

Dockside Monitoring Costs

Analysis of A23 Alternatives

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Dockside monitoring alternatives analyzed

- **7.4.4.1.3** Comprehensive monitoring program (sector and common pool)
- **7.4.4.2.3.1** Option A- Lower coverage level (20%) for minor ports
- **7.4.4.2.3.1** Option B- Lower coverage level (20%) for low-volume vessels
- **7.4.8.2.2** Sub-Option 2B- Remove DSM requirement when fishing west of -72.5 degrees longitude
- **7.4.8.2.4** Sub-Option 3B- Remove DSM requirement when fishing west of -71.5 degrees longitude

Approach- 7.4.4.1.1

- Total costs:
 - offloading costs- at offload port
 - travel costs- to/from major ports
 - miscellaneous costs- 5%
- ASM costs FY16-FY18: proxy for hourly DSM costs
- Realized sector and common pool trips FY16-FY18
- Assumption: larger offloads take longer to observe
- High/low estimates: offload rate, risk premiums

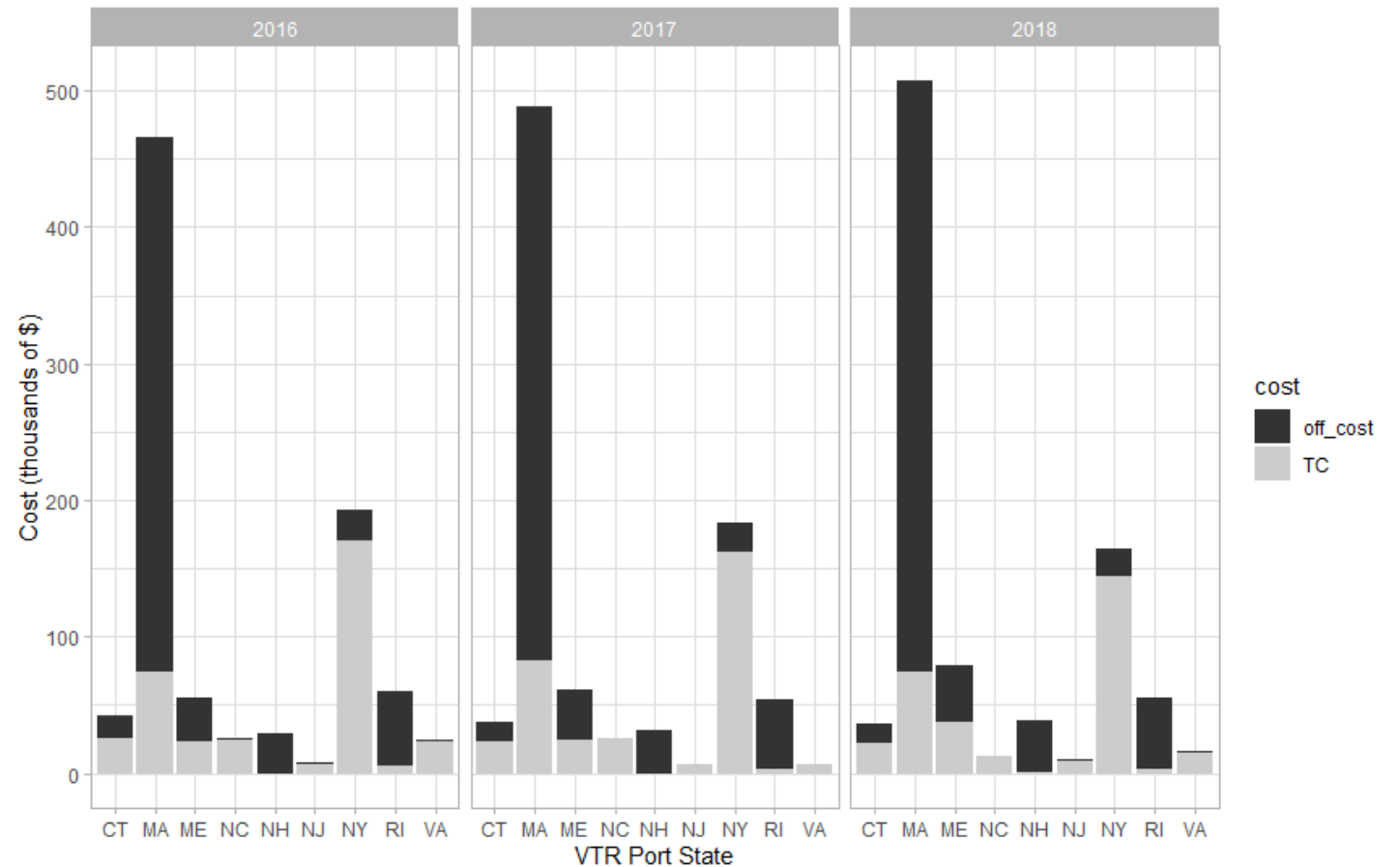
Results– 7.4.4.1.3 Option 2: Comprehensive DSM Program

- Fleetwide costs:
 - \$0.95 million (3-year average, base estimate)
 - \$0.84 to \$1.0 million (lowest and highest estimate)
- Sector costs:
 - \$0.74 to \$0.83 million per year
 - \$116 to \$118 per trip
 - \$0.013 per pound
- Common pool costs:
 - \$0.13 to \$0.17 million per year
 - \$211 to \$240 per trip
 - \$0.065 per pound

Results– 7.4.4.1.3 Option 2: Comprehensive DSM Program

MA: accounts for 50% of estimated monitoring costs by VTR port

NY: second most expensive state due to high estimated travel costs, most expensive state for common pool vessels



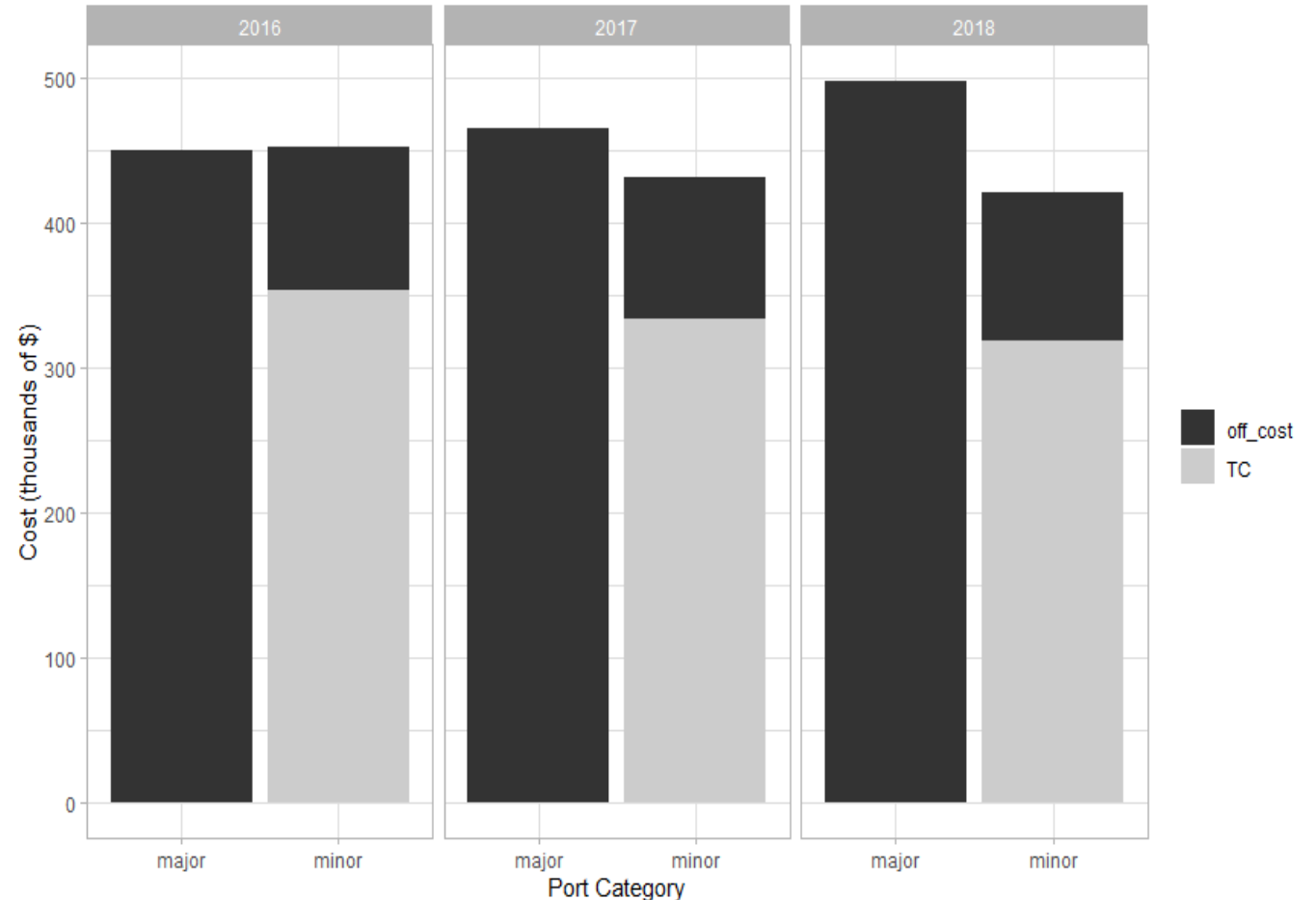
Results– 7.4.4.1.3 Option 2: Comprehensive DSM Program

Major ports:

- 98.5% of total landed groundfish
- 97% of groundfish revenue
- 56% of total estimated costs

Minor ports:

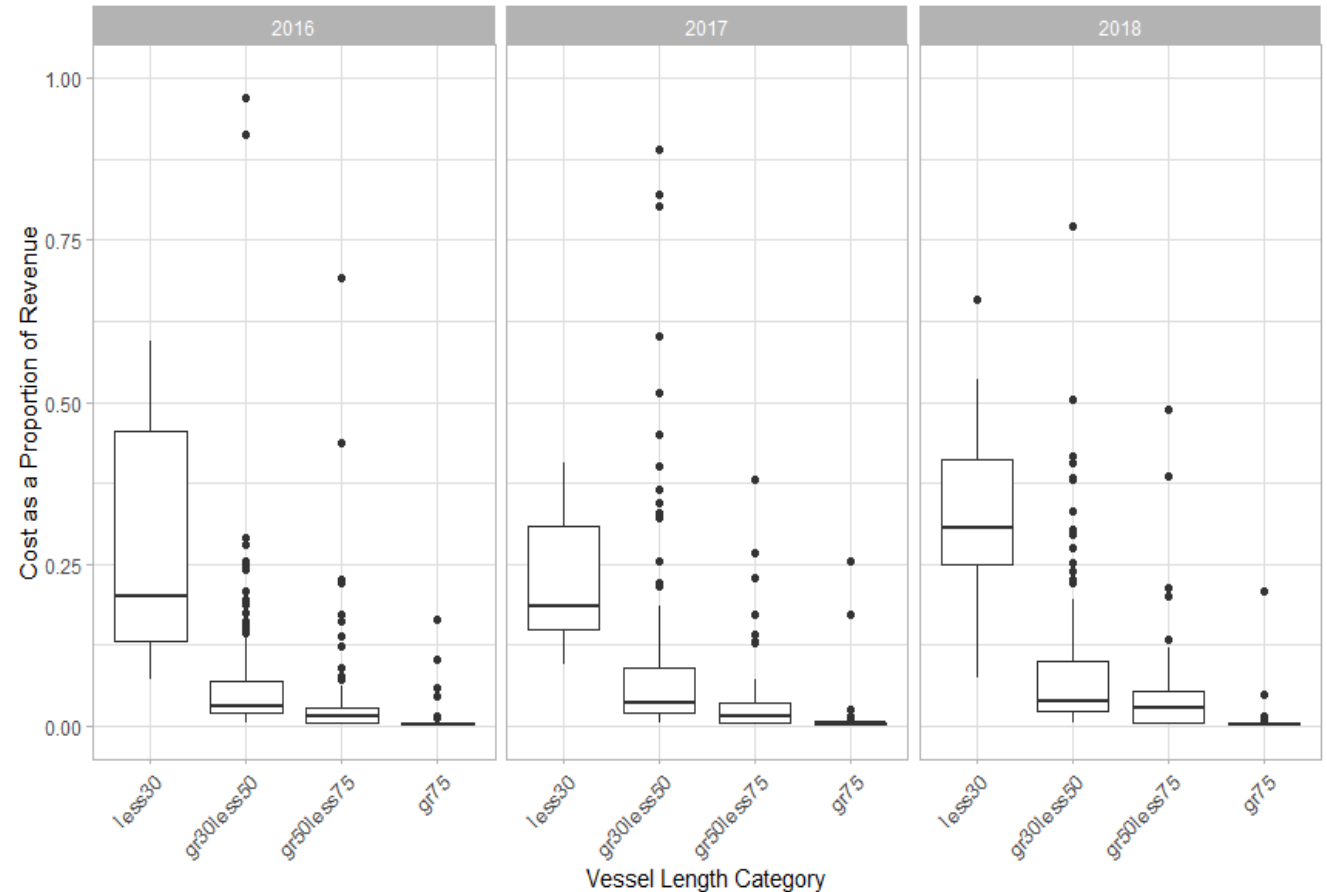
- 1.5% of total landed groundfish
- 3% of groundfish revenue
- 44% of total monitoring costs



Results– 7.4.4.1.3 Option 2: Comprehensive DSM Program

Costs are lower as a proportion of fishery revenue for larger vessels:

- 9 (0 sector) Vessels <30': 26%-53%
- 127(97) Vessels 30'-50': 3.3%- 4.4%
- 68 (54) Vessels 50'-75': 1.6%-2.8%
- 29 (28) Vessels >75': <0.5%



Results-7.4.4.2.3.1 Option A

Lower coverage level (20%) for minor ports

- Minor ports account for:
 - 1.5% landed GF pounds
 - 2.7% GF revenue
 - 14.6% trips
 - 32.2% vessels
- Randomized selection of offloads in each port (200 simulations)
- Fleetwide costs: \$0.61 million, 35% reduction
 - Minor port cost: 82,581
 - Major port cost: 530,450
- Trade-off: exempting ports may encourage effort shifts, decreasing compliance and enforceability benefits

Results-7.4.4.2.3.2 Option B

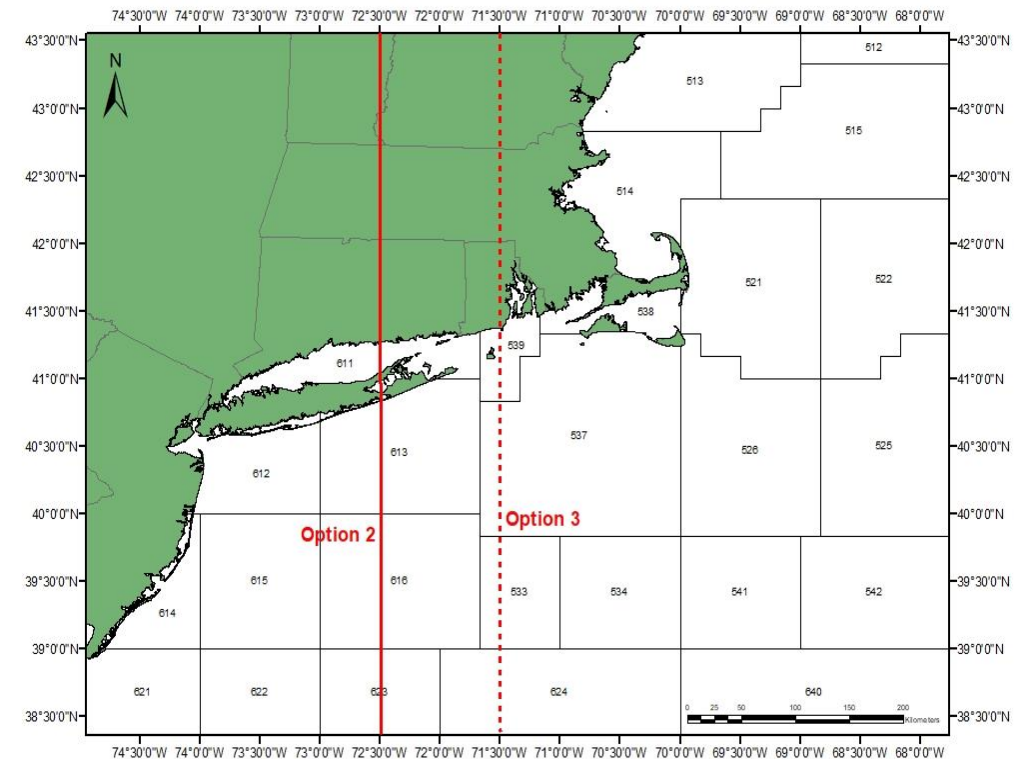
Lower coverage level (20%) for low-volume vessels

- Low-volume vessels accounted for:
 - 2.3% landed GF pounds
 - 4.3% GF revenue
 - 49.5% trips
 - 38.6% vessels
- Randomized selection of offloads for each vessel (200 simulations)
- Fleetwide costs: \$0.61 million, 39% reduction
 - Low-volume vessel cost: \$91,600
 - Other vessel cost: \$490,825
- Trade-off: Compliance and enforceability benefits may be reduced if vessel knows when it will be monitored while fishing

Results-7.4.8.2.2 Sub-Option 2B

Remove DSM requirements west of 72.5°

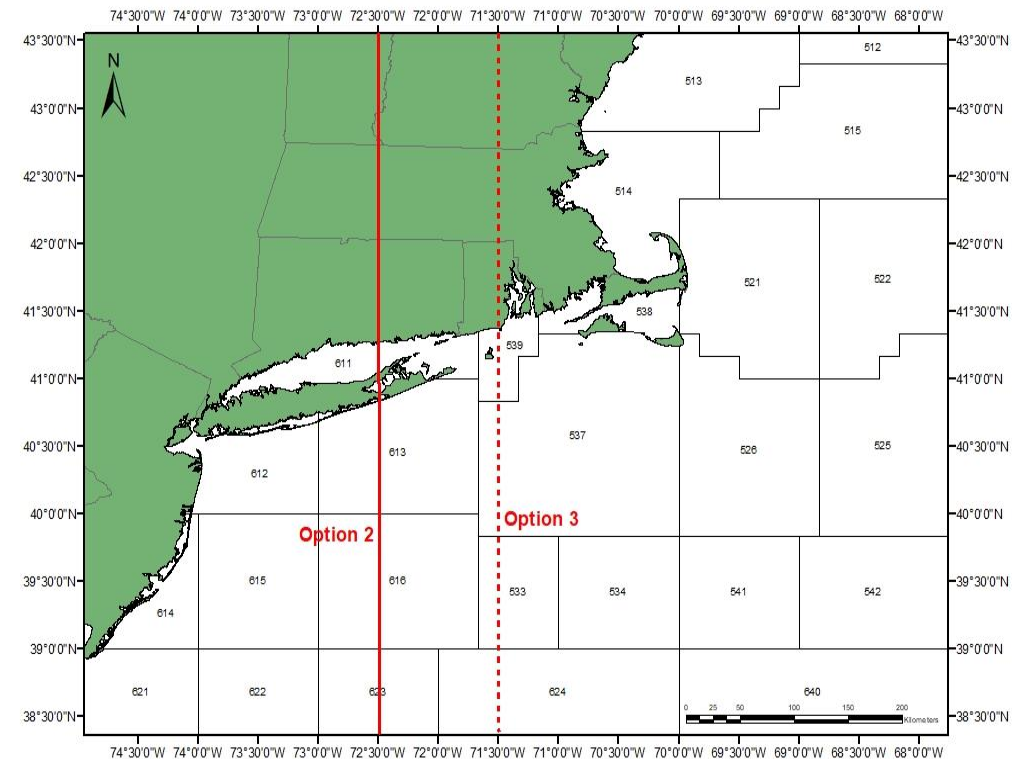
- Estimated DSM costs for all trips reporting fishing west of 72.5 degrees between FY16-FY18
- Fleetwide costs: \$0.87 million
- Exempted trip cost reduction: \$17,000
- Trade-off: some risk of effort shifts, loss of compliance and enforceability benefits on trips in that area



Results-7.4.8.3.2 Sub-Option 3B

Remove DSM requirements west of 71.5°

- Estimated DSM costs for all trips reporting fishing west of 71.5 degrees between FY16-FY18
- Fleetwide costs: \$0.63 million
- Exempted trip cost reduction: \$0.26 million
- Trade-off: Higher risk of effort shifts, higher loss of compliance and enforceability benefits on trips in that area

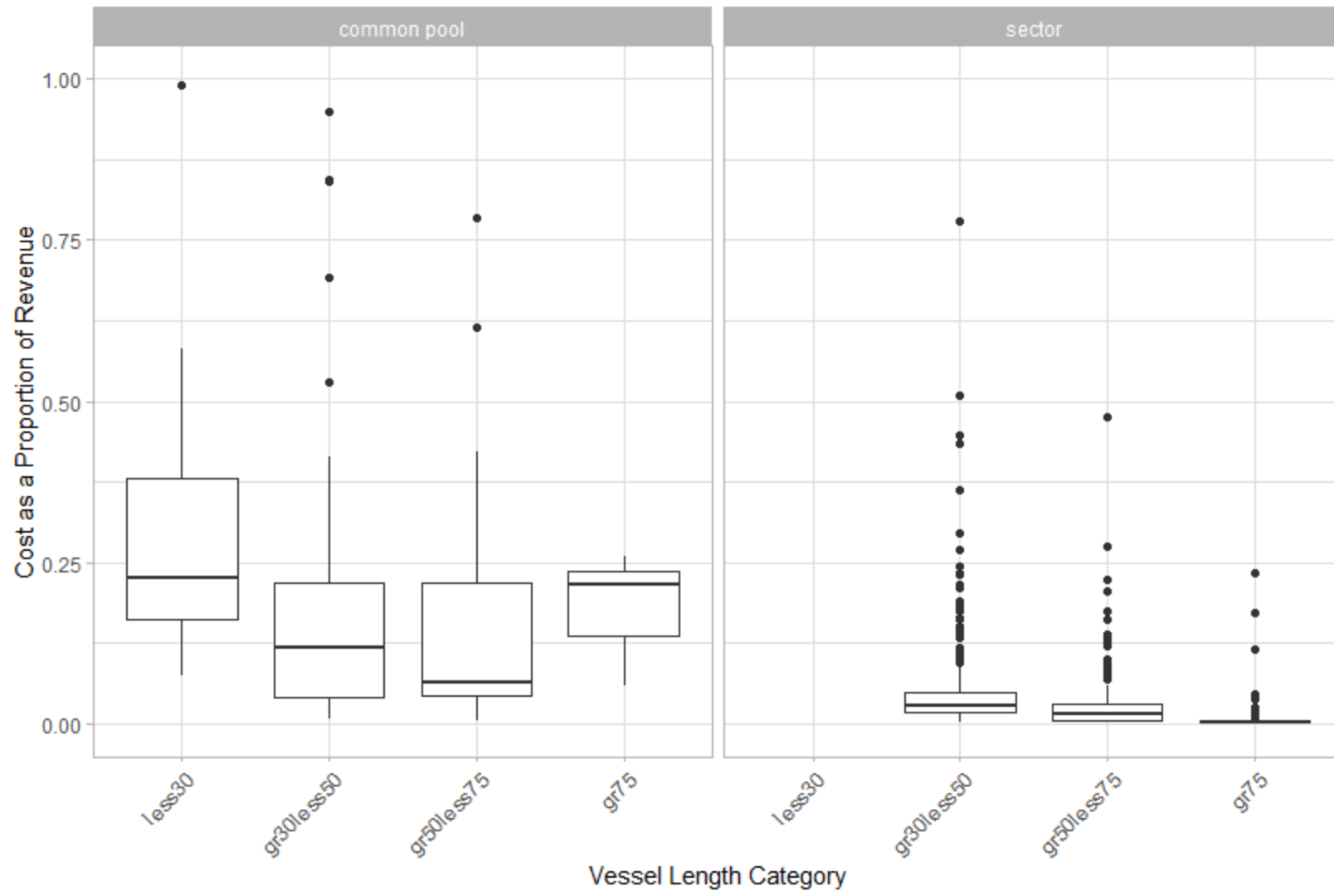


Conclusions

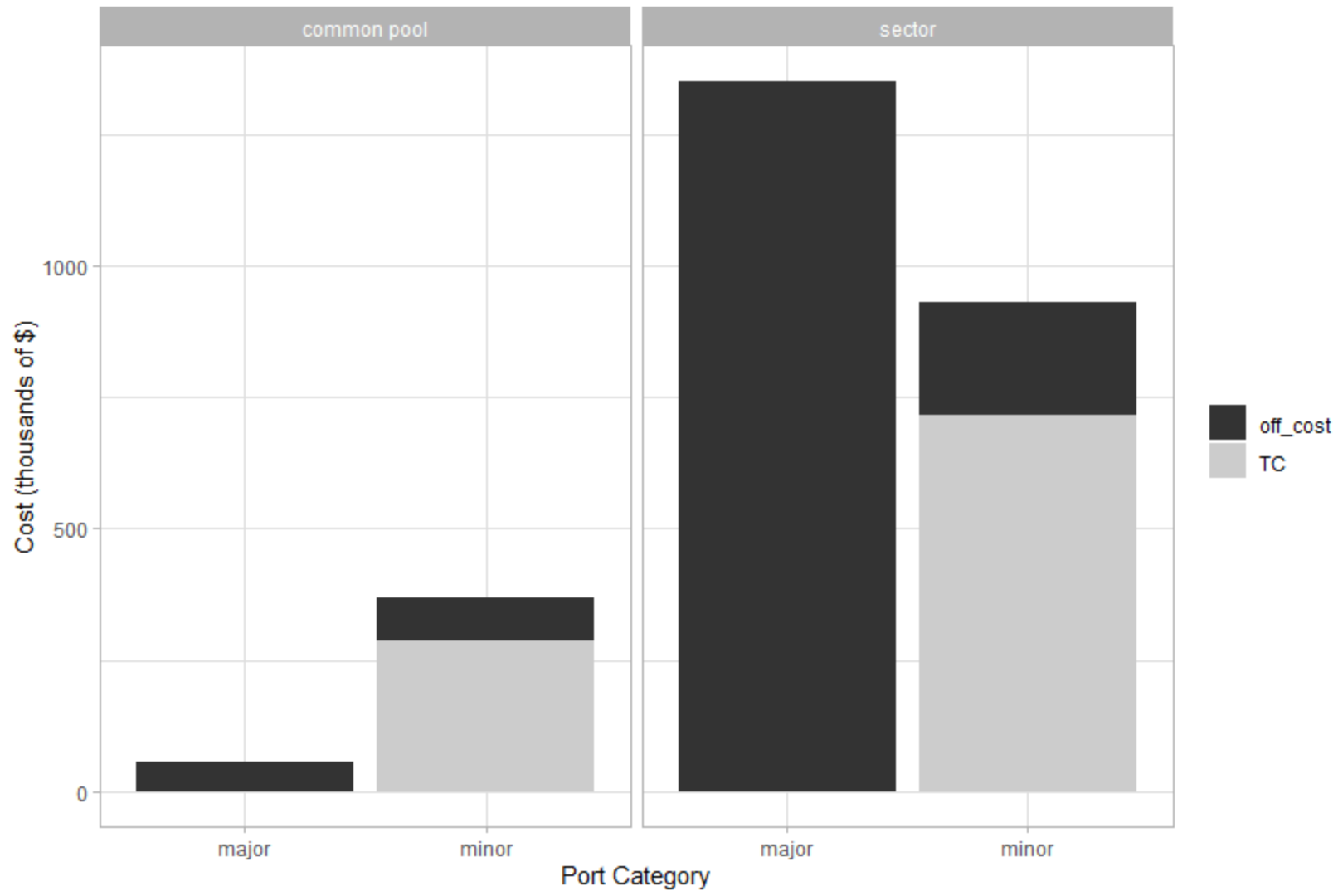
- Comprehensive monitoring estimated to cost \$0.8-\$1.0 mil per year
- Lower coverage of ports/vessels
 - Reduces cost by \$0.34/\$0.37 mil, 35%/39%
 - Reduces costs for ports/vessels accounting for minority GF activity
- Exempting vessels west of 71.5/72.5
 - Reduces cost by \$.02/\$0.26 mil
 - Few vessels report fishing west of 71.5, much more current effort west of 72.5
- Lower coverage and exemption options all have trade-offs:
 - Increases risk of non-compliance, loss of enforceability
 - Effort shifts, particularly for low coverage port option and 72.5 exemption

Extra slides

7.4.4.1.3 Option 2: Comprehensive DSM Program



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