

## **Logistics Sprawl: Spatial Patterns of Logistics Facilities and their impacts on Metropolitan Areas**

### **Questions and Answers.**

**Q1:** What city in France was pictured?

R/ Senlis, in the northern part of the Paris region

**Q2:** can we consider a MEGA DCENTERS= URBAN DISTRIBUTION PLATFORMS?

R/ **Jean-Paul Rodrigue:** No, the term platform usually applies to a cluster of DC

R2/ the term “platform” is actually quite broad. Used in Europe mostly. Can mean one freight terminal, or a cluster (such as described by Jean-Paul). Urban distribution platform would be a very small facility not at all a mega distribution center

**Q3:** What are the reasons for the change in location of Carrefour's DCs?

R/ Like other retailers: a very flexible supply chain management, trying to optimize, to cut rental costs, to transfer to larger more modern warehouses, opportunities, change of 3PL provider – lots of reasons

**Q4:** It did not look like the quotient for New York changed from 1998 to 2006. Is that correct?

R/ Correct – it remained in the same category.

**Q5:** What is the criteria to define a mega region?

R/ A variety of socio economic data showing strong relationships between the different cities of the mega region. One of the indicators is truck mobility and goods movement: strong links between two areas in terms of origin/destination of goods movement can make an important part of the definition. Different research teams use slightly different indicators.

**Q6:** To interpret the quotient, it's the number of warehouses relative to the national average?

R/ Employment in warehousing relative to employment nationally

**Q7:** How critical is the distance between the logistics center and the main consumer market? How you can evaluate that?

R/ Need to be in the vicinity of the largest consumer market. But no need to be very close to the consumers, trucks can cover up to 100 miles to reach final destinations (businesses, stores, residents) from the warehouse.

**Q8:** The Parisian initiative to relocate freight centers nearer the urban core must require building in emissions-reduction infrastructure (e.g., on-dock and pedestal electricity to power standby-ready reefers), no?

R/ Definitely so. Many standards apply, including environmental ones: use of EV, noise reduction, etc.

**Q9:** what data did you use for the analysis?

R/ County Business Patterns for the US

Building permits dataset for Paris

Establishment data base for Paris and other European cities (on going)

**Q10:** Have the researchers looked at the challenge of logistics sprawl and workforce mobility? Transit services to these employment centers can greatly affect the longevity of these business districts

R/ I haven't looked at workforce mobility, but it is an interesting element

R2/ Very crucial point, agreed. I haven't looked either yet (Dabanc)

**Q11:** at the end is the logistic sprawl positive or negative for cities and for the logistic industry?

R/ We see logistics sprawl for every region analyzed EXCEPT the Puget Sound (Seattle).

R2/ It probably adds up VMT to metropolitan areas on the whole (negative) but it provides for the flexibility and good service logistics companies need.

**Q12:** What are the primary commodities being distributed in the large 500,000+ sf warehouses?

Consumer goods, automotive parts?

R/ Consumer goods

**Q13:** what recommendations out of your study would you give to city authorities to regulate the WH location sprawl? And if so, don't you think the sprawl is very much driven by the market, so who should pay the cost of this intervention?

R/ My best advice would be to organize more clustering of warehouses, trying to get rid of isolated warehouses. This means some regional planning. Also, modernize warehouses (noise, energy) and work with local communities for these issues, including access to transit to reach these places when needed. Question of who pays costs is very broad. Achieving a reasonable degree of road pricing for trucks in

metro areas is probably a good move so that WH siting decisions are more closely related to VMT reduction.

**Q14:** Have you analyzed the environmental impacts of increased truck VMT due to logistics sprawl?

R/ Yes for the Paris case. We quantified CO2 emissions 16,000 a year for the parcel industry)

**Q15:** Did you do any correlation analysis between the urban sprawl indicators and cost factors such as land prices and transportation cost? I suspect the increase of land price in Paris plays some roles in the sprawl.

R/ Of course, land prices are the number 1 driver I would suggest. Multi story logistics terminals in Tokyo may be related to very expensive suburban land prices there: no need to go suburban then, better stay in the city. In Paris and the US, it is worth going to the suburbs as land prices decline rapidly there. It is a hypothesis, as we haven't correlated that scientifically.

**Q16:** Where can I find more information about the Washington growth act? Is there any impact of these act available?

R/From a legal perspective, some details can be found here:

<http://www.commerce.wa.gov/Services/localgovernment/GrowthManagement/Pages/LawsRules.aspx>

<http://www.washington-apa.org/resources/gma>

Here is some government monitoring: <http://www.mrsc.org/subjects/planning/gmmonitoring.aspx> If you search on Washington Growth Management Act using Google Scholar you will find numerous academic articles.

**Q17:** You agree that logistics is derived demand, and can't be separated easily from regional consumer demand?

R/ Very much so. Also to national/international demand of consumers.