

Statement

Although freight pooling appears as one of the most efficient solutions to improve the sustainability of city logistics, it is very difficult to implement for competition, technical and scarcity of space reasons.

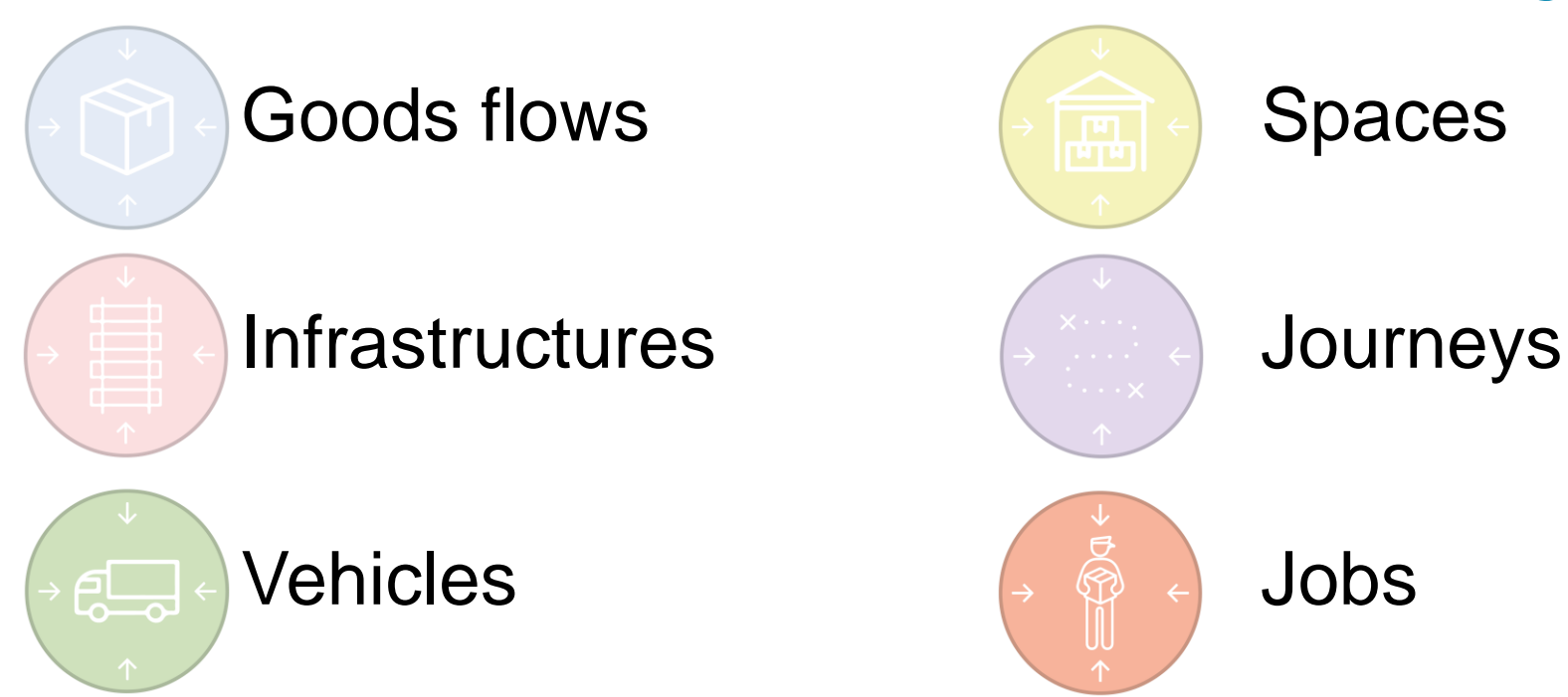
In order to define political measures in favor of pooling practices, the French Ministry of Transport asked to test different pooling solutions in various urban contexts using the Freturb - SILOGUES simulation platform.

→ Is pooling strategy the best solution to reduce road congestion and polluting emissions?

Methodology

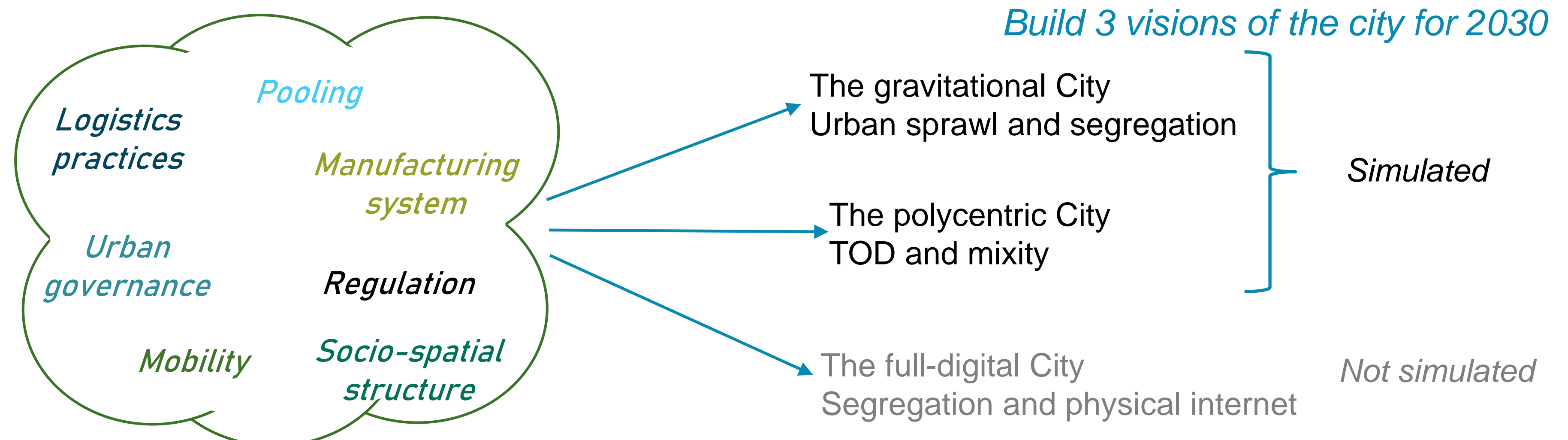
1. Literature and initiatives review:

Identification of 6 pooling families



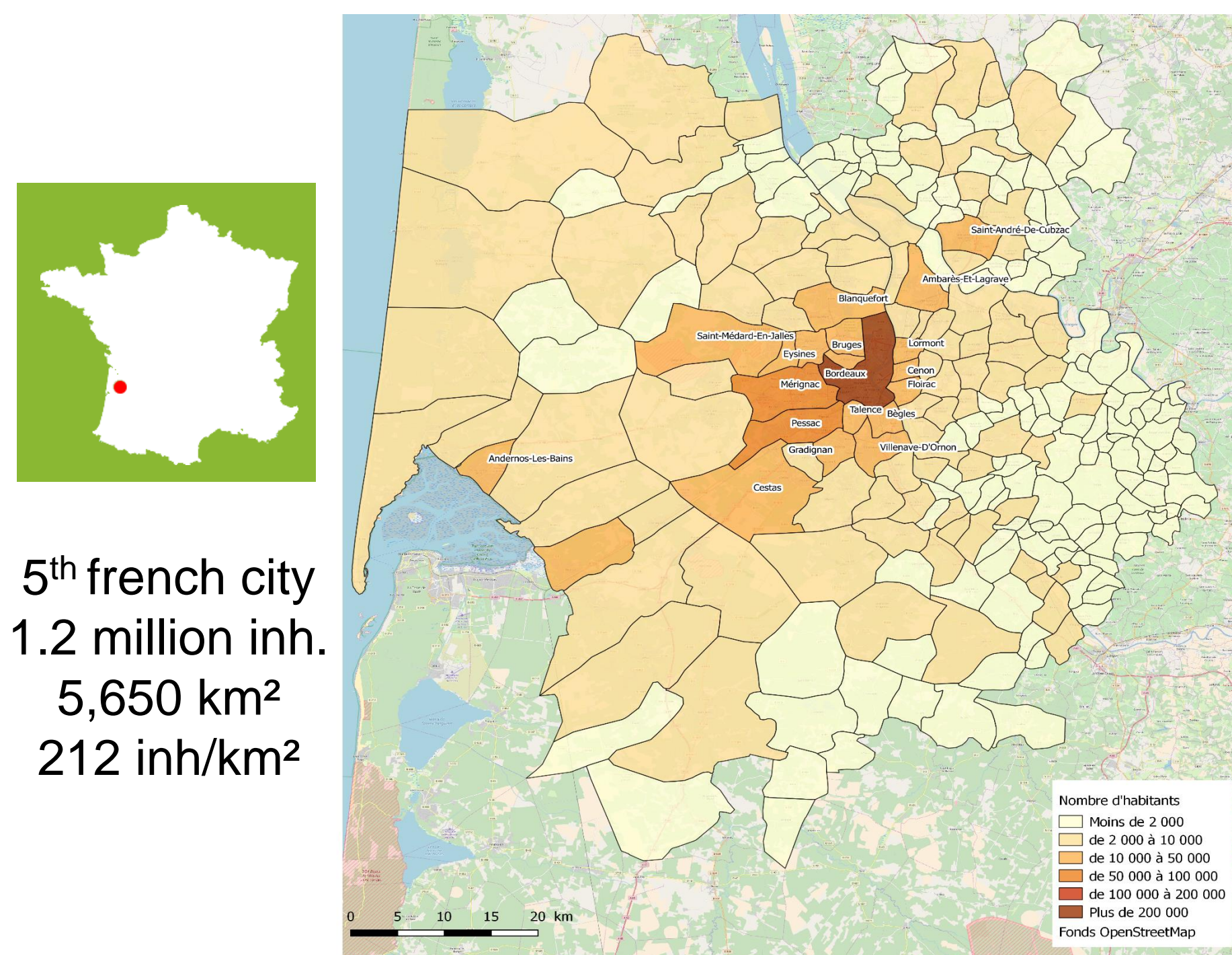
2. Urban planning and goods transportation experts meeting:

Build 3 visions of the city for 2030



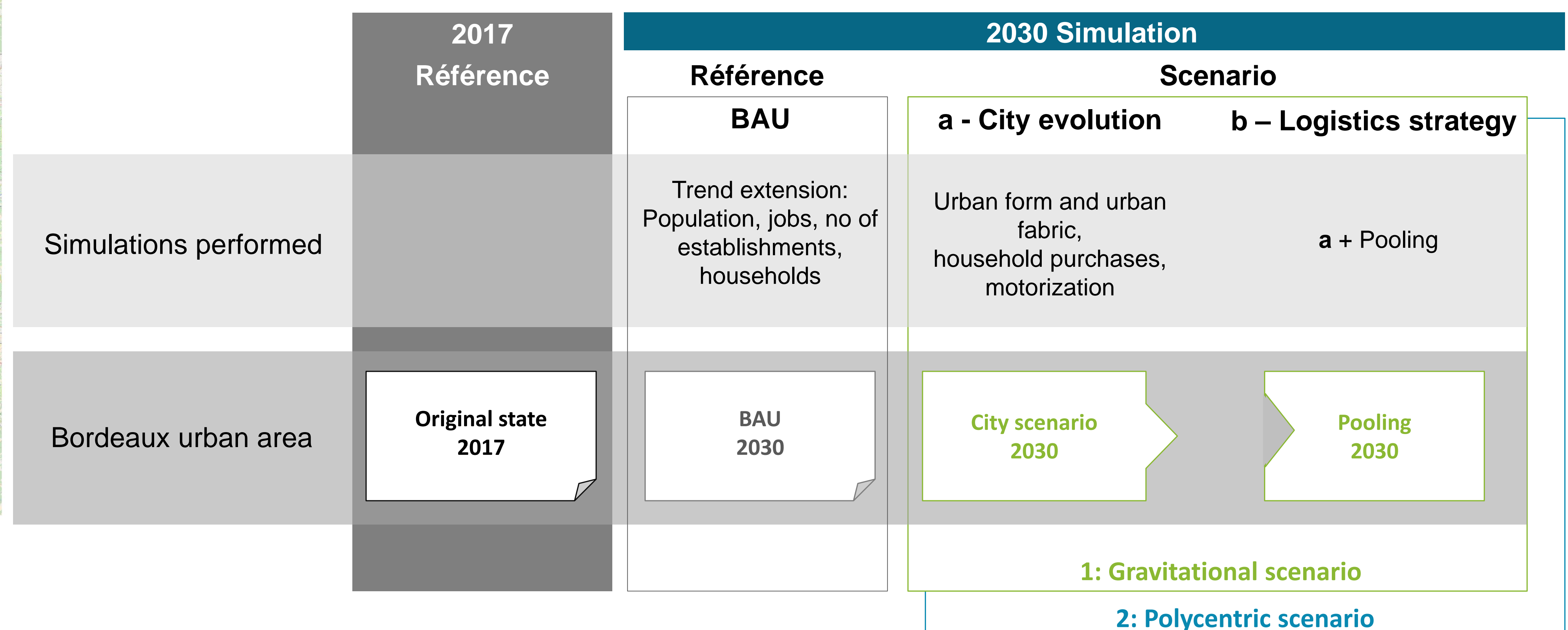
3. Choice of the study area

The Bordeaux urban area



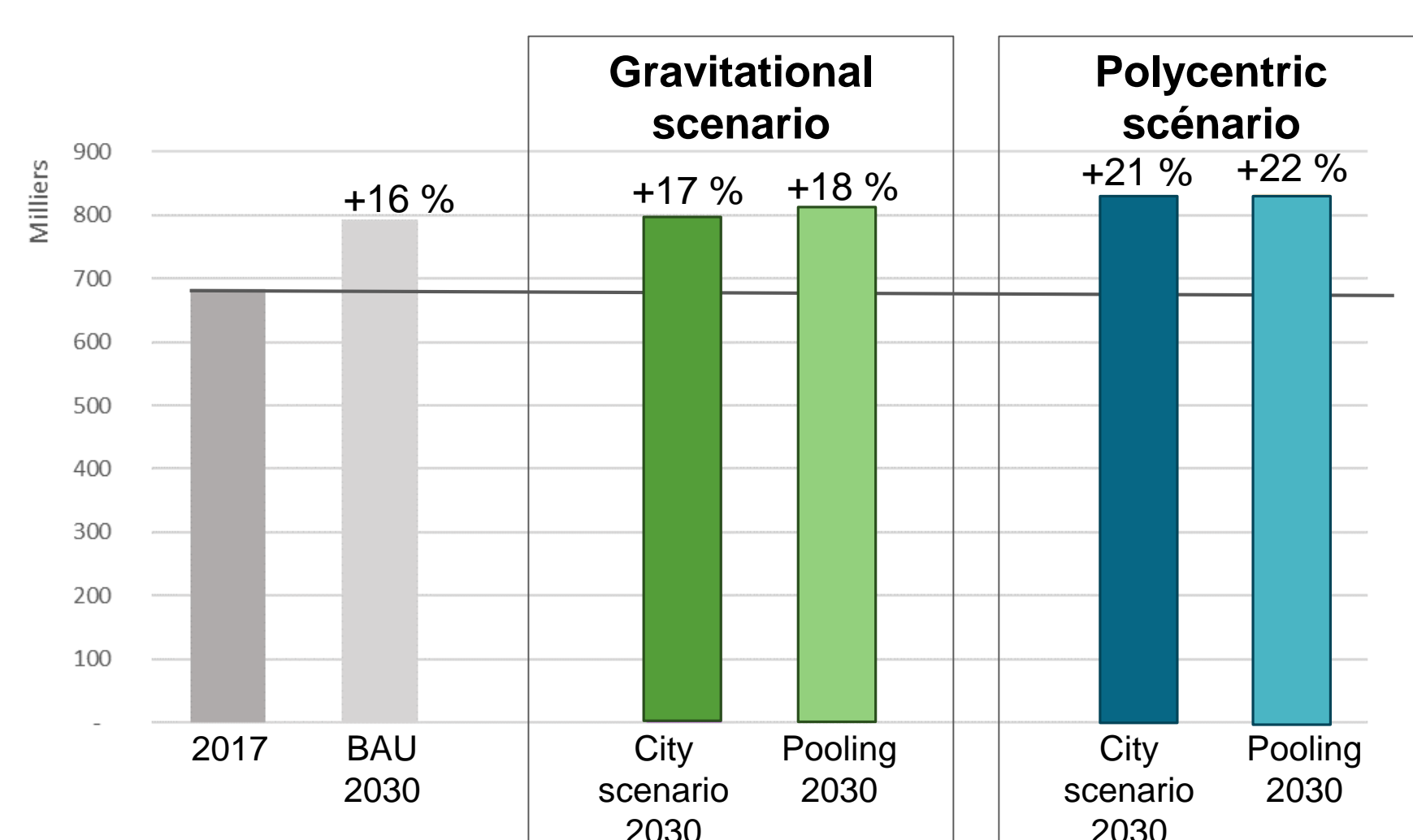
4. Simulation with the Freturb - SILOGUES platform:

A 4 steps simulation in order to separate the effects: population & economic structure vs pooling measures

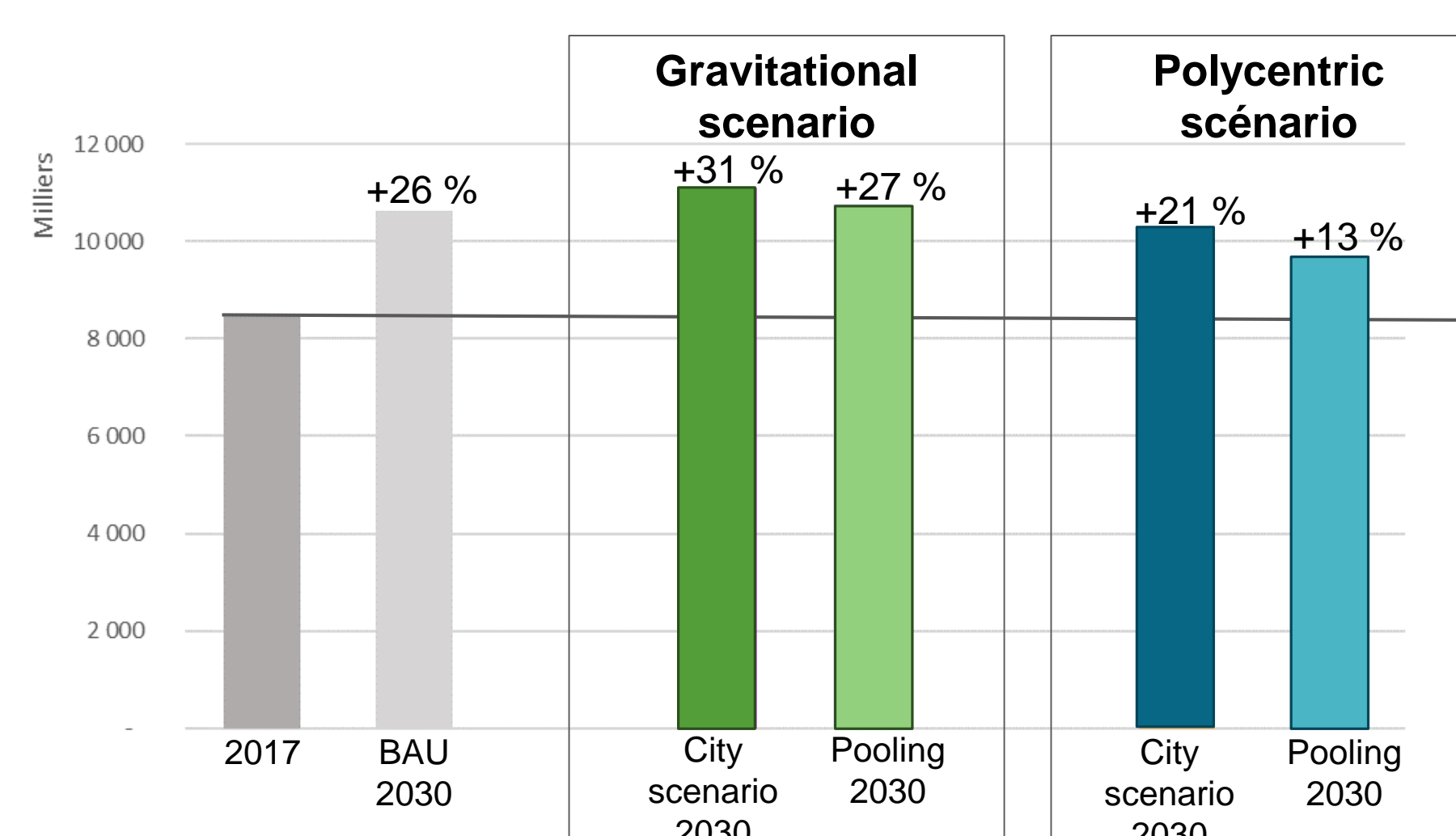


Results

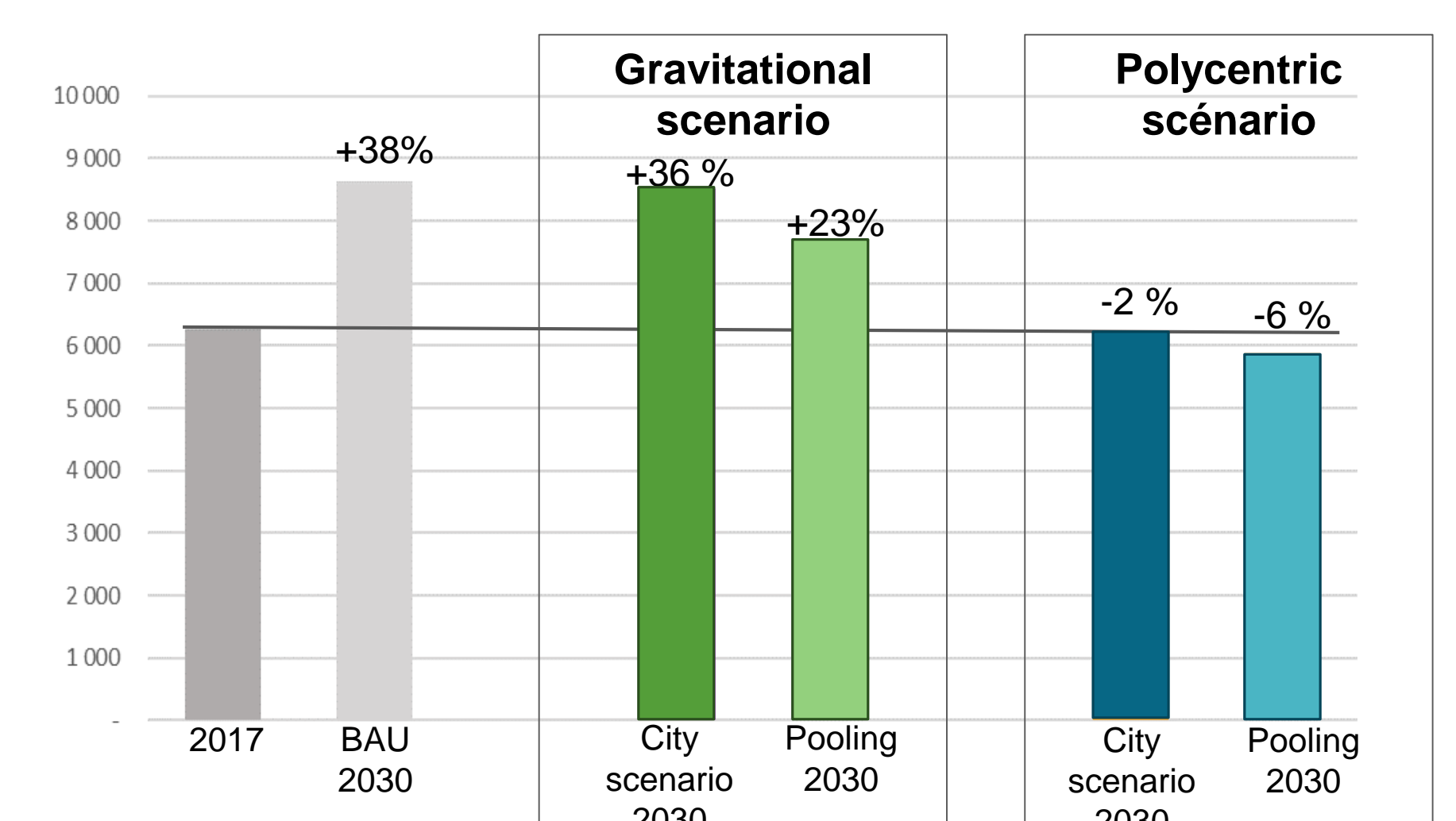
Evolution of weekly goods movements



Evolution of travelled distances per week



Evolution of GHG emissions per week (tons)



Conclusions

Pooling strategies are necessary but are far from sufficient to improve the environmental quality of urban freight. Policies for sustainable pick-ups and deliveries must act on: locations in order to bring production and consumption closer together; technological innovations for cleaner vehicles; regulation in favor of third party account and of energy transition, etc.

References

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