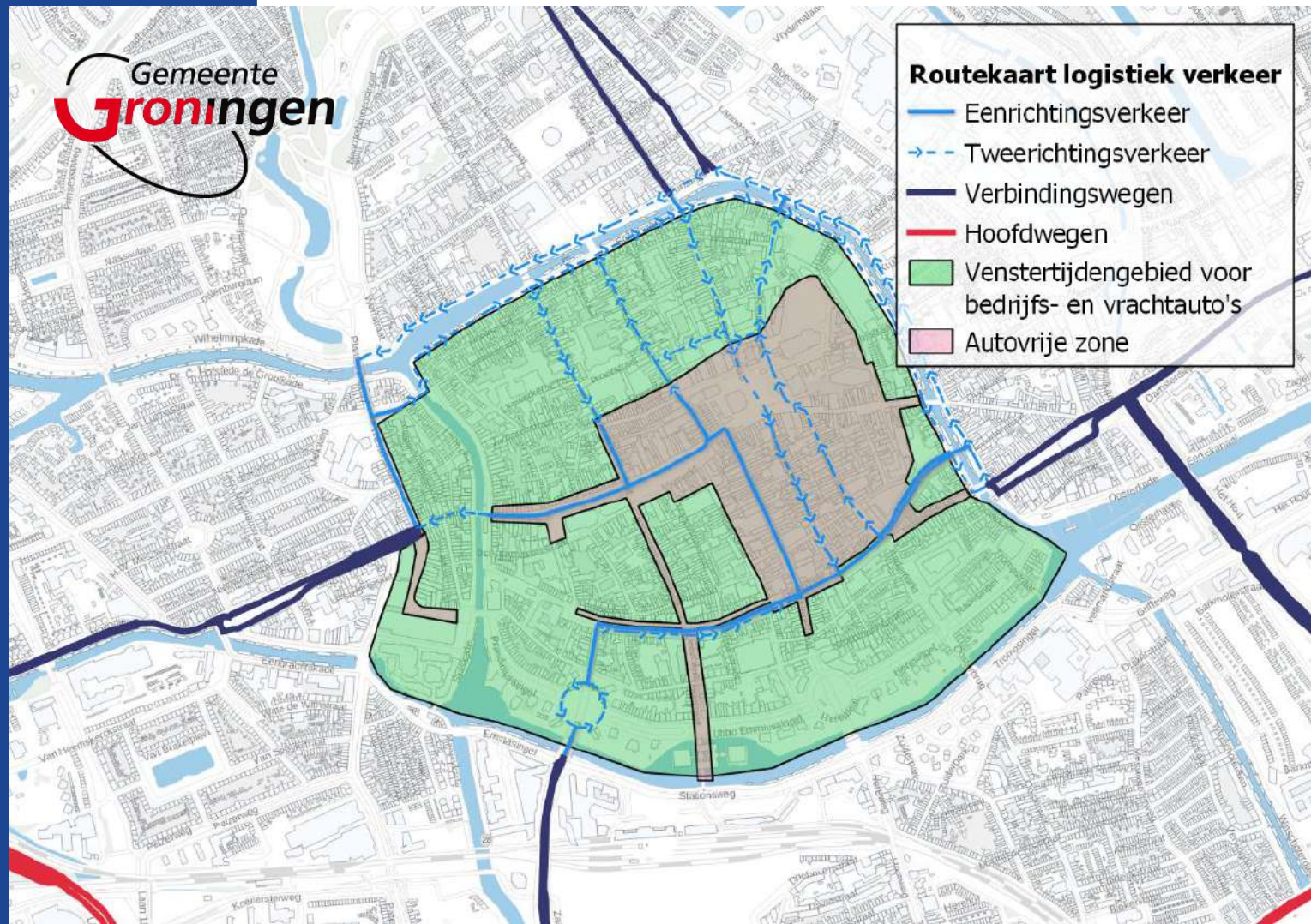
1996
Space for Space

2016
Space for YOU

Sustainable Urban Logistics Plan 2021

1. 2023: Enlarging area with time frame for deliveries
2. 2023: ANPR-camera's
3. 2023: New UVAR – exemption policy

4. 2025: ZE-zone for logistics



ULaaDS Trial 1
Inner city trial

Initial setup

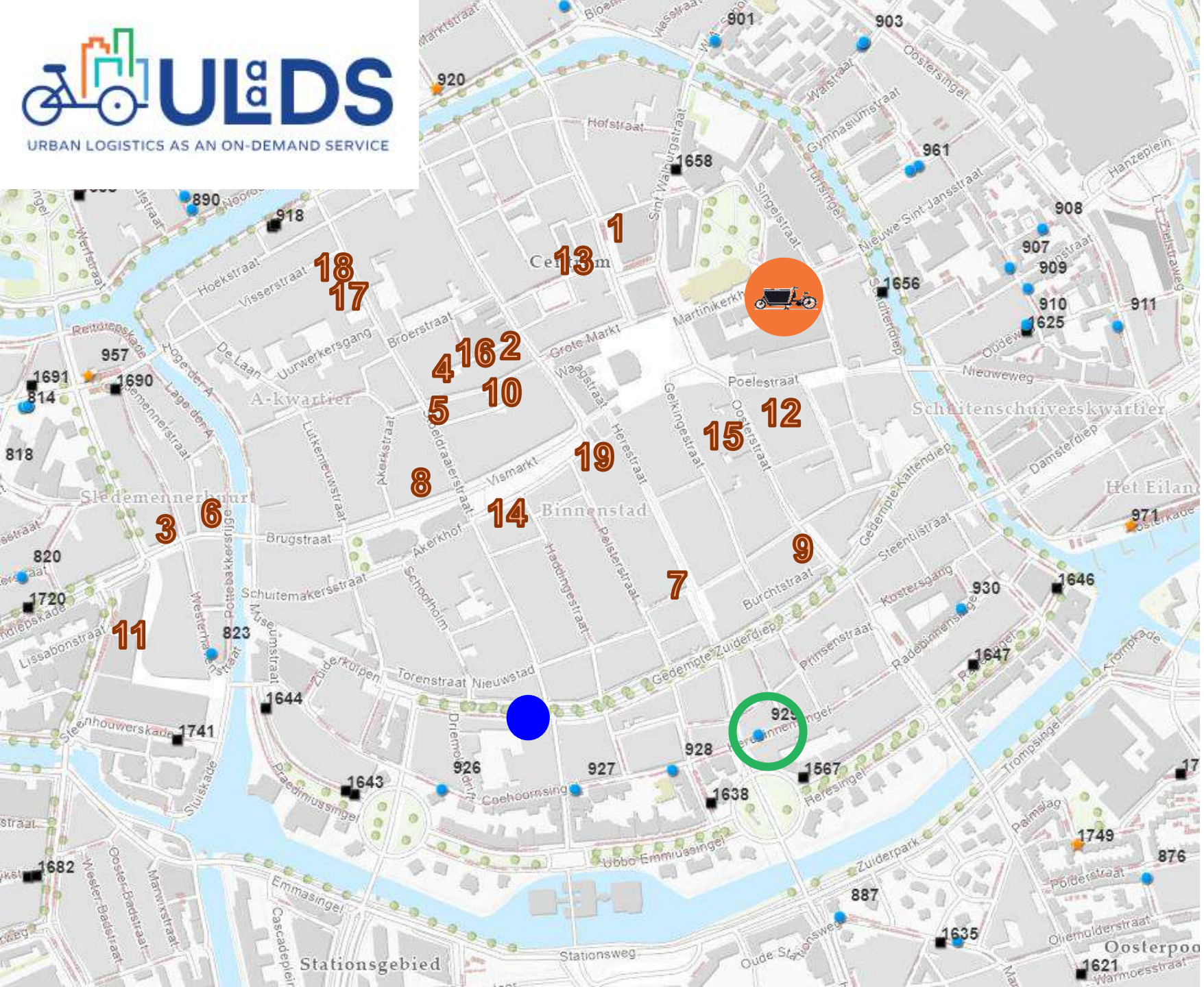
In Trial 1, the municipality of Groningen (GRO) and the Groningen City Club (GCC) organize the development, implementation, and promotion of a **platform** that enables local **shopkeepers and** other **entrepreneurs** with **access** to different types of **shared zero-emission vehicles**.

Stakeholders

- Groningen City Club (shop owners organization)
- 20 shop owners
- University of Groningen

ULaDS
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Location selection



1	Boekhandel Godert Walter
2	Cledingraad Herenmode
3	De Roemer
4	Diezijner
5	Flokstra
6	Groninger Kaasboetiek
7	Jullens Bakkerij
8	Junior Shop Groningen
9	Kaashandel van der Leij
10	Kaaskop
11	Kaldi Koffie
12	Kokotoko
13	Laif & Nuver
14	Liatelier
15	Mary Jane
16	Musjes
17	Stadsakker
18	Wirwar
19	WAAR

Trialing

ULaDS
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

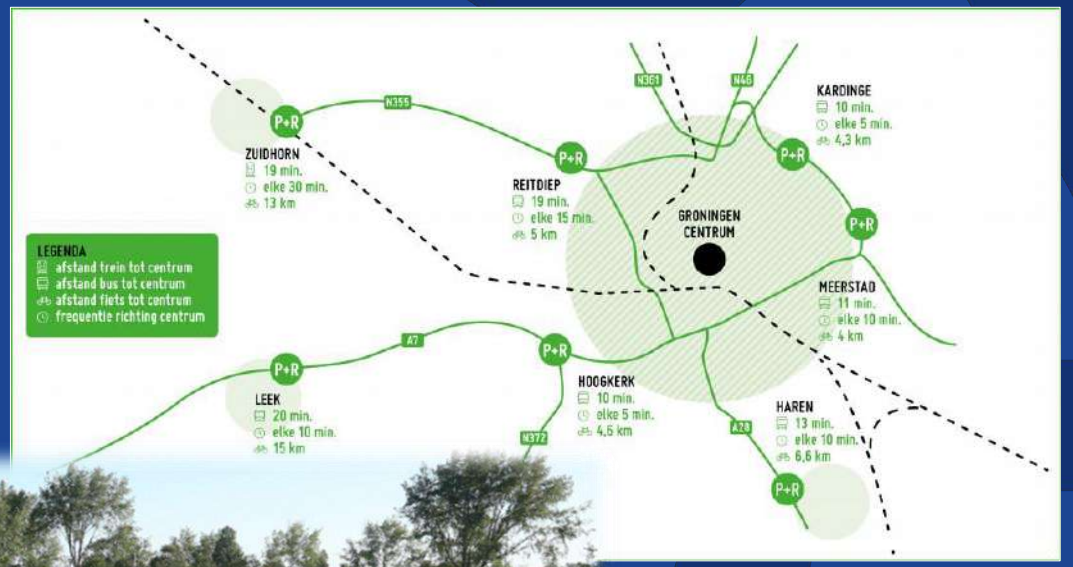
Learnings

- Working with the shop owners: keep the momentum
- Shop owners appreciate being involved in such a innovative process
- Proximity of vehicles is important
  - More for cargobikes
  - Little less for vans
- Good chances for a positive business case

Next steps

- As of November 1 2023, vehicles and platform provider Century is switched to a ULaaDS follow-up model with payment by entrepreneurs.
- Working on a joint plan for scaling up the number of vehicles.
  - Century
  - GCC
  - RUG
  - City of Groningen

Trial 2:
urban logistics as a service for commuters at park & ride



Initial setup

- Trial 2 was intended to add a logistics service to a P+R area on the outskirts of Groningen. Many commuters travel to the P+Rs around Groningen every day. The aim of this was to develop an attractive service for commuters and to make logistics more sustainable by reducing and replacing the driven transport kilometres.

Permits, agreements and requests

- Spatial integration
  - Presure on public space is growing
- Land use agreement
  - Very strict rules for using public space. So a policy framework is needed for a land use agreement
- Electricity connection
  - Long waiting period to get your requested connection

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Trialing…

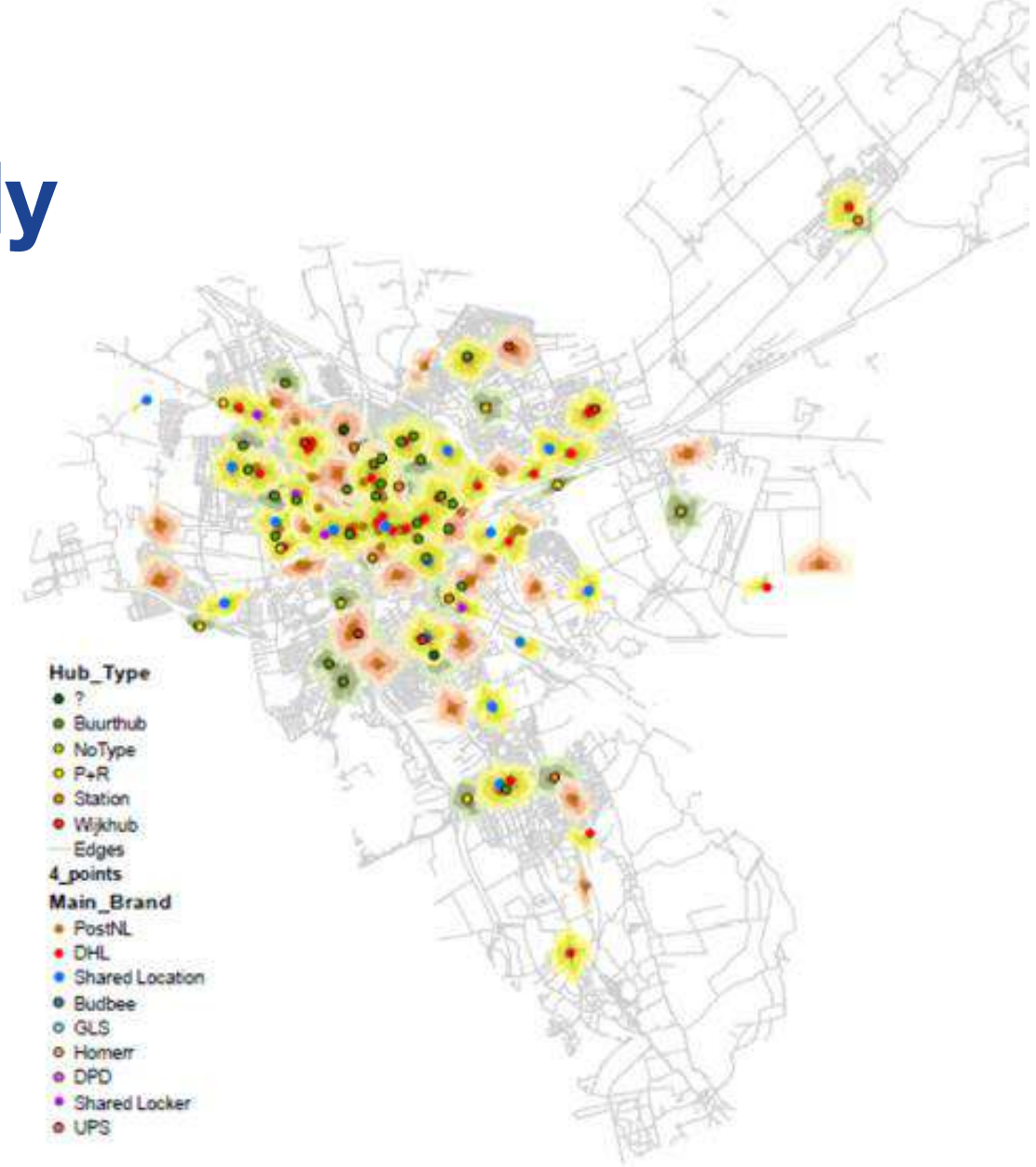
Local Fora

- Stakeholders
  - Several specialists of the city of Groningen
  - Other local authority with relevant experience
  - Public transport organization
  - Researchers
  - Suppliers of parcel lockers
  - Commuters
- Topics
  - Travel mode – proximity
  - Spatial integration and land use
  - White label vs. single player network
  - Parcel lockers as part of a pick-up/drop-off network
- After the Fora, the municipality of Groningen had a one-on-one discussion with each of the three suppliers to clarify the specifications for a possible concession request.

Policy framework

- The municipality is in the lead for lockers in public space
- All companies should use the same lockers
- The appearance of the lockers should be tailord to the location
- Parcel lockers can only be placed at specific locations (in public space)
  - Mobility hubs
  - Community hubs
- On private land permission by land owner is needed (+ meeting the municipal zoning plan and aesthetic policy)

Location study



PostNL & DHL pedestrian coverage + possible new locations (green)

Next steps

- The policy framework will be submitted to the city council for adoption in December 2023.
- A concession for operating parcel lockers in public space (1 operator).
- At least 3 companies will be asked to make an offer.
- A minimum of 10 and a maximum of 20 parcel lockers in public space.
  - This can be deviated from during the concession granting process.
- The concession period is 5 years.

Thank you!

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ULaDS
URBAN LOGISTICS AS AN ON-DEMAND SERVICE

The ULaaDS project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861833. ULaaDS is a project under the CIVITAS Initiative.

CIVITAS 2030
Sustainable and smart mobility for all

THE CIVITAS INITIATIVE IS CO-FUNDED BY THE EUROPEAN UNION

ULaDS

URBAN LOGISTICS AS AN ON-DEMAND SERVICE

Mechelen

Final event - Barcelona

November 16, 2023

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861833

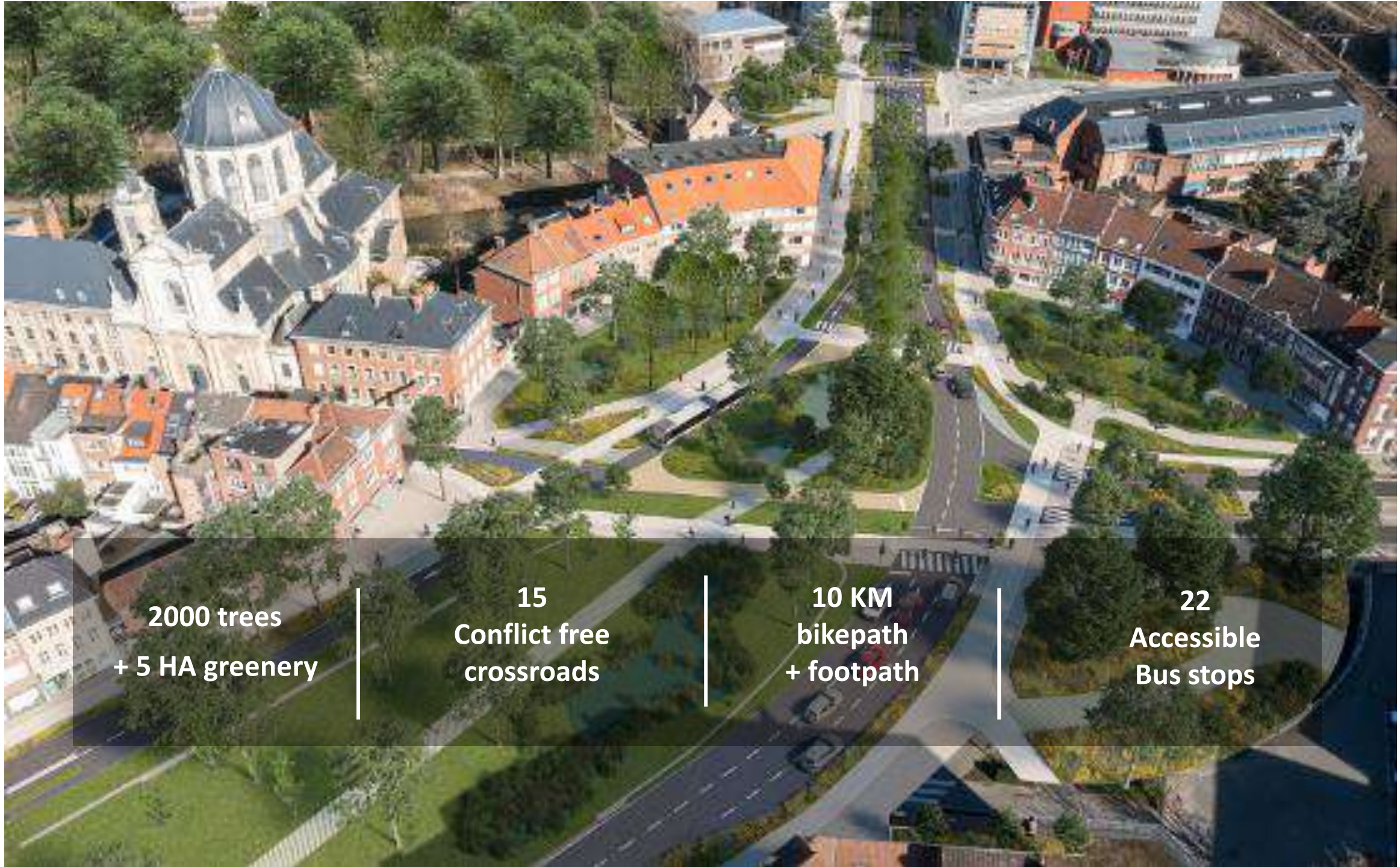
CIVITAS

Sustainable and smart mobility for all

MECHELEN


ANTWERPEN
MECHELEN
BRUSSEL

Mechelen


2000 trees
+ 5 HA greenery
15
Conflict free
crossroads
10 KM
bikepath
+ footpath
22
Accessible
Bus stops


GA TX
GA TX
GA TX
GA TX
GA TX


KingslizePizza


Dat lucht
bpost


Socialfeet


GreenDriver


URBAN ARROW


> 7500 deliveries per week
10%
Logistics traffic
32% CO²-emission by 2030

Policy with impact on logistics

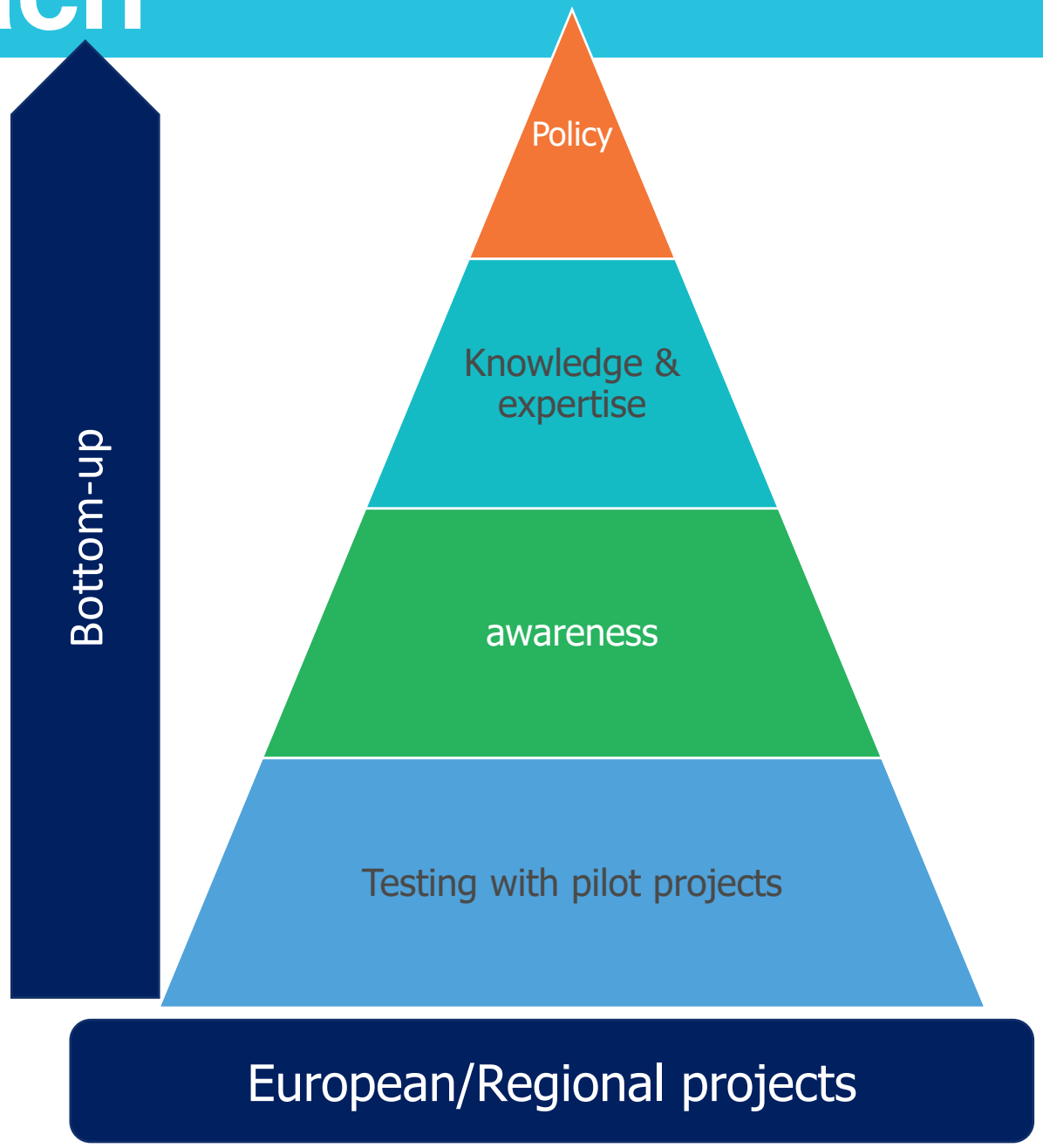
- Low car zone with focus on shopping triangle
- Time frames for deliveries (11-18u carfree)
- Inner city = zone 30 & cycling zone
- Vehicles longer than 10m and heavier than 11 tons are not allowed (without a permit)

approach

More sustainable & efficient urban logistics

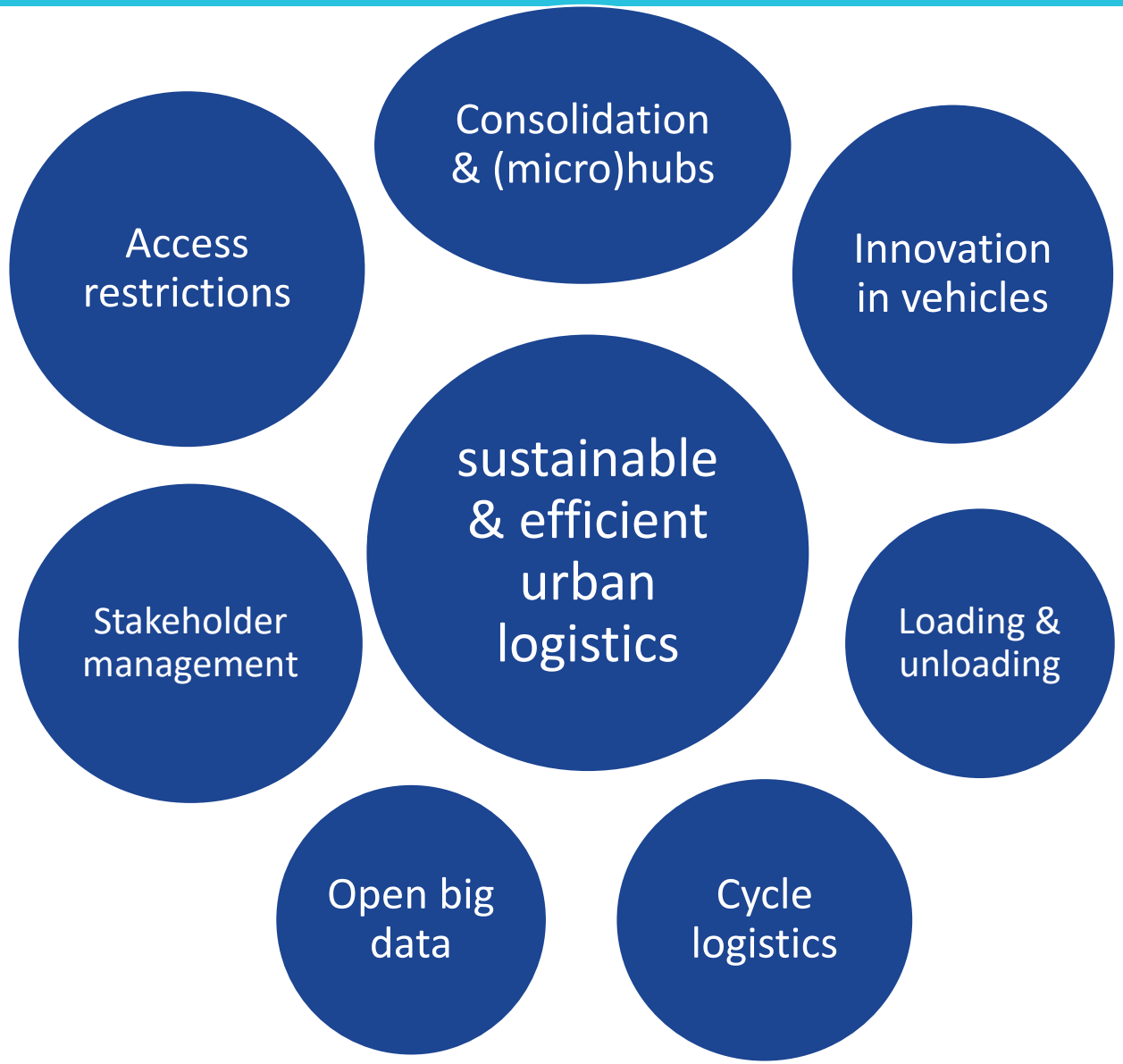
* reduction in number of transport movements
* reduction in number of driven kilometers
* reduction in CO2 emissions
* improvement of air quality

approach


Bottom-up
Policy
Knowledge & expertise
awareness
Testing with pilot projects
European/Regional projects

Mechelen – EU projects

activities


Consolidation & (micro)hubs
Access restrictions
Innovation in vehicles
sustainable & efficient urban logistics
Stakeholder management
Loading & unloading
Open big data
Cycle logistics

activities

Start-up bikecourier

Last mile city services

Subsidy scheme

34

Subsidised entrepeneurs

ANPR-data analysis

VUB VRIJE UNIVERSITEIT BRUSSEL

Analysis van logistieke data van Mechelen

ikv. Europees project Novelog

Sheida Hadavi
Heleen Buldeo Rai
dr. Sara Verlinde
prof. Cathy Macharis
prof. Tias Guns

mobi

Stakeholder engagement

activities

Lockers

Trial projects: https://youtu.be/svqfEwidH2Q

Ecozone bpost

Covenant: 0-emission by 2030

Mechelen Trials in ULaaDS

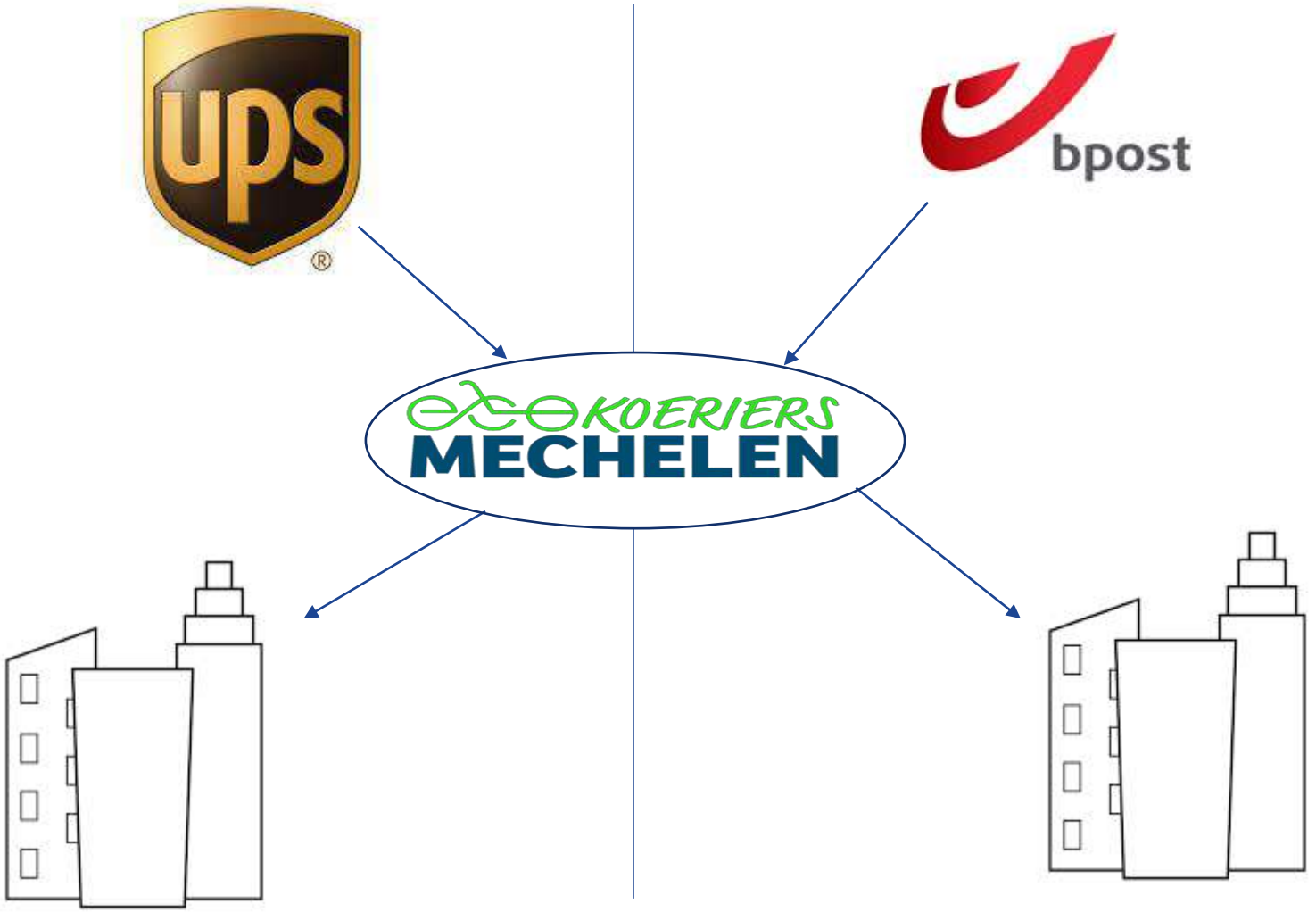
Inner city trial

Outer city trial

Mechelen Trial 1

Inner city trial

Consolidated first mile



Partners involved:

- ECO
- BPO
- UPS

Inner city trial

- *Nice trial in theory, too sensitive in reality*

- *Agreement BPO - ECO: ☺*
- *Agreement UPS - ECO: ☹*

- *UPS already works with third party for PUDO*
- *Difficult talking with all parties at the same time*

Partners involved:

- UPS
- ECO
- BPO

Mechelen Trial 2

Autonomous transport & cargo hitching

Autonomous pilot & cargo hitching

- Trajectory of 2,1 km on public roads
- 6 stops, shuttle can be ordered via app
- Security steward on board: SAE-level 3 and 4
- Transport of packages and persons
- Operated on weekdays 11 – 18u
- Free of charge

- https://www.youtube.com/watch?v=vsJWPVjZOAE

MOBILITEIT

Stad Mechelen en logistiek innovatieplatform VIL pakken uit met Vlaamse primeur op openbare wegen

Zelfrijdende shuttle is gratis uit te testen in Mechels bedrijvenpark

Op het bedrijventerrein van Mechelen-Noord rijdt de eerste zelfrijdende shuttle op de openbare weg in Vlaanderen. Het gaat om een proefproject van de stad en het Vlaamse innovatieplatform voor de logistieke sector VIL. Met de shuttle worden niet alleen maximaal zes mensen, maar ook pakjes vervoerd. Het proefproject loopt zo'n twee maanden.

Deze autonome shuttle voor personen- en pakjesvervoer rijdt de komende t

De stad Mechelen liet in 2018 al eens bij wijze van test een zelfrijdende shuttle door de winkelstraat Bruul rijden, maar nu wordt er nog een stap verder gegaan. Vanaf vandaag rijdt in het bedrijvenpark in Mechelen-Noord een volledig autonome shuttle. Die volgt een traject van ongeveer 2,5 kilometer langs interessante punten zoals bushaltes, bedrijven en een broodjeszaak. Op die manier wil men zo veel mogelijk gebruikers overtuigen om de shuttle uit te testen.

"We zijn blij en trots op deze Vlaamse primeur, want hier reed nooit eerder een operationele zelfrijdende shuttle op de openbare weg", zegt schepen van Mobiliteit Vicky Vanmarcke (Vld-Groen-m+). "We zetten een nieuwe stap richting de mobiliteit van de toekomst. Het busje rijdt 100% elektrisch en vormt een mooie aanvulling op de deelmobiliteit, wa
na
wa

Vicky Vanmarcke

Mechels schepen van Mobiliteit

"Het

men met Bpost. In de shuttle werd namelijk een zestal pakjes lockers geïnstalleerd. Vanaf 4 jul kun je via de lockers pakjes ont

vrt nws

Hoofdpunten Regio Kijk Luister Meest rec

Eerste zelfrijdende shuttlebus in Mechelen vervoert zowel mensen als pakjes

Busje komt zo... dadelijk misschien

300 mensen maakten gebruik van zelfrijdende shuttle in Mechelen-Noord: "Proefproject positief geëvalueerd"

Stad evalueert autonome shuttle: "Testpubliek was opvallend positief over potentieel"

Take away

- Broader public support than originally thought
- Stakeholders prefer hop on hop off autonomous shuttle service on fixed route
- Autonomous transport is seen as an ideal solution for target groups that are less mobile
- People don’t see a lot of opportunity in combining people with goods transport
- The Mechelen pilot has ensured that in Belgium at federal and Flemish level a working group on autonomous transport was set up
- Learning by doing has absolutely proofed its relevance!!

Further work on……

- Convincing shop owners/entrepeneurs
- Consolidation: cooperation between LSPs
- Potential of cyclelogistics : 32%
- Scale and capitalise on EU projects
- Bottom-up but also top-down: time for policy

Thank you!

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URBAN LOGISTICS AS AN ON-DEMAND SERVICE

The ULaaDS project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 861833. ULaaDS is a project under the CIVITAS Initiative.

CIVITAS 2030

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Q&A

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Enjoy the lunch!

We will start again at 14:00

Panel Discussion: the status of urban logistics in Europe

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Michael Glotz-Richter
City of Bremen

Paola Cossu
FIT Consulting

Breogan Sánchez
Zaragoza City of Knowledge Foundation

Manon Levrey
InterfaceTransport

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Q&A

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Frameworks, policies and planning for sustainable urban logistics

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Frameworks, policies and planning for sustainable urban logistics

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Hassan Hussin & Katy Huaylla, Rupprecht Consult

Lorena Axinte, Bax & Company

Ward Rauws, University of Groningen

1. Integrating ULaaDS in SUMPs and SULPs
2. Frameworks for logistics developments
3. Making planning more adaptive

1. Integrating ULaaDS in SUMPs and SULPs

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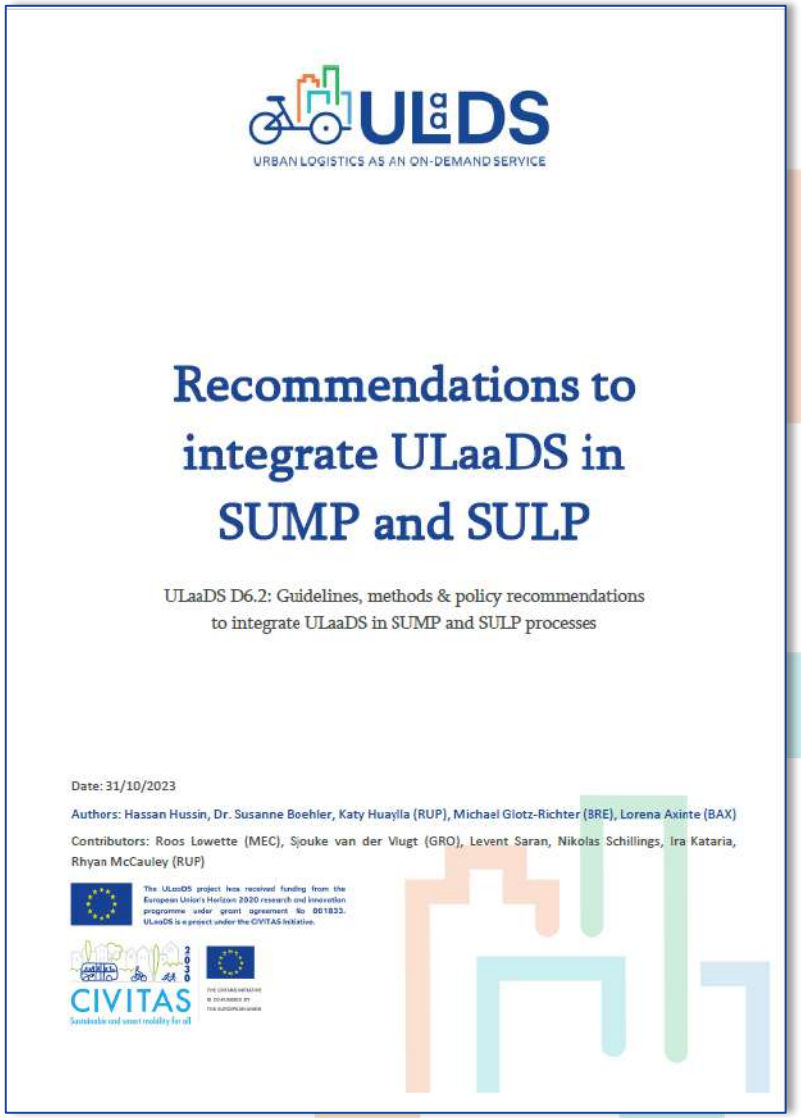

Dissemination Deliverable 6.2:

Recommendations to integrate ULaaDS in SUMp and SULP

ULaaDS D6.2: Guidelines, methods & policy recommendations to integrate ULaaDS in SUMP and SULP processes

Scan Me !

ULaaDS Guide Purpose

Give advice on how to account for ULaaDS schemes in SUMP and SULP processes.

Focus on **driving factors**, **barriers**, and **key elements** for **successful** pilot and trial **implementation**.

Inform about and facilitate ULaaDS schemes' large-scale implementation in cities.

ULaaDS Guide Target Group

Local Authorities

City Planners

Interested Private Sector

D6.2 Main Structure

- ULaaDS contributing to green urban logistics in European cities

1. SUMP and SULP as key instruments to plan for a greener urban logistics
2. The implementation of urban logistics measures
3. Setting the scene for urban logistics implementation through SULP

1. SUMP and SULP as key instruments for a greener urban logistics

Source: SULP Guide, 2019, p. 15

★ The yellow stars show for which steps and activities this Guide will provide recommendations and best practices regarding urban logistics. For the implementation of the rest of the steps and activities, the city (or any other interested party) shall follow the instructions that are presented in the general SUMP Topic Guide

2. The implementation of urban logistics measures

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1. The importance of a proper legal framework
2. Working together with stakeholders on urban logistics measures
3. Looking for the right technology and innovation
4. Generating impact: Data, indicators and monitoring

3. Setting the scene for urban logistics implementation through SULP

1 Fostering Flexibility & Resilience for dynamic urban logistics

- SULPs are not SUMPs
- Urban logistics is dynamic, Cities face constant change in population, economy, and technology.
- Sustainable Urban Logistics Plans (SULPs) are vital, evolving strategies for adaptability.
- Flexibility is key for urban logistics success, adapting to challenges.
- SULPs empower cities to navigate changes and ensure system agility.
- COVID-19 exposed urban logistics vulnerability, emphasizing the need for resilience.
- SULPs, as living documents, help cities adjust swiftly to crises and community demands.

2

Inclusive Stakeholder Engagement

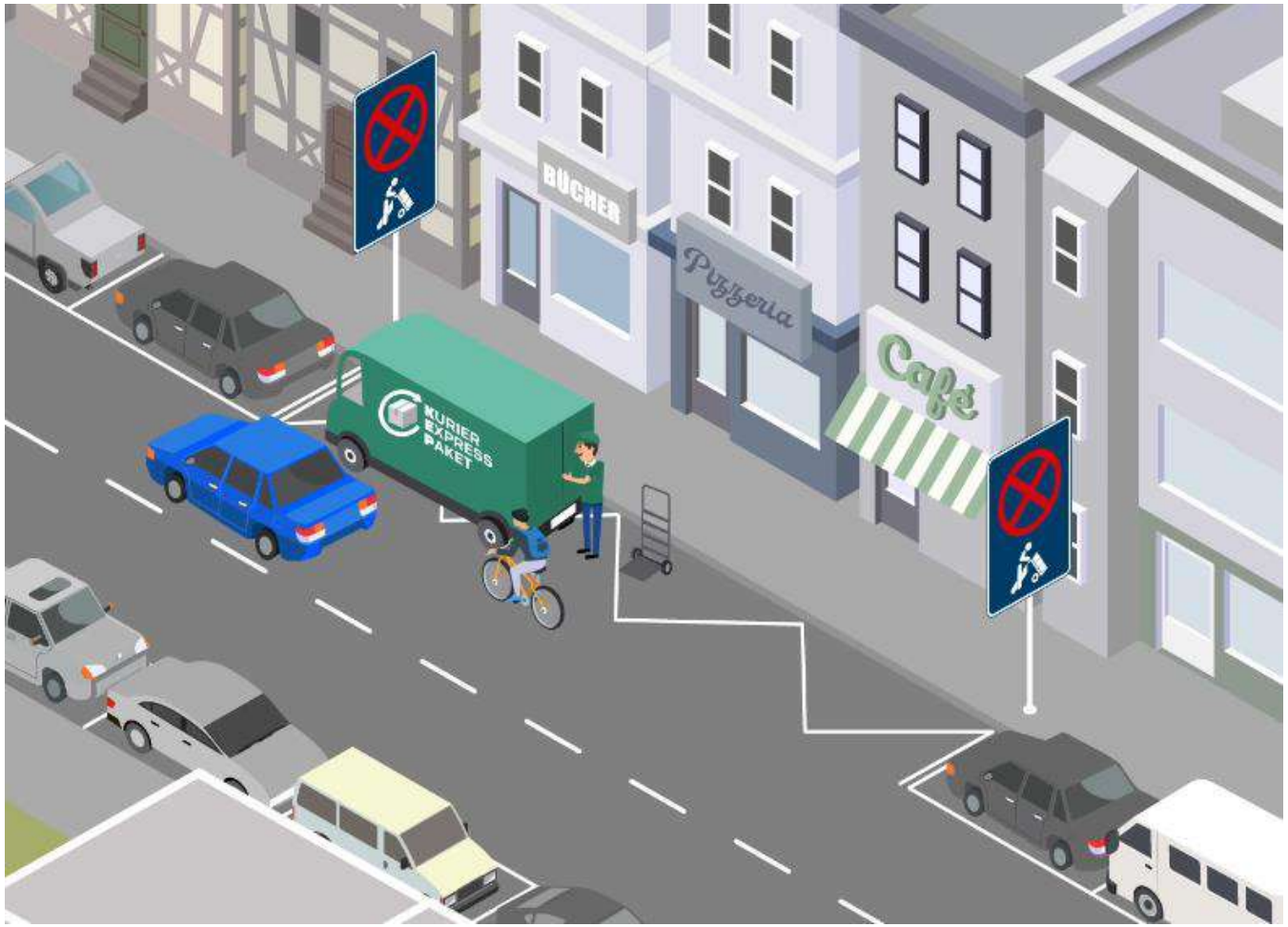
- Again, SULPS are not SUMPs
- Effective SULPs need inclusive stakeholder engagement.
- Methods like local forums promote collective decision-making and ensure involvement and interest of stakeholders on long term.
- Inclusive engagement fine-tunes logistics projects, ensuring sustainability and stakeholder consensus.
- Collaboration with businesses tailors SULPs to meet diverse logistical needs economically.

3 Encouraging technological innovation and data driven approaches

- Evolving Technology reshapes goods delivery; cities must embrace innovation for efficiency.
- Small, Electric vehicles, robots, and drones represent the future of urban logistics.
- SULPs should serve as blueprints for agile and prepared urban logistics operations.

4 Optimized space allocation and regulation

- Creating an effective regulatory framework for urban logistics is challenging due to the industry's diversity.
- Strict enforcement optimizes space allocation, ensuring timely delivery, reducing congestion, and streamlining logistics.
- Regulations incentivize compliance, promoting efficient traffic flow and minimizing disruptions.
- Optimized space allocation enhances overall urban accessibility and liveability.
- Balancing regulatory oversight and industry autonomy requires adaptable, responsive regulations.



Draft of a loading/unloading zone for Germany.
Source: BIEK German Association of Parcel and Express Logistics

5 Ensuring fair competition in logistics

- Effective regulation should guide businesses to thrive while upholding fair competition, innovation, and corporate identity.
- Ensuring fair competition in logistics prevents the concentration of privileges, promoting a balanced regulatory framework.
- Regulations should prevent anti-competitive practices while allowing companies to innovate and compete effectively.
- Unchecked dominance can stifle innovation and hinder new entrants, necessitating a level playing field.

ULaaDS Cargo bikes in Bremen

6

Learning Processes: Trial-First Approach

- Lets keep moving forward !
- Trials provide valuable data on viability, challenges, and benefits, allowing cities to tailor strategies and the development of SULPs
- Adaptive approaches ensure logistics policies are finely tuned to the unique dynamics of each urban environment.
- This dynamic framework encourages cities to explore, experiment, and refine logistics solutions for unique urban landscapes.

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ULaaDS Groningen's City Centre Logistics Service Platform – Sharing ZE-vehicles

2. Finding space for logistics – a framework for parcel lockers

A framework for parcel lockers – why and how?

Why:

- to establish the vision, rules and expected results of parcel locker services
- to provide parcel lockers as a universally accessible service
- to overcome the lack of easily replicable models from other cities/countries

Groningen City

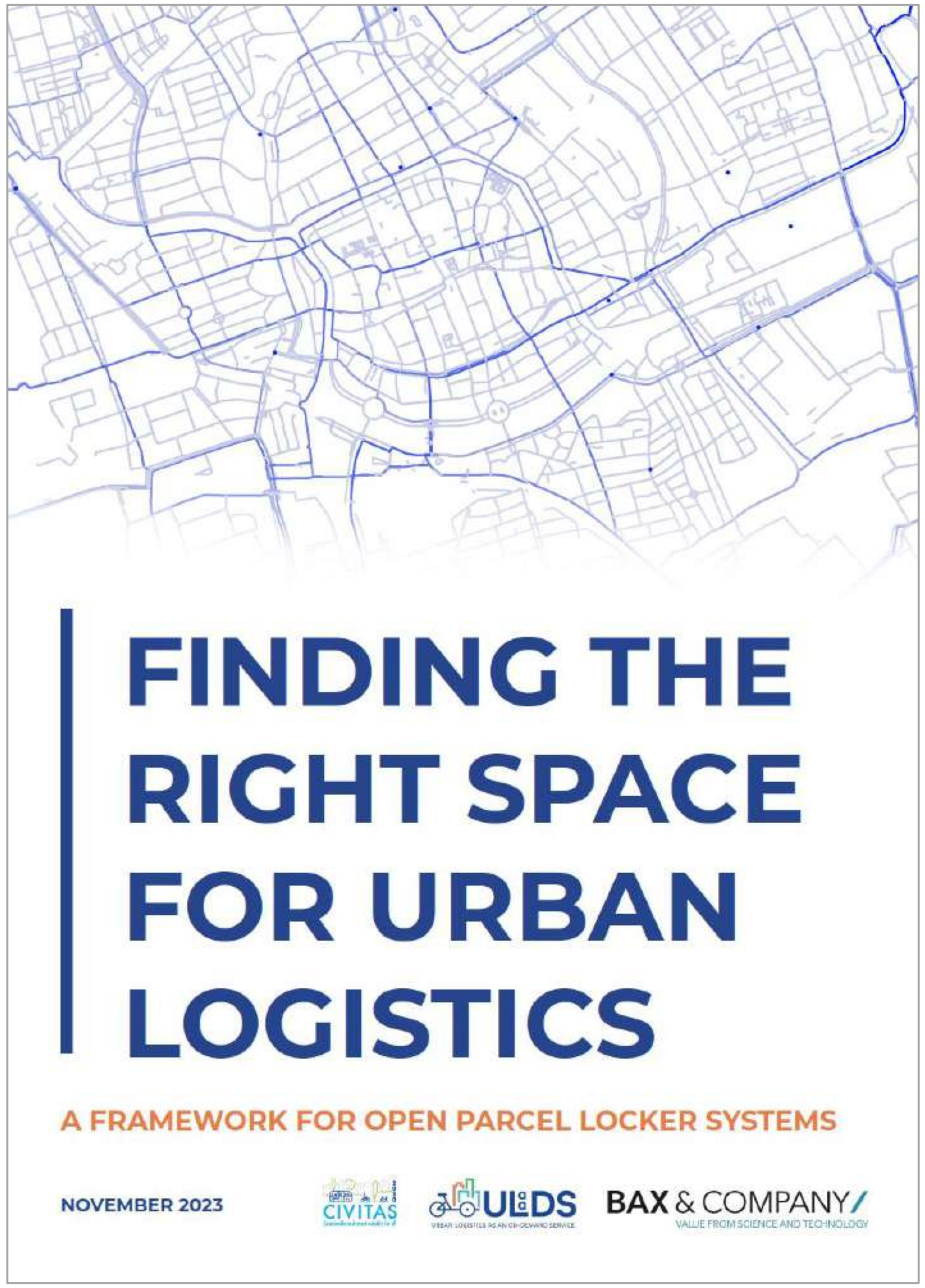
- Stakeholder fora (incl. PostNL, DHL, de Buuren)
- Inter-departmental discussions

University of Groningen

- Involvement and facilitation of stakeholder fora
- Research on the carbon emission impact of pickup points in last-mile parcel delivery

Bax & Company

- Benchmarking of worldwide practices for parcel lockers
- Spatial analysis to identify the best location for parcel lockers in terms of measured accessibility



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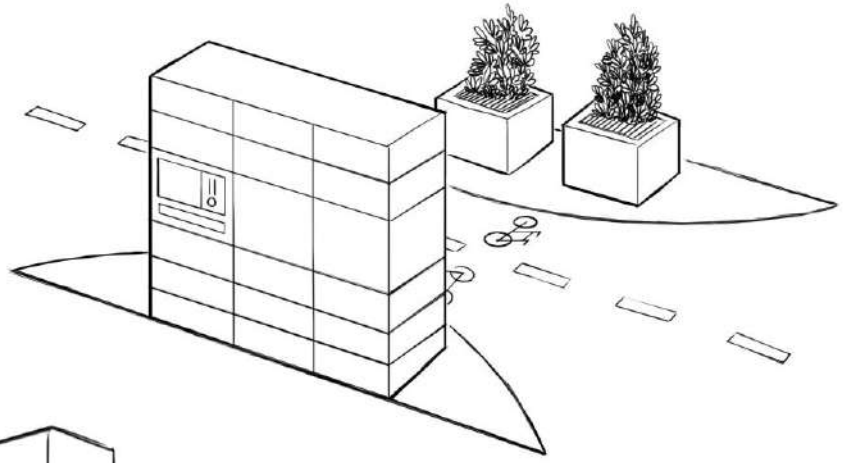
Benchmarking best practices

Examples from:

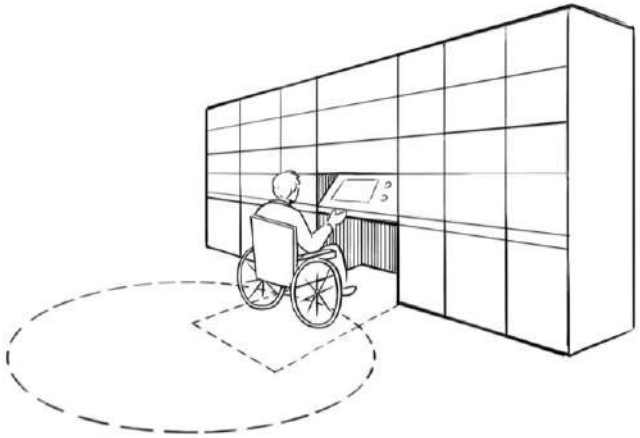
- Austria
- Norway
- UK
- Singapore
- US

Common themes:

- Overall regulation approach
- Business models
- Location
- Infrastructure requirements
- Accessibility
- Data reporting



Parcel locker integration in public space
Visual inspired by Millie Mitchell / Centre for London



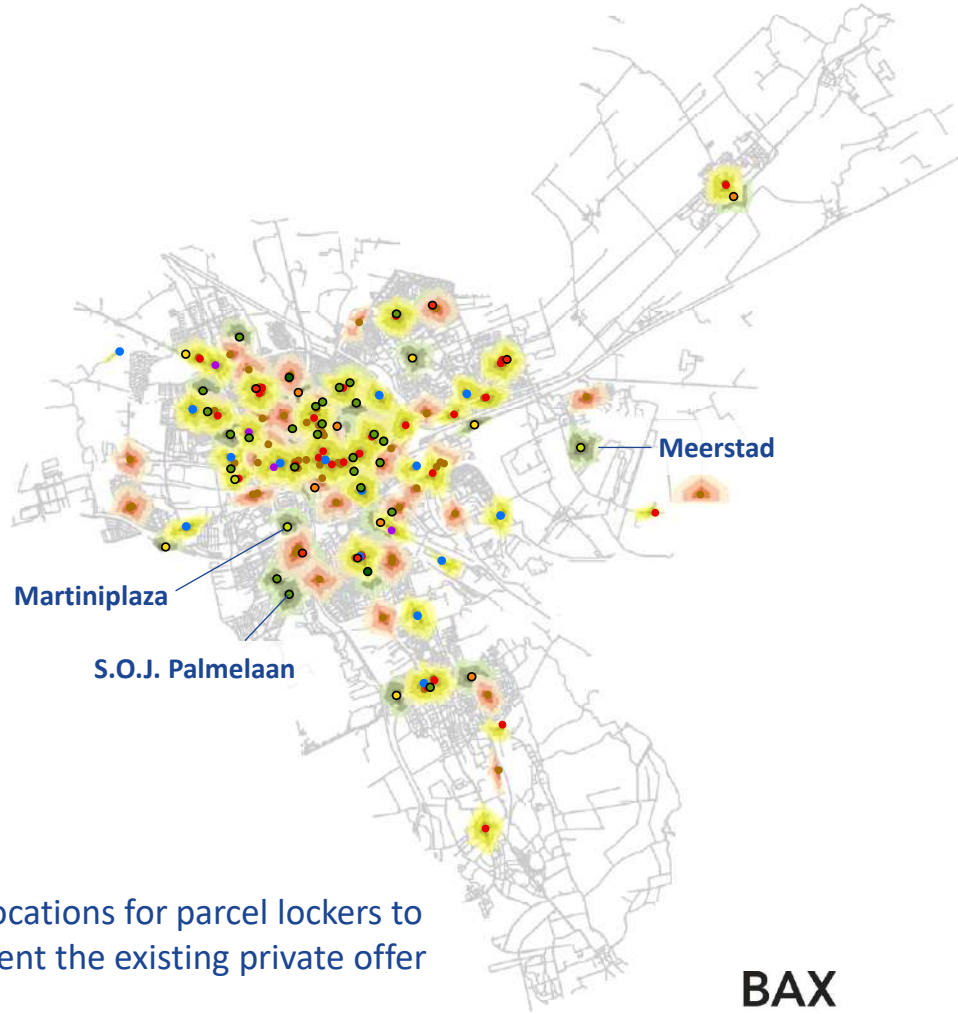
Barrier-free design of the installation site
Visual inspired by Bernhard Hrsuka / Architecture B4

Best spots for parcel lockers in Groningen

1. **Understanding the city context:**
   - Demand: where do most people live?
   - Infrastructure: where are people most likely to walk and cycle?
   - Priorities: where would the city prefer to locate parcel lockers?

2. **Finding the most accessible 10 public spots**

3. **Filling the gaps in existing private networks**



Priority locations for parcel lockers to complement the existing private offer

Best practices for implementation and application guidelines for industry, operators and cities (coming soon)

3. Dealing with uncertainties through adaptive planning

university of groningen

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Uncertainty on the radar of local logistics policy makers

D.6.1 & D.6.4

Question: What types of uncertainties influence logistics policies and how are local policymakers confronted with these uncertainties?

Analysis: survey and interviews with policy makers in 14 European cities with a SULP

Conclusion: policy makers working on urban logistics are mostly oriented towards their own city and local stakeholders, and hardly towards external developments (e.g. tech innovations, EU regulations, economic booms and bust)

(Rauws, Plazier, Buser, 2023 – to be submitted)

Identified strategies for exploring uncertainties

Forecasting
- E.g. scenario-models

Foresight
- E.g. storytelling

Exploring by testing
- E.g. pilots

Exploring by consultation
- E.g. informal one-to-one exchange

Partly based upon Van der Steen (2018)

Towards adaptivity in SULPs

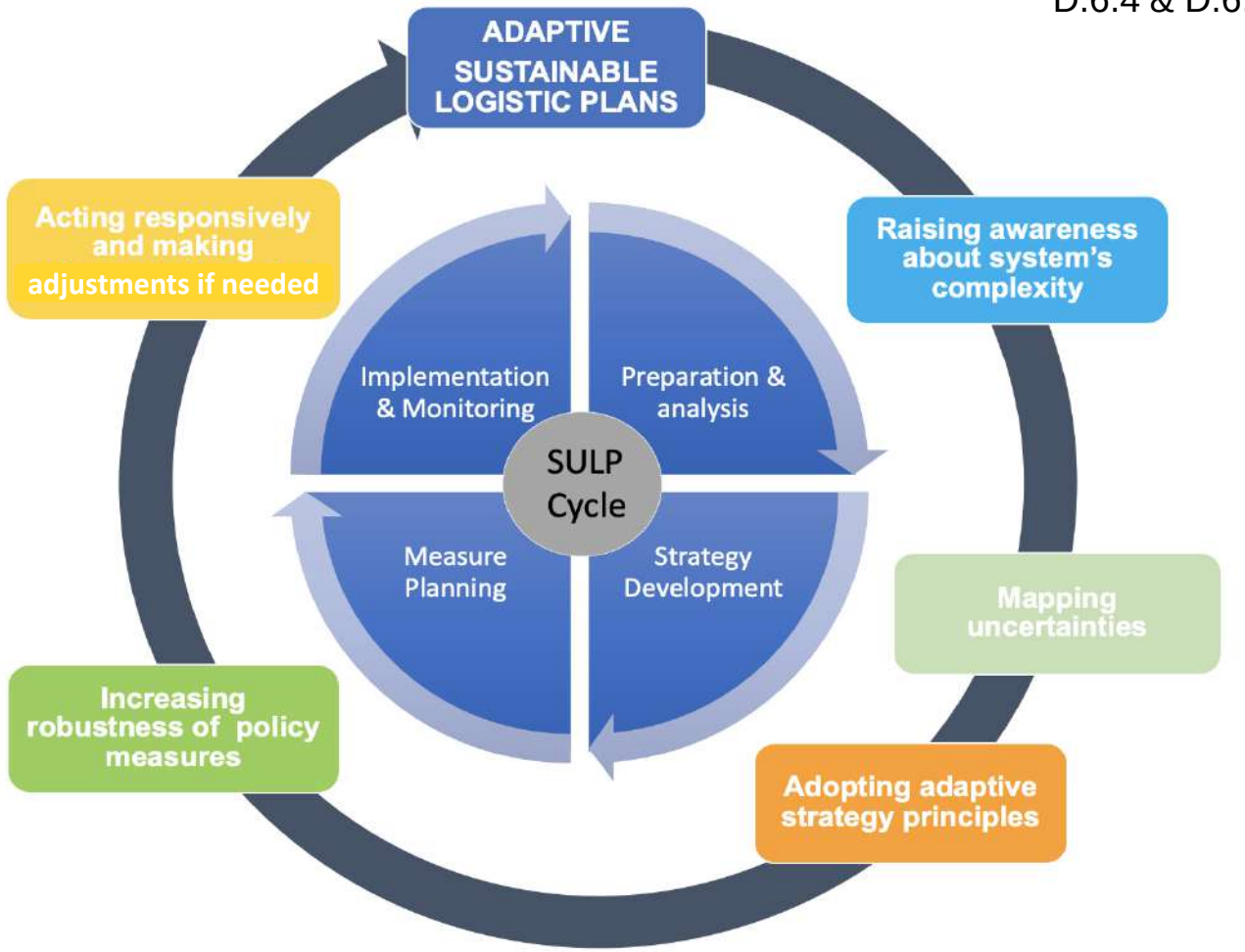
D.6.4 & D.6.5

Problem: The SULP-cycle is oriented for realizing one pre-defined future

Question: How can we enhance adaptivity in the SULP-cycle?

Innovations:

- Various theoretical frameworks have been combined to improve the planning cycle
- Organisational and individual barriers to deal with uncertainties have been mapped
- Key take-aways for policy makers are provided



(Rauws, Plazier, Buser, 2023 – to be submitted)

Let’s talk about planning!

Mentimeter:

Scan Me !

OR:
Mentimeter.com
Code: 7810 1497

Thank you!

Get in touch:

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VALUE FROM SCIENCE AND TECHNOLOGY

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Enjoy the coffee!

We will start again at 16:30

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Interactive session: Logistics world café

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Thank you!