Transport connectivity for remote communities

Roundtable on Connectivity for Small Populations in Remote Communities
National Archives, Ottawa, 23 September 2019
Purpose of the Roundtable

- Best practice and recommendations on how policies could be improved
- Discuss criteria that underpin support
- Compare how governments support connectivity for remote, low-density areas
Roundtable Report to be published in spring 2020

1. Summary and Conclusions

2. Case studies
   - Scotland
   - Canada
   - Chile
   - Greece
Share of population living in rural remote regions, 2017

Source: OECD Regional Statistics
Remote and sparsely populated areas often struggle with...

- Absence of agglomeration benefits
- High transport costs
- Structural weakness (e.g. reliance on primary industries)
- Market isolation and imperfect competition
- Unemployment & search costs
- Thin labour markets
Proximity to cities makes the difference, EU 23

Note: Corresponds to GDP per worker at place of work in small (TL3) regions of 23 EU countries. Predominantly rural (381 regions, in which 148 remote) and predominantly urban regions (365 regions). The productivity for each type is an average of the regions.

Source: OECD Regional Statistics
Transport policy could address relative distance, but there are numerous challenges...

• Transport network resilience and reliability (e.g. asset maintenance)
• Frequency and quality of public transport provision
• Price of travel & access deprivation
• "High" carbon travel

Other context-specific challenges

– Seasonality of traffic dep. on local economy and climate
– Climate change shifting conditions for transport
– ...

Source: Danish Meteorological Institute, 2019
Barriers to market-based transport in remote regions

• Higher cost of transport per capita in thin markets

• Lack of economies of scale making routes unprofitable → low incentives for private operators to run services
  – E.g. air transport: Crowding out of thin domestic routes from slot-constrained airports
  – Shortage of qualified personnel
  – Dependence on imports → empty aircraft or vessels on the return leg → underutilised capacity affecting trip viability
  – ...

# Market distortions justify public support

<table>
<thead>
<tr>
<th>Support to operators</th>
<th>Support to residents</th>
<th>Support for infrastructure</th>
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<tbody>
<tr>
<td><strong>Direct subsidy</strong></td>
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<tr>
<td>Route-based compensation</td>
<td>Passenger compensation</td>
<td>Infrastructure funding</td>
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<td>Operator-based support</td>
<td>Medical travel reimbursement</td>
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<td>Start-up aid for airlines</td>
<td>Passenger discounts for children, students, and the elderly (e.g. Norway)</td>
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<td>Capital acquisition subsidies (e.g. for aircraft used to serve remote Japanese islands)</td>
<td>Driver licensing programmes (e.g. Australia)</td>
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<td><strong>Tax expenditure and discounts</strong></td>
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<tr>
<td>Tax breaks for operations in remote areas</td>
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<td>-</td>
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<tr>
<td>Landing charge discounts (e.g. Japan)</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Support to loss-making state-run services or enterprises</strong></td>
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<tr>
<td>Support to loss-making state-owned or community-owned airlines or ferry operators</td>
<td>-</td>
<td>Support to loss-making state-owned or community-owned airports and ports</td>
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<tr>
<td><strong>Transfer of risk to government</strong></td>
<td></td>
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<tr>
<td>Preferential loans to acquire capital (e.g. EU’s outermost regions)</td>
<td>-</td>
<td>Preferential loans for new infrastructure</td>
</tr>
<tr>
<td>Revenue guarantees (e.g. U.S. Small Community Air Service Development Program)</td>
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<td>-</td>
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<tr>
<td><strong>Induced transfer or shadow subsidy with an opportunity cost</strong></td>
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<tr>
<td>Slot ring-fencing at airports</td>
<td>-</td>
<td>Provision of certain services (e.g. Australia’s Remote Aerodrome Inspection programme)</td>
</tr>
<tr>
<td>Monopoly or restricted competition on a certain route/area</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Exemption from licensing rules to pursue freight and passenger transport (e.g. Azores)</td>
<td>-</td>
<td>-</td>
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</table>
Which and how much public support?

What is the optimal level of connectivity/accessibility for remote communities?
How to best design connectivity support measures for remote communities?
Determining optimal connectivity levels (1/4)

Which rationale and objectives?

**Social**
- Access to health care
- Education
- Social services
- Social networks, family, friends

**Economic**
- Connection to national and international economic and political centres
- Enhancing productivity and investment
- Mobility of the labour force
- Access to freight networks

**Strategic**
- Economic rebalancing
- National unity
- Identity
Determining optimal connectivity levels (2/4)

What are the benefits of better connectivity?

1. It is hard to measure links between transport connectivity and wider economic benefits of transport in remote communities.

2. There may be other social benefits that are not considered in transport appraisal.
Determining optimal connectivity levels (3/4)

How well connected are remote communities?

- What is “remote”? What is “isolated”?
- How accessible are these communities?

<table>
<thead>
<tr>
<th>Country</th>
<th>Classification</th>
<th>Description</th>
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<tbody>
<tr>
<td>Australia</td>
<td>“Remote Australia”, “Very Remote Australia”</td>
<td>Average accessibility value is greater than 5.92 and less than or equal to 10.53 (remote); greater than 10.53 (very remote).</td>
</tr>
<tr>
<td>Canada</td>
<td>“Rural area”</td>
<td>Any area outside a population centre with a population of less than 1,000 and a density of less than 400 people per km². Areas with less population density, but high employment density and adjacent to a population centre (at least 400 employees per km²) are considered part of the population centre.</td>
</tr>
<tr>
<td>Norway</td>
<td>“Level 0 remote municipalities”</td>
<td>Centrality index combining two components that take into account the number of workplaces and the number of different types of “service functions” (goods and services) people living in each basic statistical unit can reach by car within 90 minutes. These units are then classified into six categories.</td>
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</tbody>
</table>
Determining optimal connectivity levels (4/4)

Which criteria?

• Greatest benefit for the greatest possible number of people?

• Equal opportunities?

• Minimum access thresholds? (What is socially acceptable?)
Designing connectivity support measures for remote communities

• How can support schemes be monitored to ensure they remain fit for purpose?

• How can policy-makers ensure that support schemes are stable but also flexible enough for the programmes to remain well-targeted and cost-effective?

• Overbidding or regional lobbying for support: Should local authorities be required to co-fund projects?

• Should transport policies be integrated with other regional initiatives to achieve strategic policy goals?
  – Economic policy: reducing corporate taxes (Norway, Chile);
  – Coordination with health and education policies; ...
Four case studies

Canada

Scotland

Chile

Greece
Thank you

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