DO TRANSPORT INVESTMENTS AFFECT THE LABOUR MARKET AND INDUSTRIES? IMPLICATIONS FOR TRANSPORT ANALYSIS

By: Øyvind L. Nilsen (Rambøll Norway/Norwegian University of Science and Technology)
CONTENTS

• How can fixed links expand labour market
• Why is it important?
• The study area
• Ex post analysis – changes in the labour market
• Firm location – how important is accessibility
• Conclusions
• Limitations and further research
HOW FIXED LINK CAN EXPAND LABOUR MARKET

Stavanger – Rennesøy → 2h30min → 25min
Stavanger – Finnøy → 3h → 1h30min → 50min
HOW CHANGES IN ACCESSIBILITY AFFECT LOCAL LABOUR MARKETS AND INDUSTRIES

More *interaction* between connected areas

*Better match* skills of workers with required tasks

Attract *more qualified workers*

Easier *access* to specialised suppliers

*Knowledge spillovers* from other similar firms

More *costumers* and *increased competition*
WHY IS IT IMPORTANT?

Today's assessment tools do not take changes in population and employment from transport investments into account.
WHY IS IT IMPORTANT?

Locations with better accessibility will become more attractive.

Might change direction of new industrial development.
WHY IS IT IMPORTANT?

Locations with better accessibility will become more attractive

Might change direction of new industrial development
RESEARCH QUESTIONS

Do areas that get connected by a fixed link experience changes in employment, commuting and number of firms?

Is the number of people and employees in the area important in the firm relocation process?
DATA AND STUDY AREA

- Approx 1.4 million people and 60 000 km²
- Transport model that covers the entire area.
- 17 000 firms registered from 2009-2013
EX POST EVALUATIONS OF 3 FIXED LINK PROJECTS IN NORWAY

Method

Difference in difference was used to calculate what would have happened without the fixed link and the impact of the fixed link

Results show that:

The majority of the firms experience benefits from a wider labour and customer market.

Increase in the number of firms, employees and commuting
FIRM RELOCATION MODEL

Method:

The probability of moving and where to move is calculated by discrete choice models.

Results show that:

Firms move relatively seldom and short distances.

Firms are drawn towards areas with many employees.

Firms are drawn away from areas with high land prices.

Differences between sectors.
CONCLUSION

Each fixed link is area and sector specific

Dependent on the mainland characteristics

Dependent on which sectors are affected

Fixed link projects in close proximity to cities can expect increase in the number of firms and employees
LIMITATIONS AND FURTHER RESEARCH

Need to study what happens on the main land

Redistribution effects or growth?

Include prognosis for employment change in transport assessment tools
PUBLISHED RESEARCH

- **Impacts on land use characteristics from ferry replacement projects. Two case studies from Norway** (EWGT 2015/TRPRO)
- **Impacts on land use characteristics from fixed link projects – four case studies from Norway** (ETC 2015/TRPRO)
- **Modelling the impacts on population caused by fixed link projects** (TRA 2016/TRPRO)
- **How changes in accessibility affect local labour markets and industries.** (Journal of Case studies in Transport policy)
- **Relationship between agglomeration and productivity in a Norwegian context: Estimates for Cost benefit analysis.** (Journal of transport research record)
- **Firm relocation: Empirical evidence from Norway** (submitted for TRB 2018)
- **Impacts on land-use characteristics of fixed link projects, a Norwegian case study of 11 projects** (accepted at Journal of transport geography)

[Logo: Ramboll and NTNU]
QUESTIONS/ SUGGESTIONS?