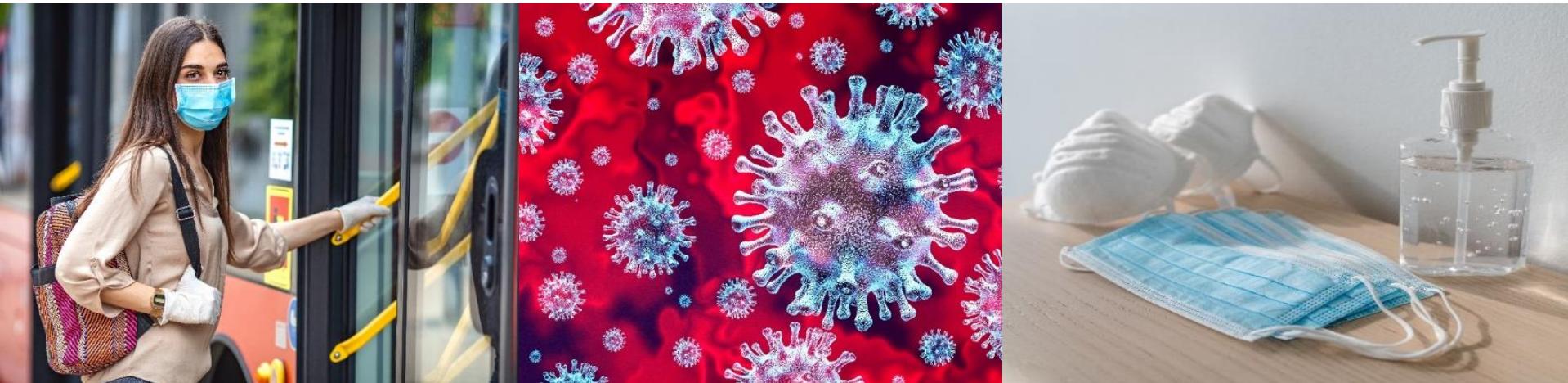


The Impact of COVID-19 on Transport Choices in Scotland

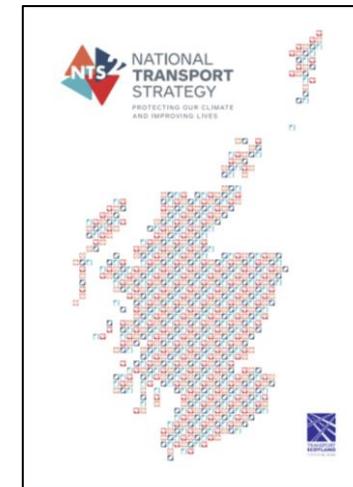
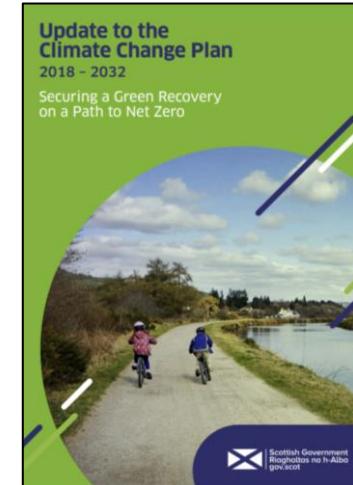
An Online Survey of Scottish Residents

Lucy Downey, Achille Fonzone, Greg Fountas, Torran Semple



Background

- + March 2020 lockdown¹
 - ❑ Bus (-85%) & rail (-92%) patronage decreased
 - ❑ Volume of car traffic fell 75%
- + Transport Scotland² (May 2021)
 - ❑ 67% concerned about contracting the virus while using PT
 - ❑ 60% concerned about people having enough space to observe physical distancing on PT
 - ❑ 41% “I will avoid PT and use my car more than I did before when restrictions on transport are lifted”
 - ❑ 61% “I will walk or cycle more”
- + Climate Change Plan 2018 – 2032
 - ❑ Greenhouse gas emissions net-zero by 2045
 - ❑ Reduce car kms on Scottish roads 20% by 2030



¹Transport Scotland (2021) COVID-19: Scotland's transport and travel trends during the first six months of the pandemic

²Transport Scotland (2021) COVID-19 Public attitudes survey data: Wave 17

Methodology



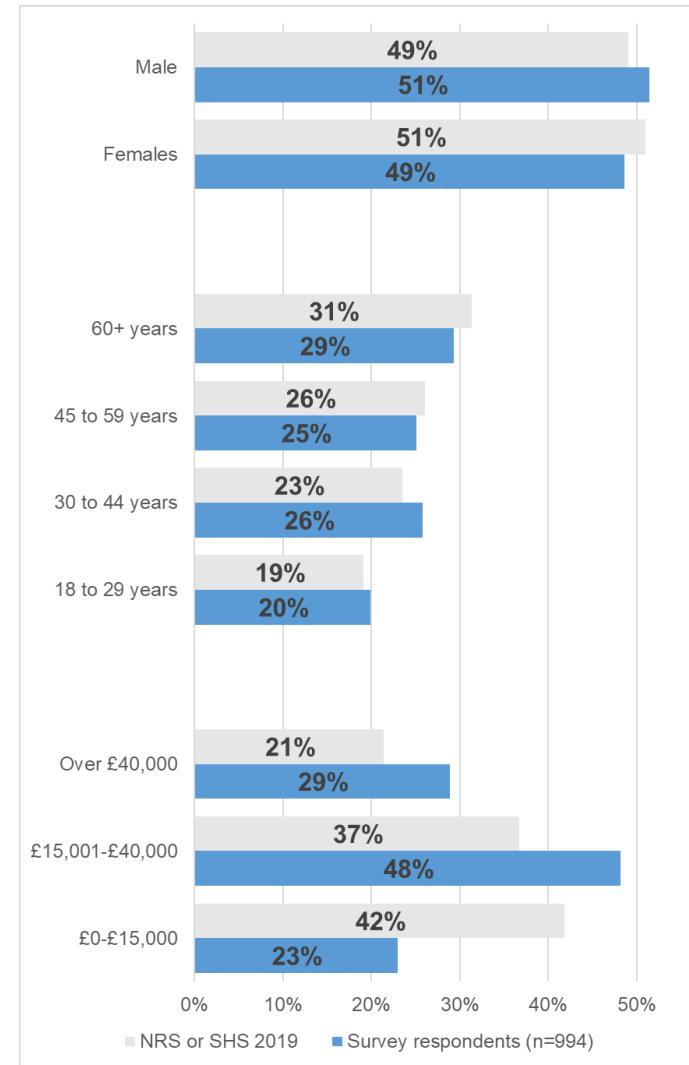
Online Qualtrics Survey

- ❑ Response panel (quota set for age, gender, income)
- ❑ 3rd to 17th February 2021
- ❑ 994 responses



Survey topics

- ❑ Perceptions of COVID-19
- ❑ Mode choice
- ❑ Travel related activities (WFH)
- ❑ Effectiveness of PT measures
- ❑ Socio-demographics

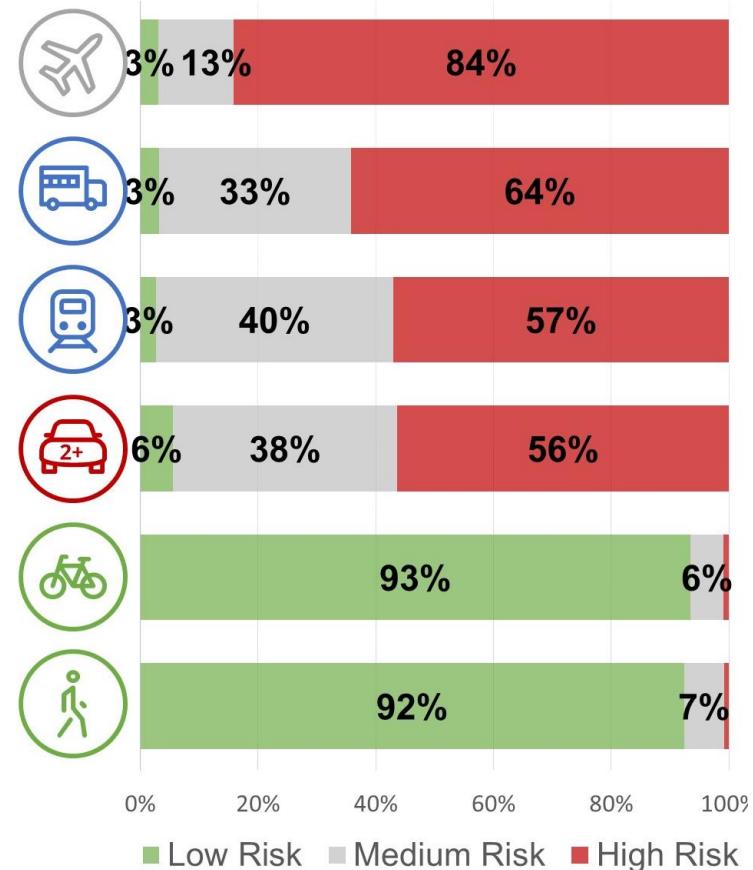


Travel Modes and Risk Perception

- Percentage of respondents travelling at least once a week by mode

Mode	Pre-covid	lockdown
 Bus	27%	9%
 Train	12%	4%
 Car	69%	55%
 Share	15%	5%
 Bike	13%	13%
 Walk	75%	81%

- Perceived risk of different types of transport in terms of contracting/spreading the virus



Anticipated Future Mode Use

- Thinking ahead, some 12 to 18 months from now, how often will you travel using the following types of transport compared to what you did before the COVID-19 pandemic?

Scottish transport trends by mode 2014 to 2019¹



Car traffic increased 8%



Train passengers increased 13%



Bus passengers decreased 10%

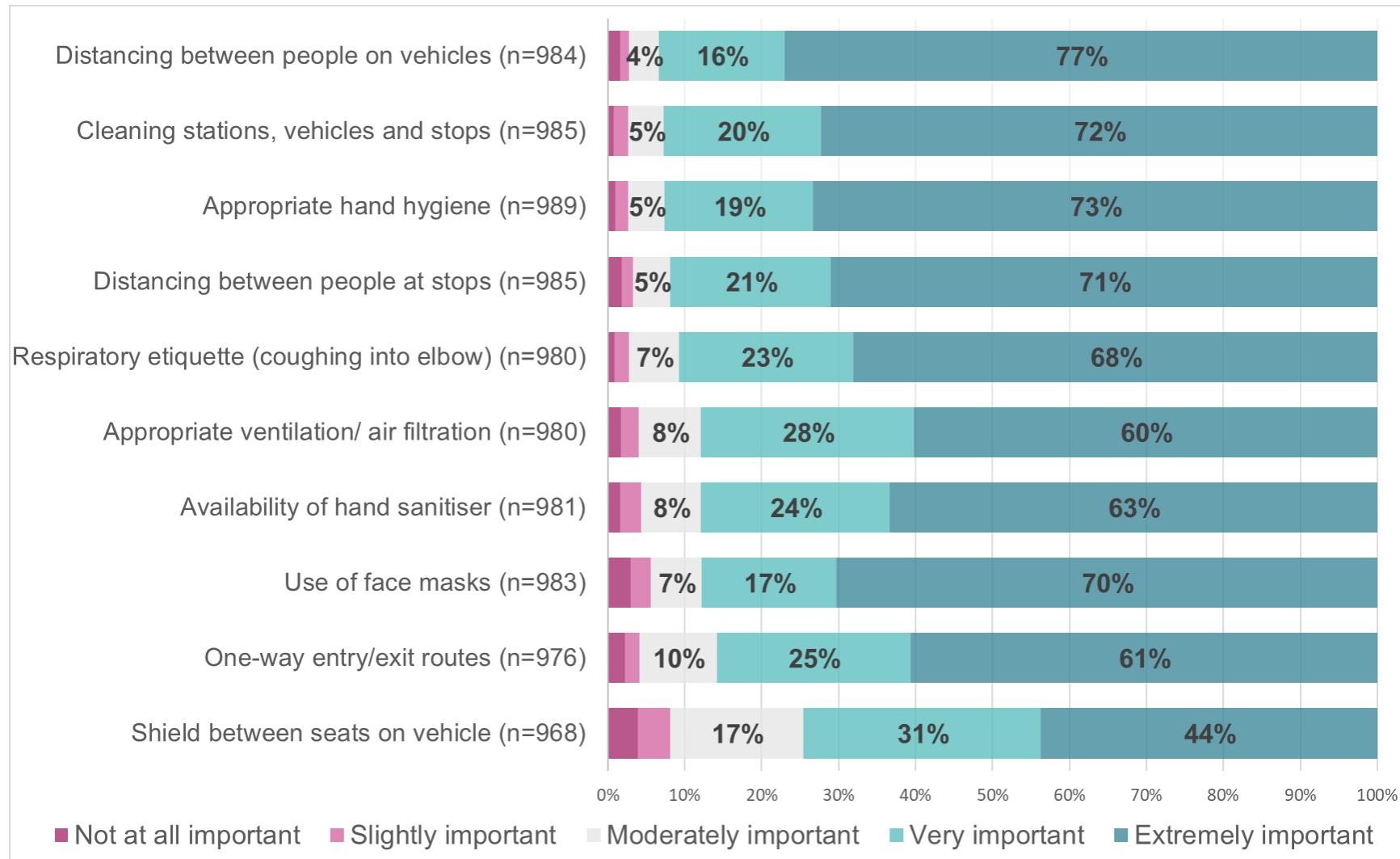
Transport Mode	Less	Same	More	Diff
Walk	5%	50%	45%	40%
Bike	14%	58%	39%	15%
Driving HH car	13%	63%	25%	12%
Passenger in HH car	14%	67%	19%	4%
Passenger other car	25%	56%	18%	-7%
Train	34%	47%	19%	-15%
Plane	42%	35%	23%	-19%
Taxi	33%	54%	13%	-20%
Bus	36%	49%	15%	-21%

¹Transport Scotland (2019) Scottish Transport Statistics No 38

Reduced Public Transport Use

- Thinking ahead, some 12 to 18 months from now, why do you intend to use public transport (buses and/or trains) less often than before the COVID-19 pandemic? (Multiple Response n=333)
 - Possibility of getting COVID-19 (63%)
 - Lack of cleanliness on board PT (49%) PT is too crowded (45%)
 - PT too infrequent, slow, unreliable or starts too late/finishes too early (41%)
- Statistical modelling (Random Parameters Bivariate Probit method)
- Significantly more likely to travel **less by bus**
 - Travelled by car 3+ days a week (pre-covid)
 - Perceived bus travel as a ‘high-risk’ activity
- Significantly more likely to ‘**the same**’ or ‘**more**’ by bus
 - Unable to work (long-term illness and/or with a disability)
 - Lothian residents
- Significantly more likely to travel **less by train**
 - Travelled by car 3+ days a week (pre-covid)
 - Perceived train travel as a ‘high-risk’ activity
 - Smaller households (less than 3 people)

Public Transport Measures



Future Transport Related Activities

- % who say they will do **more** of these activities than before the pandemic



Working from home
54%



Using IT to communicate
Work 64%
Family/friends 51%



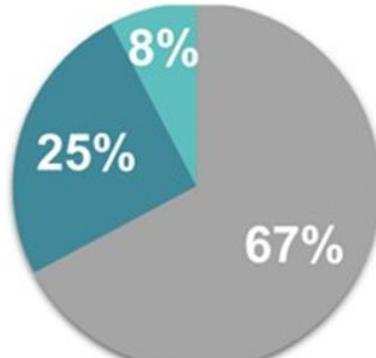
Shopping online
Grocery 36%
Non-grocery 45%



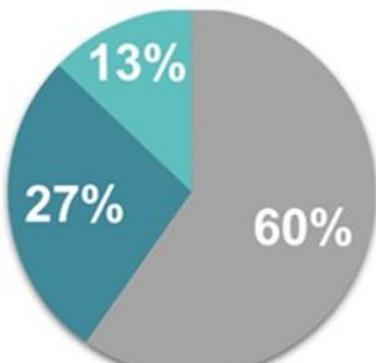
Exercising outside
58%

Residential Relocation

Before COVID-19



February 2021



No Yes (within 5 yrs) Yes (5+ yrs)

Circumstances influencing wanting to move from current accommodation
(Multiple Responses n=366)

- Want a different lifestyle (42%)
- Change in household/family circumstances (36%)
- Working from home (17%)
- Change in employment situation (17%)
- The COVID-19 pandemic (11%)

Conclusions

- % who say they'll be doing **more** of these things than before the pandemic



Car Driving
25%



Cycling
29%



Walking
45%



WFH
54%



Shopping
online
36%

- % who say they'll be doing **less** of these things than before the pandemic



Bus
36%



Train
34%



Flying
42%

- If car use can be discouraged, the pandemic presents an opportunity to alter travel patterns which were detrimental to health, physical activity, road traffic incidents and climate change (Laverty et al 2020)

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