NWSRG
NATIONAL WINTER SERVICE RESEARCH GROUP

nwsrg.org

Creating Route Efficiencies

Debbie Cavanagh - Safecote

29th April 2025

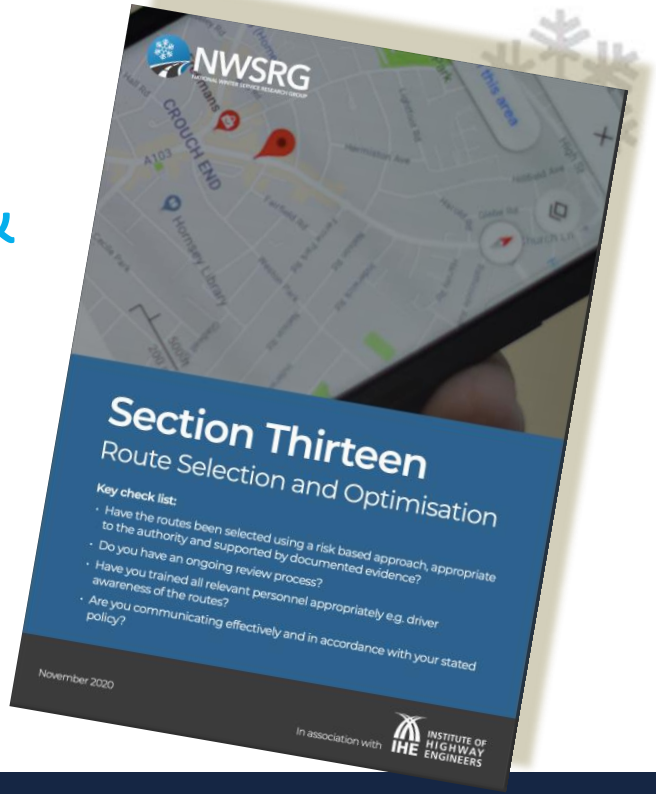
Dedicated to advancing understanding of best practice for winter service delivery

Creating Route Efficiencies

Debbie Cavanagh - Safecote

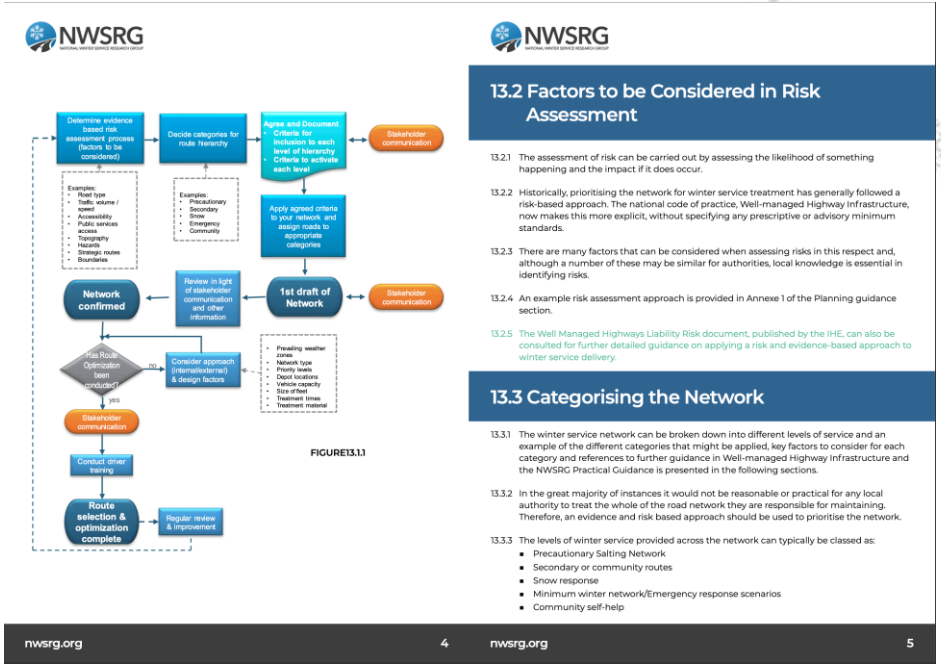
Section 13 – Route Selection & Optimisation

The guidance is designed to assist authorities to review and amend their winter service routes based on their local needs by adopting a risk and evidence-based approach. This approach is recommended in Well-managed Highway Infrastructure Section B.7 Winter Service. In addition, it supports the case for authorities (excluding London) to apply for Department for Transport incentive element funding.



Factors to consider

1. Scope to save
2. Timings
3. Spread rates
4. Climate/topography
5. Restrictions
6. Driver feedback



Your why?

< Reduce vehicles

< Reduce labour

< Maximise efficiency

< Lower Co2

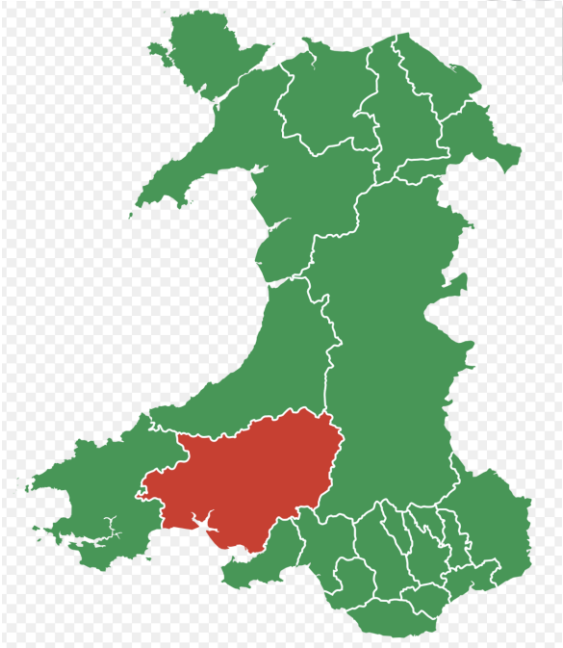
< Change of hierarchy

Ultimately saving £££££

Case Study

Carmarthenshire County Council

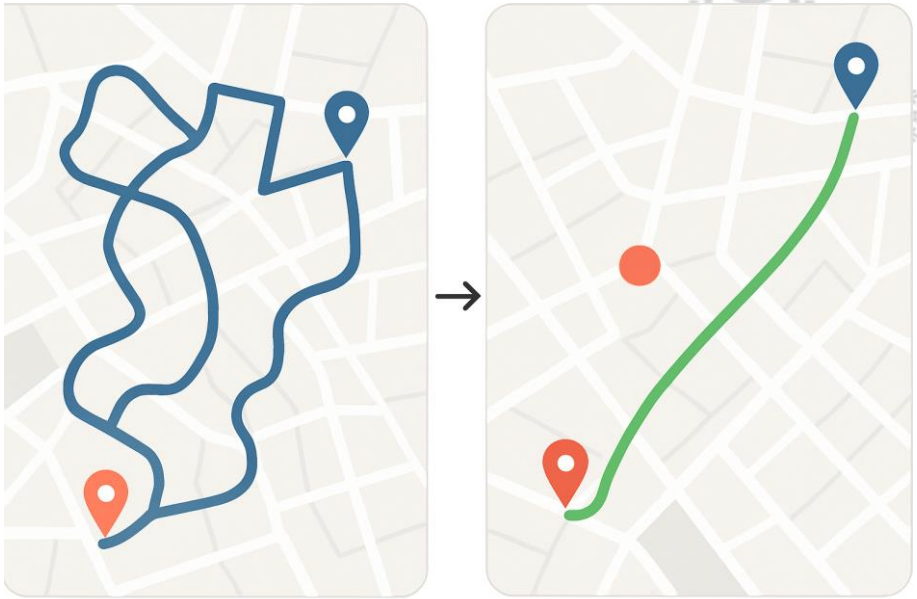
March 2024



Scope

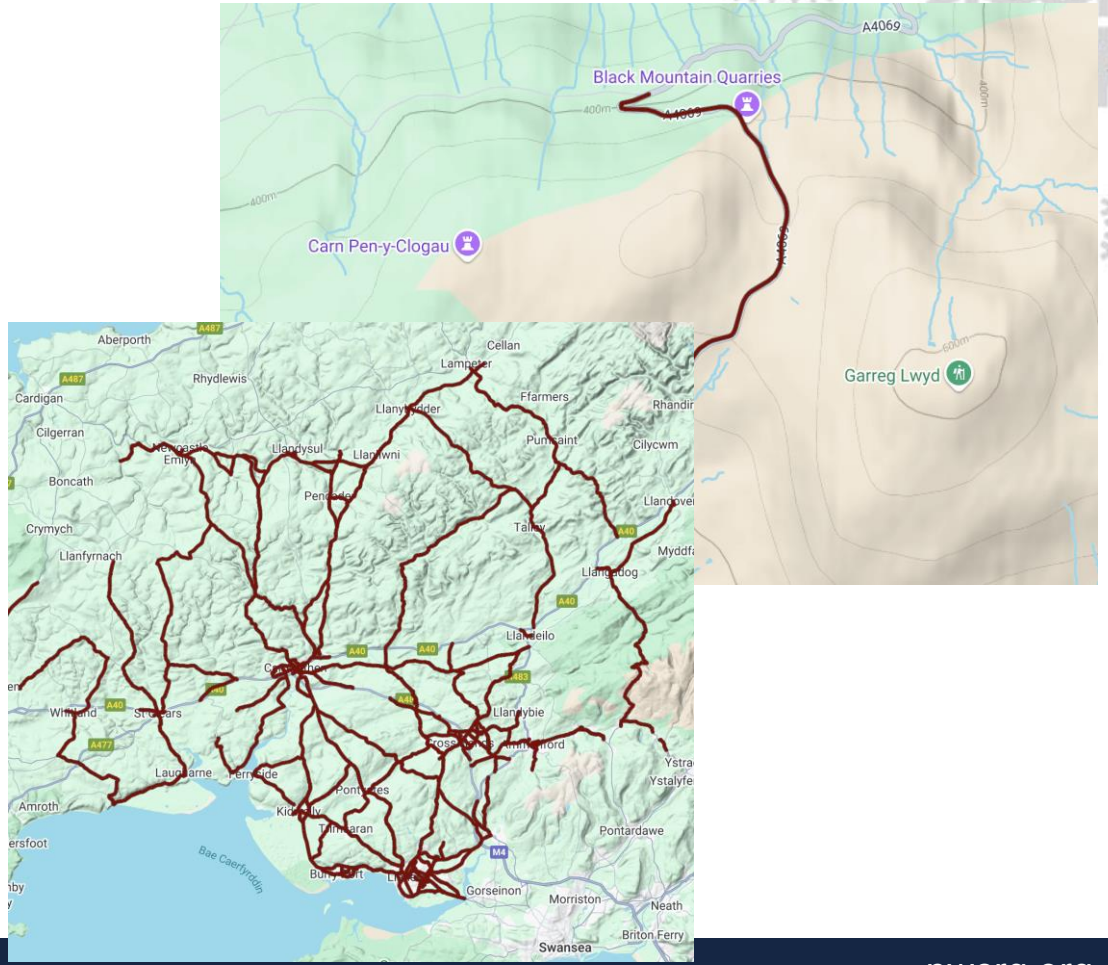
- 13 existing P1 routes
- Some minor changes to salted network
- Reduction of routes
- Routes based around topography
- 3 Depots
- Various vehicle sizes

Tools



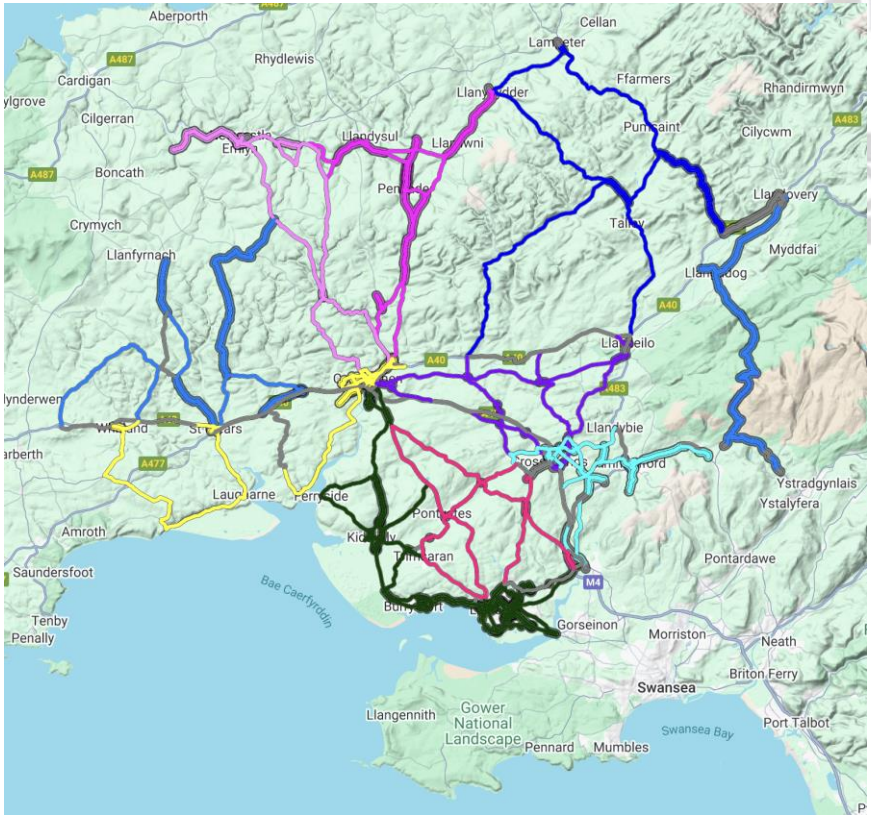
Challenges

- Elevated roads limited network
- Coastal routes
- Maintain operational split



The Result

- 2 route reduction
- 66% efficiency
- Maximising use of vehicles to 90%
- All routes under 3 hours



Savings (approx.)

- Vehicles +£200k
- ½ tonne Co2
- Labour £££
- Labour availability

Summary

- Route Optimisation can be carried out regularly and can achieve huge savings in many areas of your service
- If there are network changes, then there will generally be inefficiencies
- Consider static route changes then become more proactive by being selective, dynamic, or adaptive using new tech & data