INDEX

A '1 + G G 11' '	
Accidents. See Collisions, crashes	Community transport
and accidents	advantages of, 121–122
Active ageing, 144–145	barriers to using, 122–122
Active mobility. See Cycling; Walking	on demand, 122
Active travel	utilitarian service, 122
older people's travel, 31–32	Commuting trips, 19, 20
Adaptability, 132	Compensation techniques, 80–82
Adaptive Cruise Control, 210	Computerised maze
Aesthetic (tertiary) needs, 100,	navigation, 176
106–107	Concessionary travel pass, 29
Affective motivations, 95	Constant speed, 165–166, 167
Autonomous driving, 57	Constructivist (or interpretative)
	paradigm, 95
Bidirectional relationship, 5	Contactless cards, 213
Brain fitness programmes, 173	Continuity and enclosure, 131
Bronfenbrenner's Ecological Systems	Conventional public transport, 216
model, 5	Coping capacity, 70, 72, 80–83
Business trips, 20	Cycling, 25
F	attitudes, 144
Car travel, 26–28	average distance travelled by, 142
Casualty rate, 42–44	capability and experience, 151
Character, 131	infrastructure for, 157
Cognifit, 179	levels of, 141
Cognitive ability, 76	mobility, 145–147
Cognitive and physical tests, 185	policy, 144–145
Cognitive change, 10	programmes to support, 156–158
Cognitive skills, 17	promotion of, 156–158
Collisions, crashes and accidents	vignettes, 147–156
different driver ages, 44	1181100000, 117 100
involvement by driver, 39	Delayed Recall Test, 176
	Demographic change, 2–3
junctions, 46–48	Devon Driving Decisions Workbook,
right of way violations, 46, 47	180
types of, 46–49	
Combined cognitive training	Digital technologies, 208, 210
programmes, 178–179	Diversity and choice, 132

222 INDEX

Drivefit, 179 Driver behaviour, 162 Cognifit and Drivefit, 179 computerised maze navigation, 176 Delayed Recall Test, 176 Dual n-back task, 177 education and training, 181–183 fitness programmes, 178	Hazard perception tests, 177 Health, 4 implications for, 16 physical activity, 21 virtual and imaginative mobility, 198–200 walking, 31
hazard perception tests, 177 Motor-Free Visual Perception Test (MVPT/VC), 175–176 physical aids, 177–178 Roadwise Review, 181 self-assessment aids, 179–181 Self-Awareness and Feedback for	Inclusive design, 215, 216 Income levels, 21 Individual need, 6, 11 Internet-based services, 211 Interpersonal communication skills, 18
Responsible Driving (SAFER Driving) tool, 180–181 shoulder, neck and head rotation,	Legibility, 132 Leisure trips, 20
speed of processing training, 177 Trail Making Test (TMT), 175 training programmes, 173–183 useful field of view (UFOV) test, 173–175 Driverless cars, 212 Driver risks, 42–46 Driver testing, 57–60 Driver training, 57–60 Driving licences renewing, 60–61 Dual n-back task, 177 Ease of movement, 131	Mean trip length, 16, 17 Mobility conical model of, 5 difficulty, 16, 17, 19 freedom and independence, 79 health/social care, 11 importance of, 3 level of, 66 older people's motivations for, 200 psychosocial needs for, 7, 8 and transport (See Transport) types of, 4 virtual, 11
Ease of movement, 131 E-bike, 140 comfortable and thrillingly fast, 151 Ecological models, 5 Electronic assistance, 57 Equality Act 2010, 217 Ethnic identity, 142	Mobility-as-a-service (MaaS), 211 Motivation for travel, 6, 7 Motivation-behaviour relationship, 95 Motor-Free Visual Perception Test (MVPT/VC), 175–176
Fitness programmes, 178 Fragility index, 41, 42 Grounded theory approach, 96, 162	Needs, 4 aesthetic (tertiary), 100, 106–107 hierarchy of, 100 individual, 6, 11

Index 223

practical (primary), 100, 101–103 psychosocial (secondary), 100, 103–106	Pavement maintenance of, 130 Personal identity, 94
utilitarian, 101–103	
wellbeing, 8	Physical activity through walking and cycling, 21
Non-transport technologies, 81–82	Physical aids, driver behaviour, 177–178
Old-age vulnerability, 66	Physiological change, 10
complexity in transport	Positivist and postpositivist paradigm,
environment, 67–68	95
coping capacity, 80–83	Practical (primary) needs, 100,
exposure factors and threats,	101–103
71–75	Psychosocial needs, 7, 8
older road users, difficulties of, 76–78	Psychosocial (secondary) needs, 100, 103–106
vulnerable road users, 68-71	Public buses, 118–121
Older driver needs	Public spaces, 131–132
data analysis, 164	Public realm, 131, 133
external distractions, 165	Public transport, 10
fatigue, 166	accessibility, 120
glare and lighting conditions on	barriers to using buses, 118–119
road, 167	improving bus services, 120-121
participants, 163	norms, 119–120
reaction time, 166–167	older people's travel, 28–30
speed limit, 165–166	psychosocial (secondary) needs,
Older driver safety	103–106
collision involvement, 39	
collision, types of, 46–49	Quality of life, 3, 21, 22, 28, 29
assessment and training, 57–60	• • • • • • • • •
danger to other road users, 49-53	Rail travel
fatality rate for, 42	accessibility, 125
fragility, 39–42	age friendly, 125–126
improving roads and vehicles,	integrated and simple ticketing,
53–57	125
renewing driving licences, 60–61 risks, 42–46	older people's satisfaction of, 123–125
Older people's travel	Real-time information, 213,
active travel, 31–32	215
car travel, 26–28	Rear-end collisions, 57
impairments, 18, 19	Ride sharing, 211
implications, 20–22	Road design, 75
public transport, 28–30	Road infrastructure, 71–75
Online shopping, 102	Road Traffic Act 1988, 60

224 INDEX

Self-assessment aids, 179–181	slow and fast, 209–214
Self-Awareness and Feedback for	technological innovations, 214–217
Responsible Driving	Travel needs, 7, 100–106
(SAFER Driving) tool,	Trips
180–181	per person by age and mode, 24
Self-awareness of driving, 82–83	per person by age and purpose, 20
Self-Parking systems, 210	types of, 20, 22
Sharing economy, 211	
Shopping trips, 19	Unsafe travel behaviour, 80
Short-term trip planning, 215	Urban spaces, 131
Social class, 21	Useful Field of View (UFOV) test,
Social exclusion, 4	173–175
Social networks, 21, 80	Utilitarian needs, 101–103
Social norms, 122	
Speed limit, 165–166	Vehicle safety-critical systems, 211
Speedometer, 166	Video Elicitation Interview
Street design	(VEI), 146
distinctive and aesthetically	Virtual and imaginative mobility
pleasing, 133	outdoor space and health and
legible place, 133	wellbeing, 198–200
safe and accessible space, 133	technology to mimic going
	outdoors, 200–203
Telehealth, 11	Virtual mobility, 11, 198–200,
Threats, 69, 72	200–203
health issues and road	Virtual reality, 202
infrastructure, 71–75	Vulnerability
Ticketing, 124	framework, 69–72
TNS Loneliness Survey (2014), 3	older road users, 68–71
Traffic collisions, 79	
Traffic control, 48	Walking, 31, 140
Traffic signals, 54	barrriers to, 130–131
Trail Making Test (TMT), 175	Wellbeing, 5
Training programmes, 173–183	implications for, 16
Transport technologies, 81	virtual and imaginative mobility,
policies, 217–219	198–200