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Design of intermodal mobility hubs in low density area

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CONTEXT

- A range of mobility issues exists in sparsely populated areas: car dependency, cost of transports, inefficiency of public transport, unsafe use of active modes, etc. (Huygues, 2013).
- In France, new tools like public calls for projects and engineering support aim to improve rural areas mobilities. Adding to this, a recent law has expanded mobility governance and management. The whole country is now covered by local authorities in charge of mobility policy.

QUESTION

- Intermodal development has traditionally relied on heavy and costly railway hub projects (Richer, Bentayou, Depigny, 2017). Rural territories have experimented new forms of hubs built around their road networks.
- What form should hubs take in rural areas? We outline first learnings from five small-hubs' challenges identified by Van Acker and Triggianese (2020).

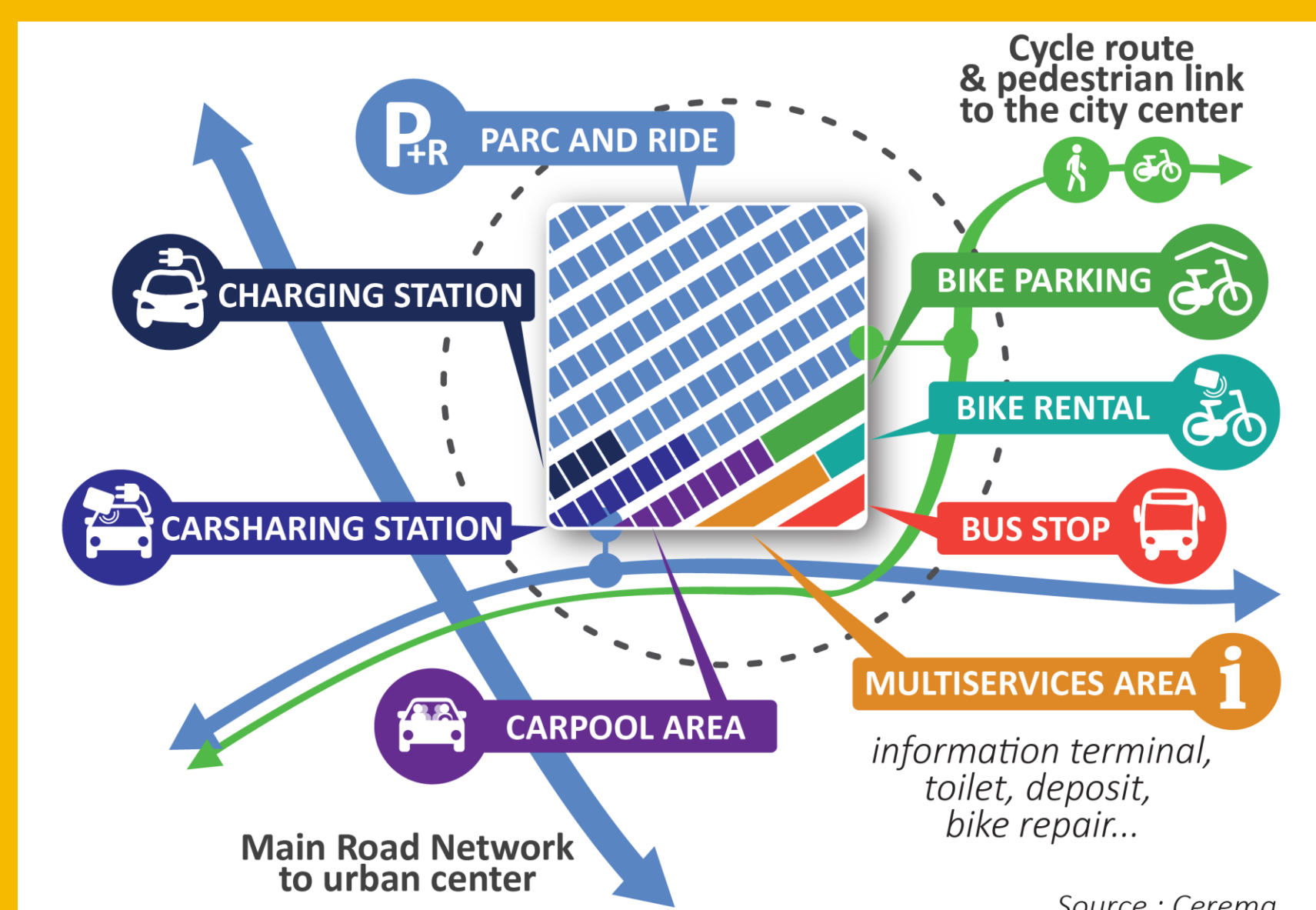
→ How have those challenges been handled in the implementation of rural multimodal hubs in France ?

METHODS

- International literature review on small hubs.
- Follow-up of experiments in the scope of Cerema's activities: webinars, interviews with stakeholders and field studies.

FIRST RESULTS

- In France, mobility hubs focus on individual modes and are guided by road networks. They are part of local planning strategies based on two main objectives: offering alternatives to the individual car and promoting mobility solutions for rural populations.



PERSPECTIVES

- These developments are the result of public policies that we must consider from its early stage.

→ How do public policies at the origin of such spatial arrangements arise and evolve in order to respond to specific issues in rural areas?

- This research is currently underway with the PhD of Agathe Daniel (MATRIS-Cerema and LVMT).

POSTER SESSION

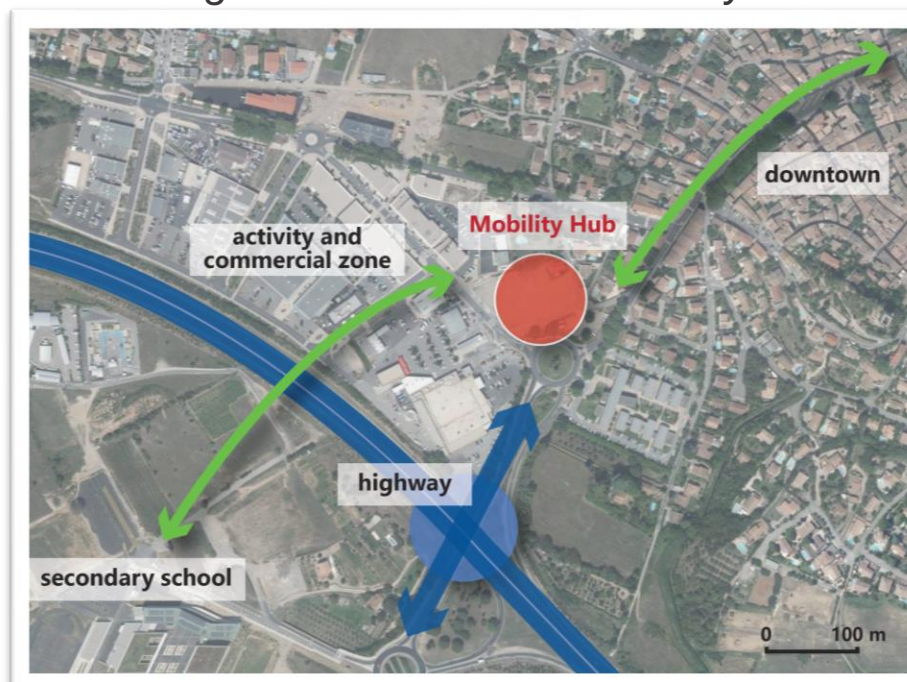
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Design of intermodal mobility hubs in low density area

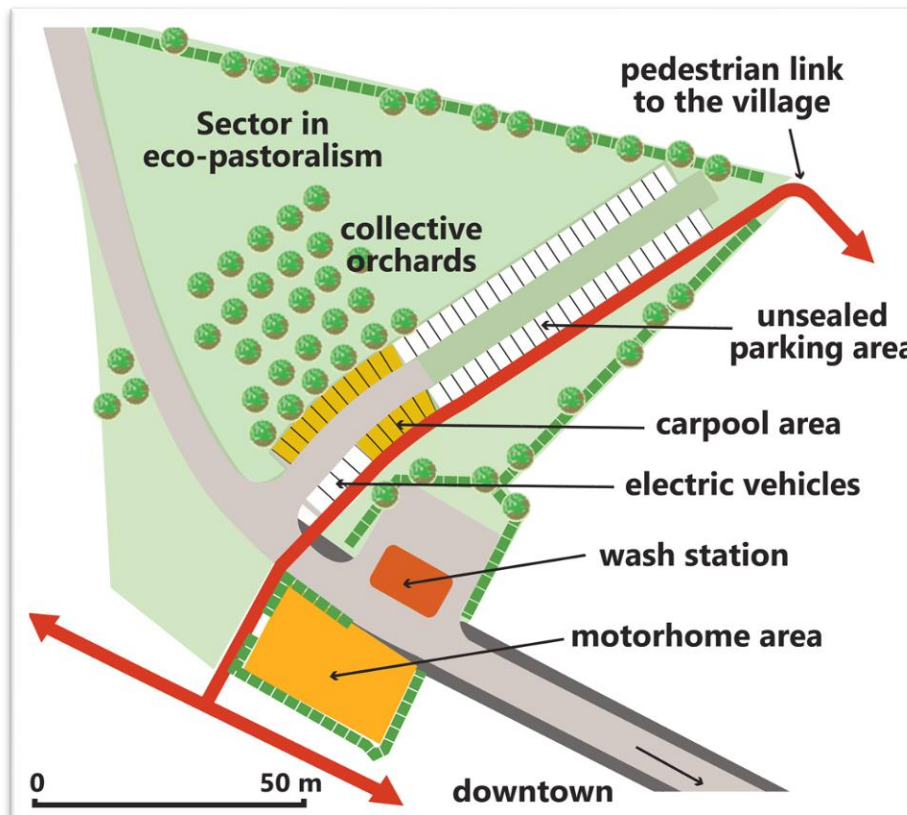
Lumbres (3,600 inhabitants)
Network of 7 Mobility stations (cost : €0.42 M)
combining car-sharing, bike rentals and an
access point for solidarity transport



Gignac (6,500 inhabitants)
Challenge of repositioning a hub and
connecting it to the school and the city center



Luitré-Dompierre (1,800 inhabitants)
Implementation of a hub (cost : €0,57 M) with
a touristic dimension and development of a
collective orchard with schoolchildren



Embrun (6,300 inhabitants)
Landscape integration (cost : €0.47M) with a
multi-service space: sanitary facilities, touristic
information, a bus and bicycle shelter.



5 small-hubs' challenges
(Van Acker & Triggianese, 2020)

Intermodality

- Functionalities mainly related to shared vehicles (car-sharing, car-pooling...)
- Diversification of the public road transport: from solidarity transport to high service level projects
- Integration of active mobility

Morphological barrier

- Free geographical positioning of mobility hubs, a location depending more on available lands than existing infrastructures
- Often guided by road accessibility, and therefore close to highway interchanges
- Issues of crossing and linking the city center by active modes

Programming and services

- Implementation of multiservice areas beyond mobility
- Associating economic activities and creating links with local economy
- Relying on the touristic potential of the territory, mainly by promoting cycling

Public space

- Highlighting mobility services in strategically selected existing public spaces
- Efforts to facilitate pedestrian access to hubs
- Co-designed public spaces

Typo-morphological character

- Creation of small shelters rather than heavy construction
- Implementation of hubs on surfaces of about 1 hectare (10,000 square metres)
- Enhancement of agricultural and rural landscape

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