

Improving stakeholder engagement for urban logistics: the L-3D project

International research seminar on urban logistics and e-commerce mobilities
Paris (France), Friday 9 November 2022

Giacomo Lozzi, TRElab @Roma Tre University



Progetto cofinanziato dall'Unione europea



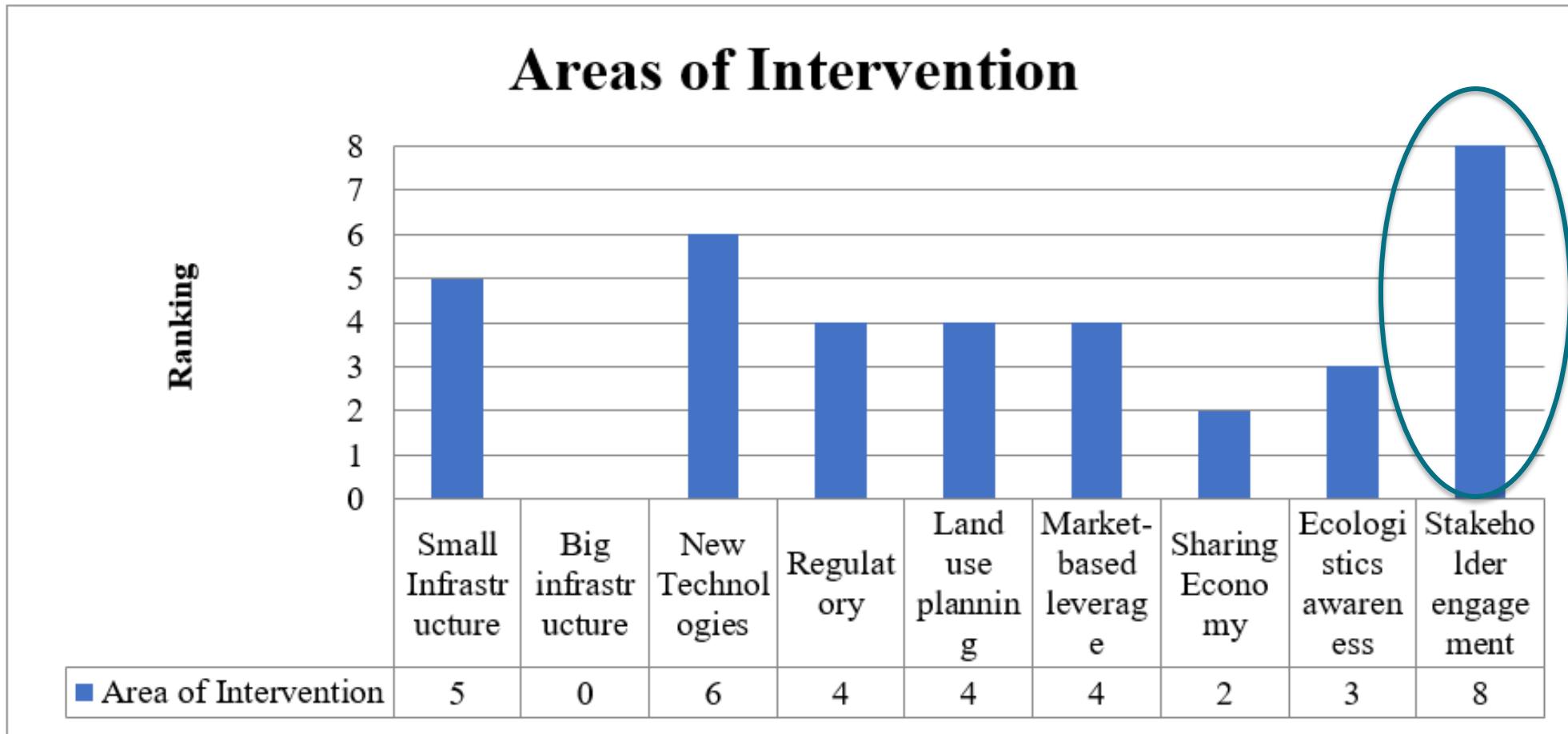
Outline

- Why this project
- The Logistics Living Lab
- The L-3D project
- Case study
- Preliminary results
- Next steps

Why this project

The project aims to increase the involvement of stakeholders in the decision-making processes of public policies for urban logistics, thanks to the use of new technologies and innovative communication techniques

Lack of stakeholder engagement



Logistics Living Lab



Urban freight measures in the Sustainable Urban Mobility Plan of Rome



SHORT TERM	MEDIUM TERM	LONG TERM
<ul style="list-style-type: none">- Living Lab approach- Information campaigns and <i>gamification</i> processes- Incentives for low emission vehicles- Increase of the offer of L/U areas- New permit system for expansion of the Freight LTZ	<ul style="list-style-type: none">- Vehicle accreditation systems- Mini-hubs and parcel lockers- Technological systems for management and control of L/U areas- Electric charging points- Crowdshipping- Delivery systems with cargo-bikes and off-peak deliveries	<ul style="list-style-type: none">- Urban Distribution Centers (UDC)- Reverse logistics- Electric van-sharing

The Logistics Living Lab



- EU project City Logistics in Living Laboratories (CITYLAB)
- Permanent working table on urban logistics
- Continuous involvement of public and private stakeholders
- Co-create, test and implement effective and sustainable solutions in line with SUMP
- Consultation, exchange & networking
- Synergies & integration of projects



Participants so far

- Public actors:

- Roma Capitale (Transport and Commerce Departments), Città Metropolitana, Roma Servizi per la Mobilità, ATAC (PTA), Regione Lazio, Università Roma Tre.

- Associations and organizations:

- Associazione Italiana Corrieri Aerei Internazionali, e associati (AICAI), Associazione Nazionale Imprese Trasporti Automobilistici (ANITA), Associazione riders Roma, CNA, Confcommercio Roma, Confcooperative, Freight Leaders Council, Isfort, Unindustria

- Companies:

- Amazon, Bartolini (DPD Group), CDU San Lorenzo, DHL, FedEx / TNT, FERCAM, FM Logistic, GLS, Piaggio, Poste Italiane, SDA, Spedire Roma, UPS.



ROMA
CAPITALE



mobilità
ROMA

atac

ROMA
TRE
UNIVERSITÀ DEGLI STUDI

REGIONE
LAZIO



FREIGHT
LEADERS
COUNCIL



ISFORT

ANITA
ASSOCIAZIONE NAZIONALE IMPRESE TRASPORTI AUTOMOBILISTICI



CNA
Riders Union Roma

CONFCOMMERCIO
IMPRESE PER L'ITALIA
ROMA

AICAI
Associazione
Italiana
Corrieri aerei
Internazionali



CONFCOMMERCIO
IMPRESE PER L'ITALIA
ROMA

UNINDUSTRIA
UNIONE DEGLI INDUSTRIALI E DELLE IMPRESE

amazon Poste italiane

GLS BRT CORRIERE
ESPRESSO DHL

FedEx TNT PIAGGIO

TRANSPORT
RESEARCH
LAB

CORRO
CORRIERI ROMA

FM LOGISTIC

SPEDIRE .COM
La tua spedizione, la nostra missione

FERCAM
Logistics & Transport

SDA
EXPRESS COURIER

UPS

FedEx®
Corporation

TNT

PIAGGIO



Improving stakeholder engagement for urban logistics: the L-3D project



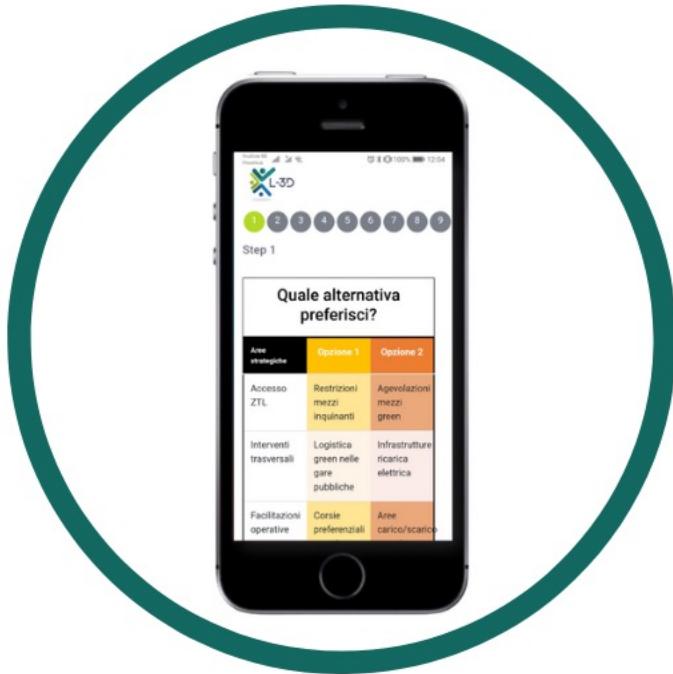
REGIONE
LAZIO

fesr
FONDO EUROPEO DI SVILUPPO RURALE
2014-2020 POR
PROGRAMMA OPERATIVO
REGIONE LAZIO

www.trelab-it/l3d/en



A NEW DIMENSION OF PARTICIPATION



Design & questionnaire

Identification of a first set of strategic policy areas & list of measures., translated into a questionnaire.



Policy mix prioritisation

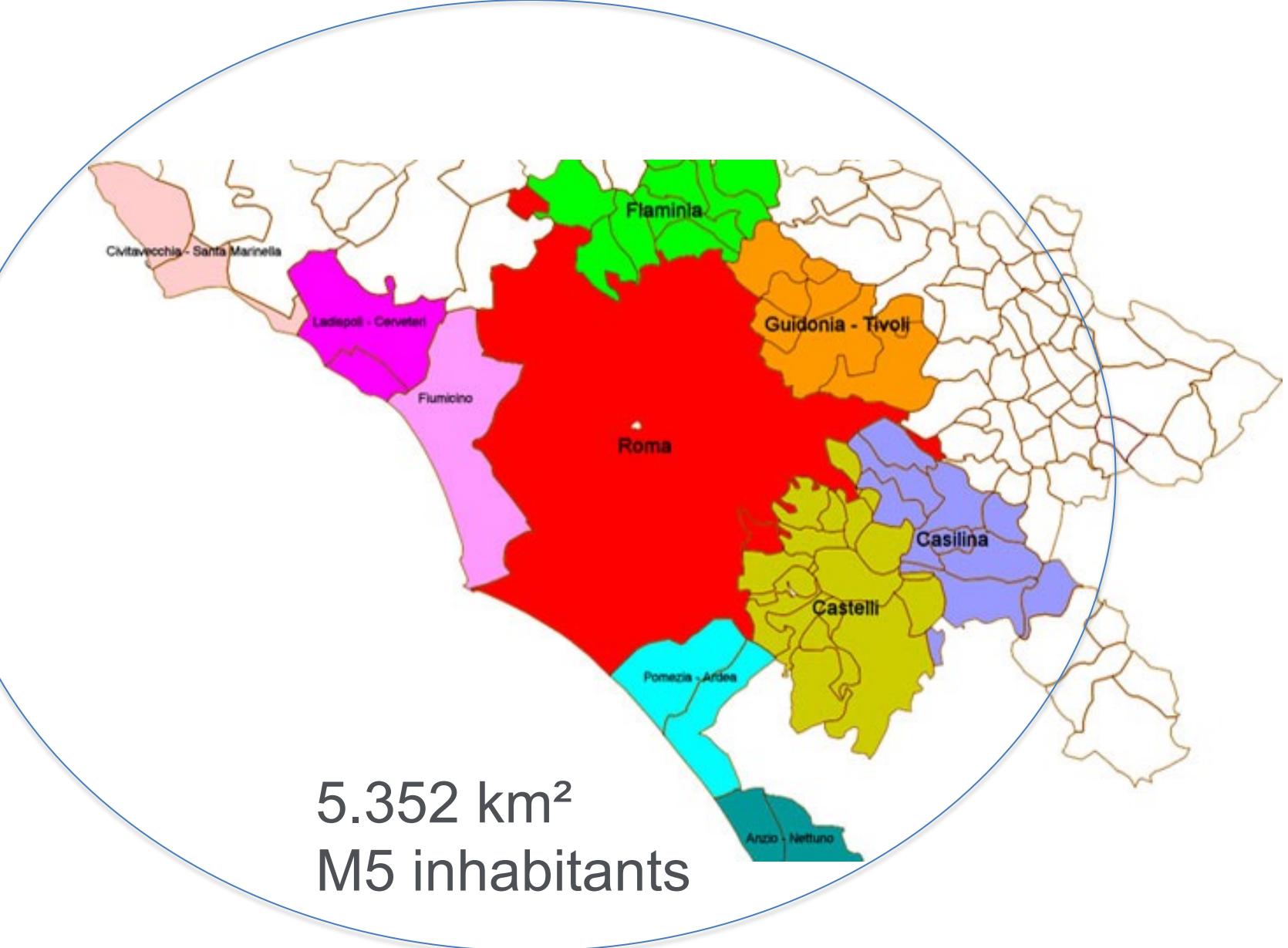
The software converts stakeholders' answers into a ranking of the top *shared* policy mix.



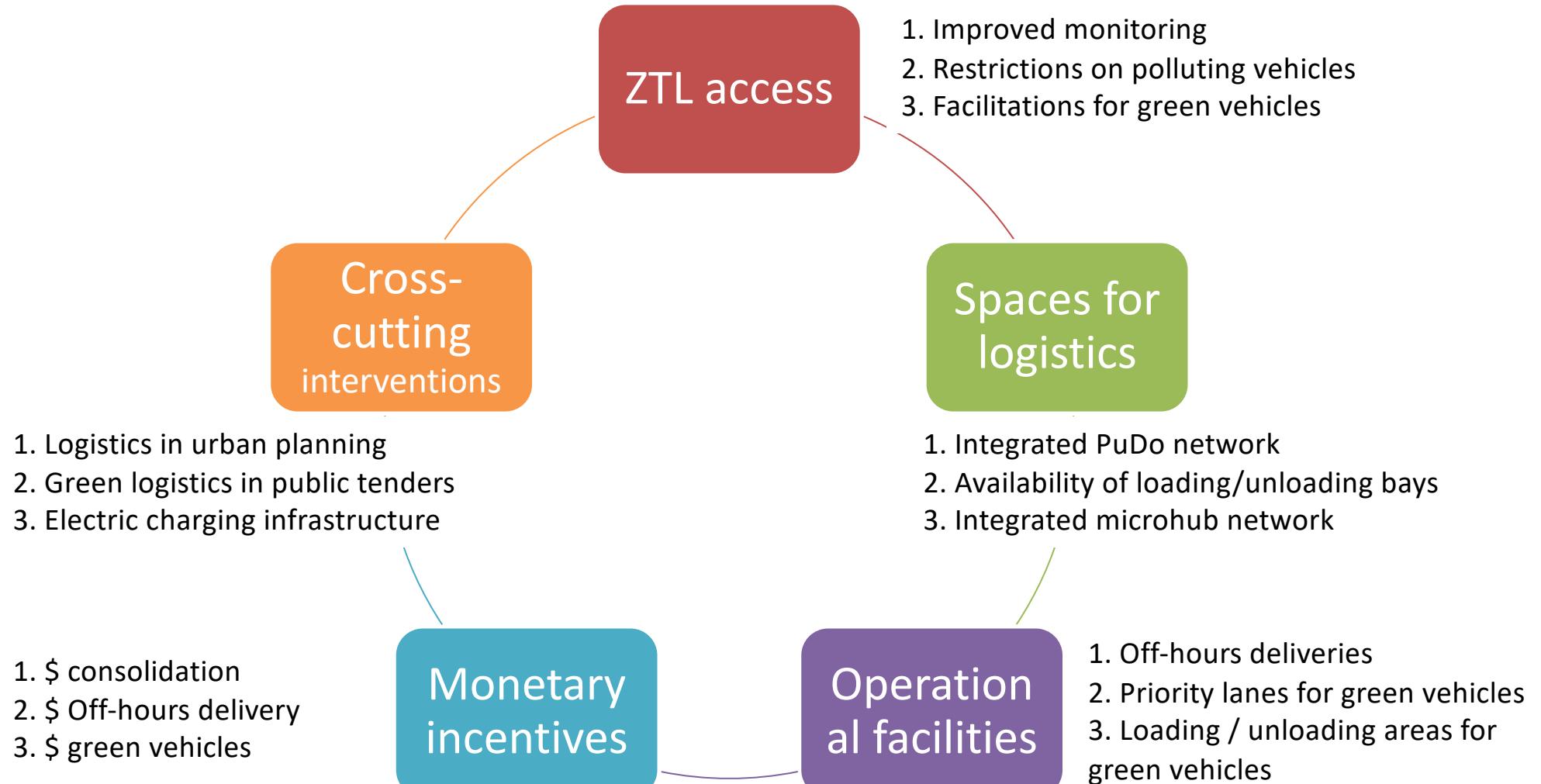
Storytelling & validation

Scenarios validation via dynamic visualisation of impacts & perspective of each stakeholder.

The case study:
Sustainable Logistics Plan
of
Rome metropolitan area



Strategic areas of intervention and actions



L-3D: preliminary results

Clarifications on the process

- 3 categories analysed: senders, transport providers, receivers
 - *Transport providers* category over-represented (62%)
- 12 supply chains
- Acquisition of stakeholder preferences and priorities
- Identification of the policy mix with the highest level of shared acceptability
- Not a question of selecting/excluding measures, but of characterising preferences and priorities by stakeholder/supply chain



QR Code Evento



Non sicuro | 89.46.67.45/StatedChoiseExercise/qrcodepage.aspx?id=3



Bookmarks Drive To do_UR3 To do_G To do_Polis gmail Hotm UR3 mail TRElab SOL+ SOL+ LL PEC GCal EVENTS POLIS » Altri Preferiti



Utenti

Progetti

Dashboards

QR Code

Ticket

Ciao
Gabriele Iannaccone

Link Evento:

[http://89.46.67.45/StatedChois
eExercise/indexquestionario.as
px?idq=3](http://89.46.67.45/StatedChois eExercise/indexquestionario.as px?idq=3)

Download

Logout

2022© Newlit

clideo.com



Strategic measures prioritisation

Best shared policy mix



LTZ access	Facilitations for green vehicles
Cross-cutting interventions	Logistics in urban planning
Operational facilities	Priority lanes for green vehicles
Spaces for logistics	Integrated microhub network
Monetary incentives	Incentives for off-hours deliveries

Degree of satisfaction



transport providers



senders



receivers

Best shared policy mix + degree of satisfaction per stakeholder = catchier way of presenting results

Relative importance of strategic areas



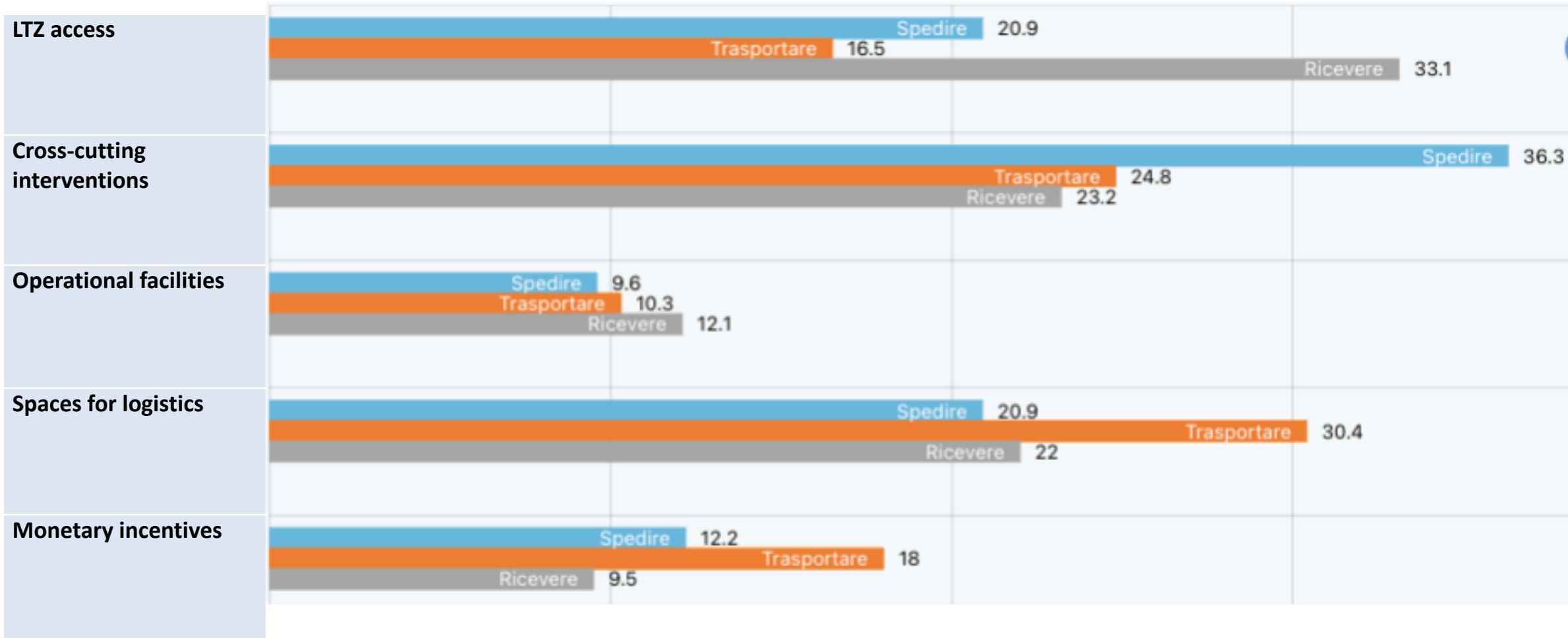
Shippers



Transport providers



Receivers



Impact assessment

	INDICATORI												
	Area di impatto →	Ambientale				Sociale				Economica			
	indicatori di riferimento → (TRElab)	Inquinamento visivo	Inquinamento dell'aria	Emissioni di gas serra	Inquinamento acustico	Accessibilità	Congestione	Condizioni lavorative	Sicurezza stradale	Costi Fissi	Costi Operativi	Livello del servizio	Tempo medio per consegna
AREE DI INTERVENTO ↓	AZIONI ↓												
Accesso ZTL	Miglioramento monitoraggio	+	+	+	+	+	+	=	+	=	-	+	+
	Agevolazioni mezzi green	=	+	+	+	=	=	=	=	-	-	=	=
	Restrizioni mezzi inquinanti	=	++	++	+	=	=	=	=	-	-	=	=
Spazi della logistica	Disponibilità aree carico/scarico	+	+	+	+	+	++	+	+	=	+	+	++
	Rete integrata microhub	-	+	+	+	+	+	+	++	=	-	+	-
	Rete integrata PuDo	-	+	+	+	+	+	+	+	=	+	+	-
Facilitazioni operative	Corsie preferenziali mezzi green	=	+	+	+	=	+	+	+	=	+	+	=
	Aree carico/scarico mezzi green	+	=	=	+	+	+	+	=	=	+	+	=
	Consegne fuori orario	=	+	+	+	+	+	=	+	=	-	+	++
Incentivi monetari	\$ consolidamento	+	+	+	+	+	++	=	++	+	+	+	=
	\$ consegne fuori orario	=	+	+	+	+	+	=	+	+	+	+	++
	\$ mezzi green	=	++	++	+	=	=	+	+	+	+	=	=
Interventi trasversali	Logistica green gare pubbliche	=	+	+	=	=	=	=	=	-	-	+	=
	Infrastrutture ricarica elettrica	-	+	+	=	=	=	=	=	=	+	+	=
	Logistica nei piani urbanistici	=	+	+	+	++	++	+	++	+	++	+	++

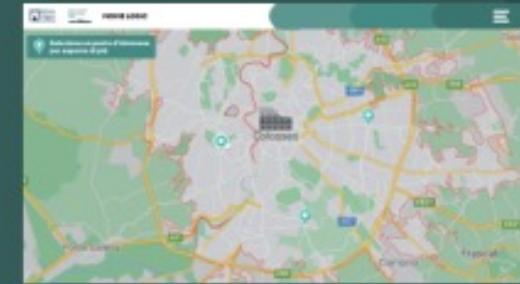
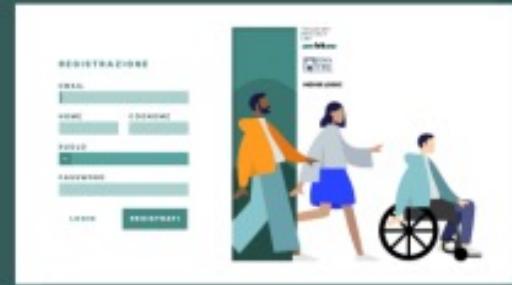
Next steps

Next step: Digital storytelling & Measure validation



The interface shows a 3D isometric view of a city with various buildings, roads, and green spaces. A white circular overlay highlights a specific area on a building. To the right, a detailed pop-up window titled "MOVIE LOGIC" displays:

- Categoria:** Tipi di categoria...
- Grado soddisfazione:** 😊
- DESCRIZIONE:** Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent fringilla dolor et nulla aliquet eleifend. Massacras tincidunt ut dolor id lacinia. Fusce fringilla dui quis sodales pharetra. Nunc vitae mollis lorem, quis fermentum leo. Fusce interdum metus nec vestibulum ornare. Cras at erci porttitor, fermentum purus quis, dictum risus. Nunc tincidunt tortor dui, aliquet finibus metus accumsan bibendum.
- Policy Mix:** Policy Mix 1 (highlighted), Policy Mix 2, Policy Mix 3, Policy Mix 4



Next steps

- Broaden the number of respondents
- Engage «non-usual suspects»
- Assisted procedure
- From strategic (i.e. Plan) to operational level (e.g. micro-hubs implementation)
- Apply methodology to other policy/research areas

Thank you for your attention!

Giacomo Lozzi
Research & project manager
Giacomo.lozzi@uniroma3.it

TRELAB | Transport Research Lab – Roma Tre University
www.trelab.it | info@trelab.it

L-3D Team:

Edoardo Marcucci edoardo.marcucci@uniroma3.it

Valerio Gatta valerio.gatta@uniroma3.it

Ila Stefania Maltese ila.maltese@uniroma3.it

Riccardo Lozzi Riccardo.lozzi@uniroma3.it

Gabriele Iannaccone gabriele.iannaccone@uniroma3.it