

Road Safety for Children's Independent Mobility in Japan

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Children's Independent Mobility (CIM)

- Freedom to move and play without adult supervision
 - Japan has relatively high CIM internationally
 - Associated with well-being and life satisfaction
 - Example: Independent errands (Otsukai)



子どもたちは
トップルをしたり

立ち止まって
立ち話をしたり

子供はこんな所で遊んでいる



Human-Centered Streets Before Modernization

- Traditional roads were not built for cars
 - Narrow and often winding
 - Roads functioned as shared social spaces
 - Children played and neighbors interacted along streets



Group School Attendance (Since 1929)

- Introduced due to frequent child accidents
 - High accident rate among first-grade students
 - Older students support younger children
 - Socially supported safety system



土曜・日曜・休日を除く
7:30 - 9:30
ここまで



スクールゾーン



Designated School Routes (since 1972)

- Legally supported within traffic safety framework
 - Within approx. 500m of elementary schools
 - Prefer roads with separated sidewalks
 - On narrow roads: traffic restrictions during school hours
 - Community monitoring by local residents
 - Consider traffic safety and crime prevention

Residential Streets and 30 km/h Policy

Residential streets: width 5.5m
or less

- Often no sidewalks (shared-space condition)
- Relatively low illegal roadside parking
- Nationwide 30 km/h limit from this September
- Lower fatality risk & child perceptual limits
- Tobidashi-kun signs for dart-out warning



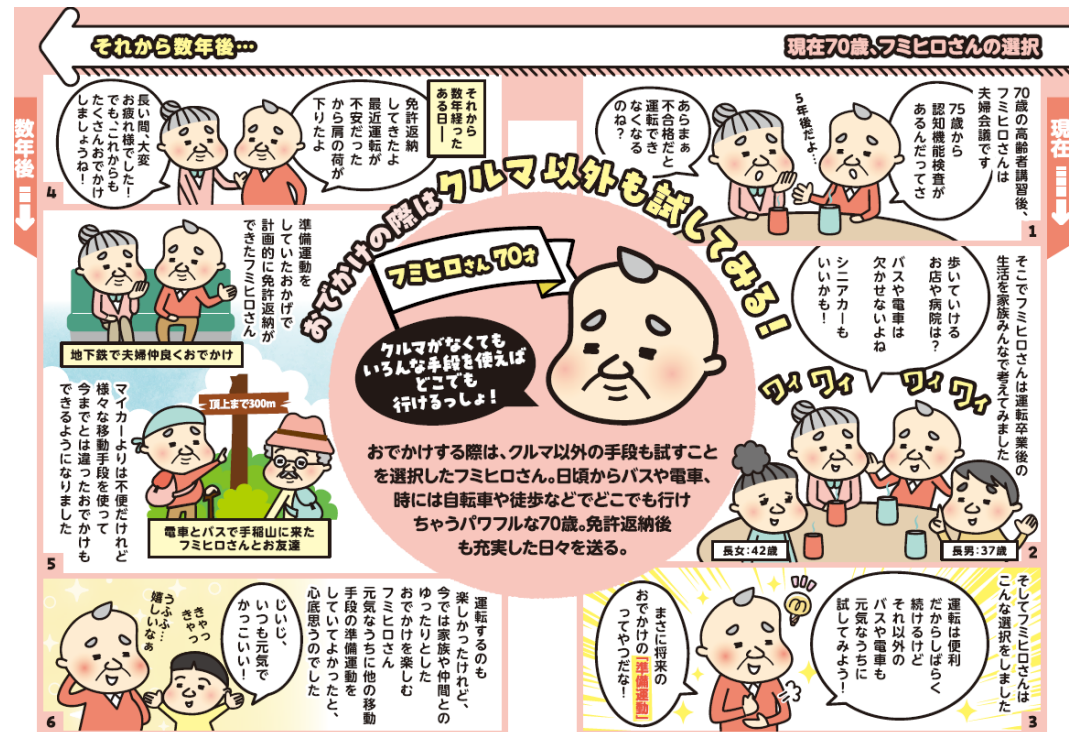
Urban Structure Supporting CIM

- Spatial: narrow streets, 500m zones, 30 km/h
 - Low illegal parking improves visibility
 - Social: group walking, monitoring, errands
 - Traditional festivals process through neighborhood streets
 - Strong community ties create informal 'eyes on the street'
 - Interaction leads to higher CIM



Independent Mobility Across the Life Course

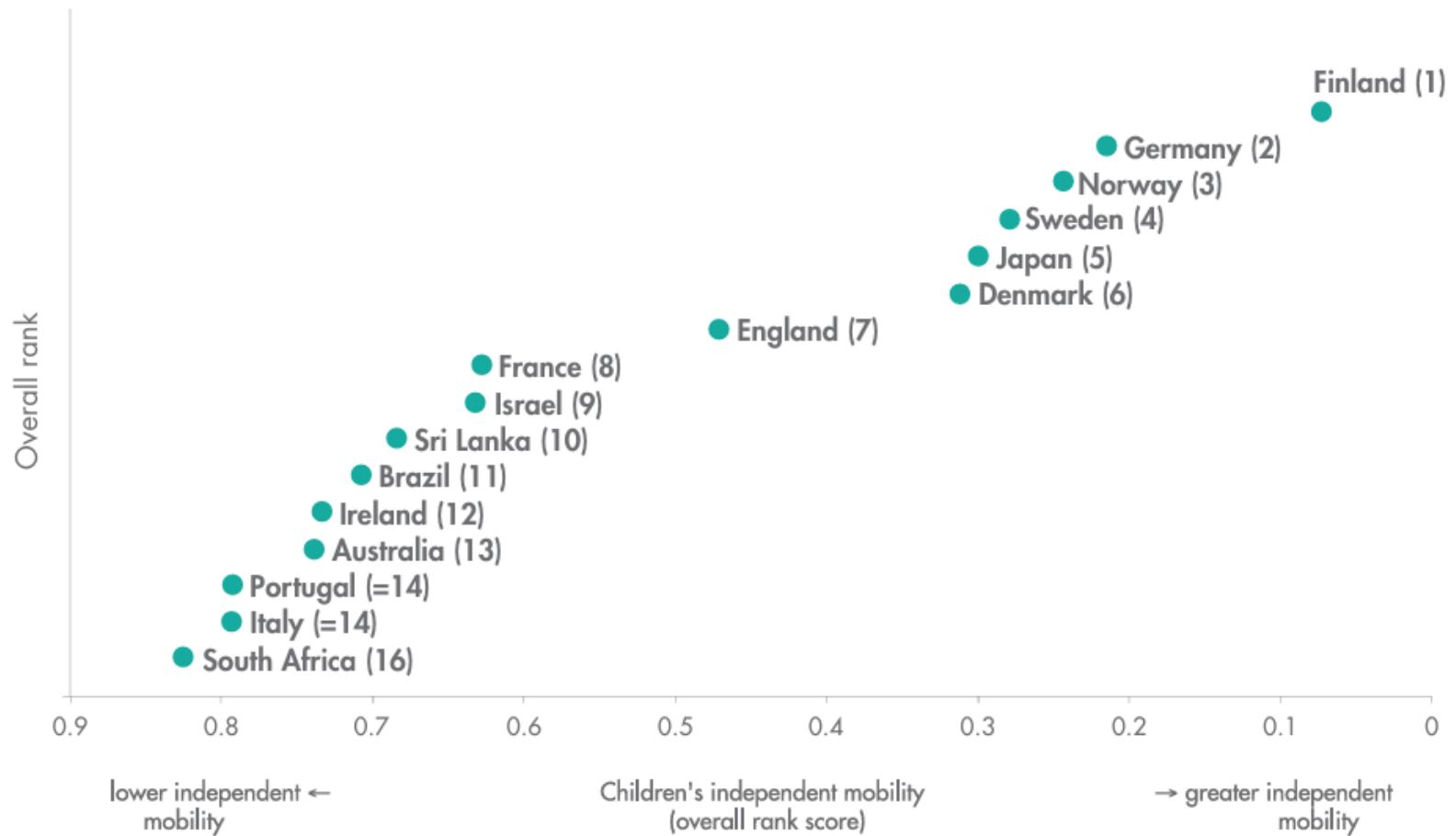
- Children's vs older adults' independent mobility
 - License surrender → reduced outings → health risks
 - Research-based structural analysis
 - Manga booklet for public communication
 - Reducing car dependency supports long-term well-being



Conclusion

- Originally human-centered streets
 - Motorization disrupted child safety
 - Legal, spatial, and social countermeasures developed
 - Independent mobility is supported by structure
 - Safety should support safe independence
 - Urban design across the life course matters

Figure 3: Differences in overall children's independent mobility levels compared



Shaw, B., Bicket, M., Elliott, B., Fagan-Watson, B., Mocca, E., & Hillman, M. (2015). Children's independent mobility: an international comparison and recommendations for action.

QUESTION THEME	ADULT	CHILD
Main roads	Is your child allowed to cross main roads alone?	Are you allowed to cross main roads on your own?
Other journeys	When going to places other than school that are within walking distance, is your child allowed to go alone?	—
School journeys	Does your child travel home from school alone?	—
After dark	Is your child usually allowed to go out alone after dark?	—
Local buses	Is your child usually allowed to travel on local buses alone (other than school buses)?	Are you allowed to go on local buses (other than school buses) on your own?
Cycling	If your child has a bicycle, are they allowed to cycle on main roads alone?	If you have a bicycle, are you allowed to ride it to go to places without any grown-ups?




Shaw, B., Bicket, M., Elliott, B., Fagan-Watson, B., Mocca, E., & Hillman, M. (2015). Children's independent mobility: an international comparison and recommendations for action.

国立市立小学校通学路图

(平成30年7月23日現在)



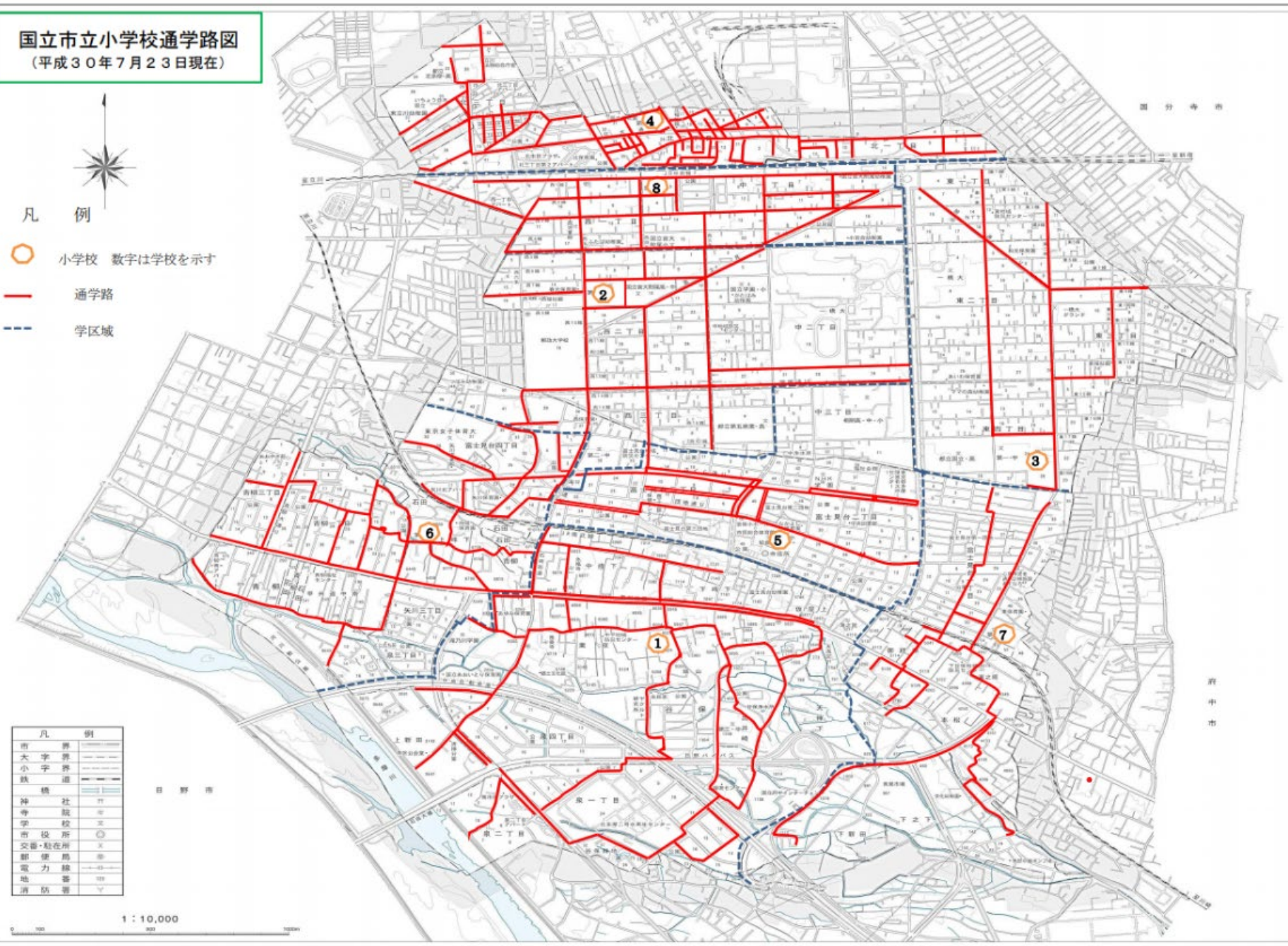
凡 例

-  小学校 数字は学校を示す
-  通学路
-  学区域

凡 例	
市 界	———
大 学 界	———
小 学 界	———
鉄 道	———
橋	———
社 区	①
学 校	②
市 役 所	③
交 通 駐 在 所	④
郵 便 局	⑤
電 力 線	⑥
地 区 界	⑦
消 防 署	⑧

日 野 市

1 : 10,000



国分寺市

府中市