

# Index

## A

Access, 2–4, 14, 17, 20, 22, 23, 25–27, 32, 33, 44, 45, 47, 49, 51, 55, 57, 58, 62–64, 66–69, 75–78, 94, 97, 116, 119–122, 127, 138, 140–142, 151–156  
Accessibility, 1, 2, 4, 14–16, 19–25, 27–33, 44–55, 57–59, 61–63, 66–69, 75–78, 80, 94, 97, 103–106, 114–116, 122, 127, 128, 137–141, 145, 146, 151–156  
Accessibility of cities, 24, 156  
Accessibility of intermediate cities, 28, 29  
Accessibility of stations, 25  
Accessibility outside the HSR network, 138  
Adapted measure, 66  
Adapted network effects, 67  
Area, 13, 17, 25, 27, 29, 33, 47, 52–56, 60, 61, 76, 78, 82, 96, 103, 104, 106, 109–112, 139–141, 151–153, 155  
Attribute definition, 96

## B

Back-casting, 94, 155  
Background, 45, 53, 87, 111, 113, 149, 152, 155  
Benefits, 1–4, 18, 22–27, 30, 33, 44, 55, 57, 59–61, 65, 68, 69, 75–77, 79, 86, 97, 103, 116, 127, 137, 140, 142, 144, 146, 150, 152, 153, 155, 156  
British studies issues and doubts, 22

## C

Capturing network effects, 61  
Case study results, 122  
Cities, 1, 2, 4, 7, 11, 13, 20–22, 24, 25, 27–32, 44, 48, 51, 52, 54–56, 76, 77, 80–82, 105, 106, 109, 111, 115, 116, 150, 152, 155  
Competition, 1, 17, 23, 26, 31, 33, 45, 52, 55, 57, 76, 82, 84, 105, 106, 112, 115, 116

Competitive, 1, 9, 31, 47, 54, 109, 114, 115  
Competitive advantages, 26, 75, 77, 114, 137, 155  
Competitive city-regions, 108  
Continuous railway systems, 86, 121  
Conventional, 14–16, 24, 30, 32, 44, 49, 57, 58, 63, 75, 76, 78, 80, 83, 139, 142, 143, 145, 152, 155  
Costs, 1, 2, 4, 15–17, 26, 48, 49, 59–61, 64, 105, 109, 115, 142–144  
Critical issues, 110, 113  
Criteria to select strategies, 77

## D

Daily accessibility, 27, 48, 51, 54  
Data, 12, 17, 23, 25, 28, 44, 45, 48, 53, 54, 65, 75, 90, 91, 94, 96, 104, 111, 121, 122, 137, 139, 144, 145, 151, 154  
Definition, 103, 106  
Delphi, 94, 95, 121, 152, 155  
Density, 31, 59, 61, 67, 104–106, 123, 124, 127, 128, 139, 146, 147, 156  
Disparities, 2, 27, 44, 54, 61, 153, 156  
Distribution, 4, 18, 27, 48, 51, 56, 57, 60, 67, 69, 121, 128, 139, 142, 145, 146, 149, 153, 156  
Distributive, 44, 59, 65, 68, 75, 127, 128, 137, 140, 150, 151, 156  
Distributive effects of transit strategies, 145

## E

Economic, 4, 15, 18, 22, 23, 25–27, 30, 47, 48, 50, 56, 57, 97, 103–106, 108, 109, 112, 113, 115, 137, 142, 144, 153, 154  
Economic perspective, 26  
Effects, 1–4, 7, 20–25, 27–31, 44, 45, 48, 50–52, 55, 59–62, 65, 67–69, 75, 76, 115, 116, 122, 124–128, 131, 140, 142, 146, 148, 150, 152–154, 156

- Efficiency, 1, 4, 14, 15, 19, 28, 49, 54, 59, 61, 62, 66, 75, 76, 103, 109, 113, 117, 122, 140, 146, 149, 156
- Evaluation, 4, 18, 20, 25, 28, 30, 45, 48, 60, 90, 94, 96, 97, 106, 122, 143, 149
- Evaluation of monetized and distributed network effects, 127
- Evaluation of strategies on network effects, 148
- Exclusive exploitation, 15, 77, 141, 142, 155
- Expert based evaluation, 94, 96
- F**
- Feeders, 33, 59, 79, 80, 138
- Freight, 16, 18, 19, 30, 65, 78, 84, 92, 97, 142–145
- Fully mixed, 16, 139
- G**
- Gravity, 26, 46, 47, 50, 51, 65, 122, 124, 126, 127, 139, 140, 146–151, 156
- Growth, 1, 2, 18, 25, 28, 60, 97, 104, 109, 115, 121
- H**
- Hierarchical networks, 58, 59, 68, 79
- High speed rail definition, 7
- HSR, 1–4, 7, 9, 11–18, 20–33, 44, 46–50, 52–58, 61, 63, 65, 66, 68, 69, 75–79, 82–84, 94, 113, 116, 117, 122, 125, 126, 128–131, 137, 138, 141–143, 147, 149, 150, 153–156
- HSR feeders or interfaces, 77
- HSR freight, 18
- HSR investment spillovers, 129, 131, 132
- HSR network, 2–4, 10, 15, 18, 21–25, 29, 30, 32, 33, 44, 57, 66, 67, 76, 117, 137–141, 145, 146, 152, 155
- HSR operating models, 4, 75
- HSR ridership, 17
- I**
- Impact, 12–16, 23, 24, 26, 55, 57, 104, 119, 139–141, 148, 149
- Impact of intermediate stops, 9
- Impedance, 46, 47, 49, 62–66, 69, 139, 140, 151
- Implications, 22, 29, 31, 44, 52, 53, 106, 142
- Indicator, 4, 22, 27, 44, 45, 47–52, 54, 60–63, 67, 115, 122, 139, 140
- Indicators comparison, 51
- Interface, 4, 33, 80, 81, 86, 116, 140, 141, 152, 154–156
- Intermediate, 1, 9, 11, 13, 21, 22, 28–30, 32, 52, 54, 55, 77, 83, 87, 96, 120, 138
- Interoperability, 9, 15, 16, 23, 59, 75, 77, 79, 139, 141, 143, 146, 152, 153, 155
- Inverted measure, 66
- Inverted network effects, 67
- Italy, 16, 18, 24, 109, 112, 114, 115, 117
- L**
- Light, 31, 33, 58, 75, 84, 138, 139, 145, 153
- Light rail transit, 75, 84, 124, 141, 145, 147–149
- Limitations, 17, 151
- Location accessibility, 48
- Location attributes, 105, 108
- M**
- Marginalization, 2, 4, 21
- Market, 15, 19, 23, 26, 31, 47, 56, 84, 104, 105, 109, 137, 142, 144
- Market expansion, 143
- Measure, 21, 25, 26, 33, 44–48, 51, 54, 58, 60, 61, 64–69, 91, 103, 105, 109, 137, 139, 140, 154, 155
- Measure implementation, 61
- Measure results, 122
- Measuring HSR accessibility, 66
- Metro, 81, 87, 106
- Metropolitan, 29, 31, 32, 52, 77, 103–109, 117, 118, 152, 156
- Metropolitan network, 119
- Mixed, 16, 23, 29, 32, 59, 76, 79, 142, 144, 154
- Mixed conventional, 16
- Mixed high speed, 16
- Monetized, 68, 69, 127, 128, 130, 131, 150, 151
- Monetized network effects, 127
- Monetizing, 69, 150
- Monetizing network effects, 68
- Multilevel, 28, 52, 53
- Multilevel analysis, 50, 52, 137, 138
- N**
- Network, 4, 15, 16, 18, 19, 21, 23–25, 28, 30, 32, 33, 44, 48–52, 54–59, 61, 62, 65–69, 75, 76, 78–82, 84–87, 90, 97,

- 103, 104, 106, 109, 112, 115, 117,  
119–122, 127–129, 131, 139–156
- Network description, 116
- Network effects, 4, 59, 126, 127
- Network effects results, 125
- Network efficiency accessibility quality index,  
148
- North-Eastern Italy, 110
- O**
- Operation, 9, 30, 45, 51, 76, 86, 87, 104, 138,  
151, 154
- Opportunities, 2, 4, 15, 19, 21, 23, 26, 45–48,  
51, 52, 55, 59, 78, 112, 115, 144, 154
- P**
- Peripheral, 22, 24, 26, 27, 48, 58, 78, 105,  
113–115, 138, 153, 156
- Peripherality, 103, 105, 106, 152
- Pioneering frenchs studies, 20
- Polycentric, 2, 25, 56, 81, 104, 106, 108, 109,  
111, 113, 114, 119, 138–140, 153, 154,  
156
- Polycentricism, 103, 105, 106, 152
- Potential accessibility, 3, 47
- R**
- Rail, 1, 4, 7–9, 11, 15, 18–21, 24, 25, 30, 31,  
44, 46–49, 57, 58, 62, 63, 75, 76, 78–81,  
83–85, 87, 90, 96, 103, 117, 118, 121,  
127, 140, 142, 153, 156
- Rail networks, 56, 57, 80, 116
- Recommendations, 58, 76, 152
- Region, 3, 21, 25, 26, 28, 30, 33, 47, 50, 56,  
58, 60–62, 64, 65, 68, 69, 76, 81–84,  
104–106, 109, 112, 114, 116, 117,  
119–121, 129, 137, 142, 150, 156
- Regional high speed rail, 75, 141, 155
- Regional HSR accessibility, 137
- Regionalization, 32, 56, 82, 83, 106, 110, 138
- Regionalization trends, 78
- Regional level analysis, 54
- Regional metro rail, 75, 81, 82, 120, 123, 126,  
127, 132, 141, 142, 155
- Relative network efficiency accessibility, 49
- Research directions, 154
- Results, 1, 4, 13, 18, 20, 21, 24, 27, 28, 32, 33,  
47, 49–51, 53, 54, 68, 78, 95–97, 116,  
122, 123, 131, 137, 139, 145, 148, 151,  
152, 154, 156
- Returns, 1, 18, 142, 143, 153
- Review of transist options, 80
- Ridership, 1, 14, 18, 31, 54, 77, 139, 141, 153
- S**
- Scale, 1, 2, 4, 24, 25, 27, 28, 50, 51, 53, 54, 57,  
59–61, 83, 109, 137, 140, 142, 144, 154
- Self-potential, 47, 48, 66, 139, 140
- Self-potential a problem or an indicator, 139
- Sensitivity testing, 122
- Speed, 1, 7, 9–17, 19, 26, 48, 75–78, 81,  
83–90, 93, 96, 97, 118, 137, 138, 142,  
144, 145, 150, 153–155
- Speed on rails, 7, 9, 11
- Spillover effects, 27, 43, 60, 61, 69
- Station, 1, 2, 4, 13, 14, 17, 21, 22, 24–26, 29,  
30, 32, 33, 52, 58, 63, 64, 66–69, 76, 78,  
80, 87, 89, 97, 112, 117, 122, 128,  
138–141, 145, 147, 149, 150, 152, 154
- Stops, 1, 9, 11–13, 16, 21, 28, 52, 54, 77, 81,  
83, 84, 86, 87, 90, 96, 119, 120, 138,  
142, 146, 150
- Strategies interfacing with HSR, 140
- Strategy, 4, 26, 33, 69, 75, 77, 87, 94–96, 103,  
116, 118, 120–123, 126, 128, 131, 141,  
146, 148–150, 152, 154, 156
- Survey, 20, 95–97, 121, 155
- Sustainability, 19, 94, 114, 116, 144
- T**
- Technology, 4, 9, 16, 76, 79, 81, 90, 144
- Technology bits, 90
- Transit, 4, 12, 17, 19, 31, 33, 57, 66, 68, 69,  
75–79, 81, 84, 87, 88, 94, 97, 103, 114,  
116, 119, 121, 122, 126, 127, 139–141,  
143, 145, 151–156
- Typology and characteristics, 105
- U**
- Urban regions, 31, 103, 106, 108, 109
- W**
- Weighting, 50, 62, 65, 66, 122, 124, 139, 140
- Weighting factors, 49, 50, 65, 67, 122–124,  
146, 148