



Messages for Railway Systems: Based on 30 Years' Experience of JR Kyushu Privatization



Contents

1.Result and Task of Japanese Railway Reform

Outline of Reform

Management Strategy and Result of JRKyushu

30 Years Experience of Reform, Result and Task

2. Future task of Railways

Shinkansen Network Completion and Study for High Speed Freight Service

Knowledge : Railway Profit depends on Population Density

High Safety ,High Accuracy and also High Frequency

3.Messages to the Railways especially in Asia

“Railway Gauge Economic Zone” , leap to the World

Increase and decrease of population and railway

ICT Development and Importance of Logistics

★★ Relationship of passenger, Freight and Infrastructure

Transportation and Infra. separate

Pass. Freight separate
Zone Divide
(Pass. Coms. hold Infra)

Germany

France

UK
National Rail

Japan

Freight

DB
Schenkah

SNCF

C
o
m.

C
o
m

C
o
m.

JR Freight

Passenger

DB
Bahn

Natio.Corpo.
(Pass. ▪
Freight)

C
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C
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m.

C
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J
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J
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Infrastructure

DB
Netz

RFF

French
Natio.Corp
or.

Network Rail
Natio.
Corpo.

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Infr
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Mainte.

Posses

J R Passenger 6 Coms., Equal Footing Measures at start



Billion yen; Equal Footing, Interest Rate 7.3%

Stock Listing Stock Listing Stock Listing

Stock Listing

2002

2006

2004

2016

JR	East	Tokai	West	Hokkaido	Shikoku	Kyushu
Fund	---	---	---	6,822	2,082	3,877
Debt	35,936	5,217	12,832	745	261	801
Capital	2,000	1,120	1,000	90	35	160

Usual Lines of JR

Narrow Gauge 19,835 km

Shinkansen Lines of JR

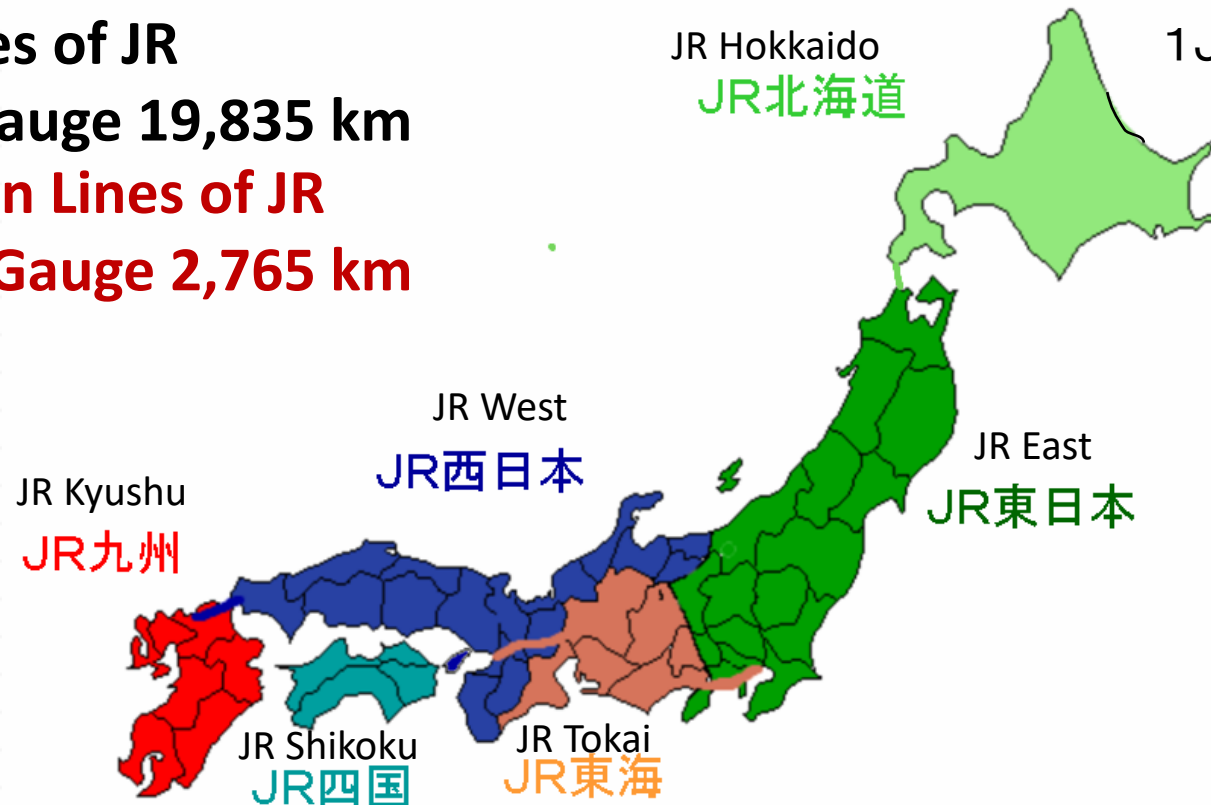
Standard Gauge 2,765 km

JR Hokkaido

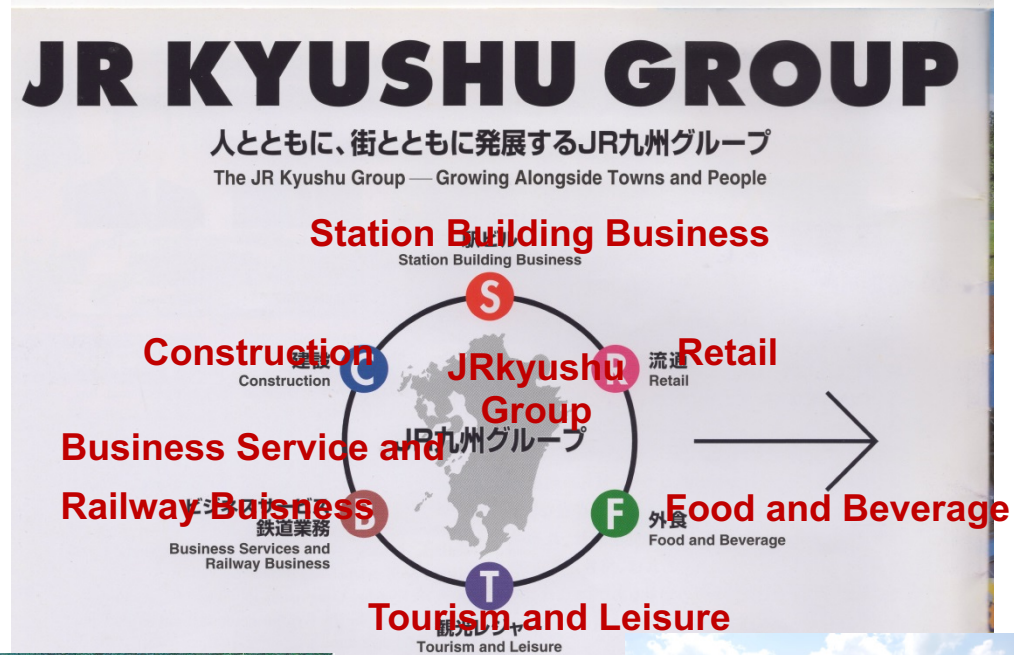
JR北海道

1JPY=0.0088D

1D=113JPY



Only JR Kyushu has a larger other business than railway



Railway Business

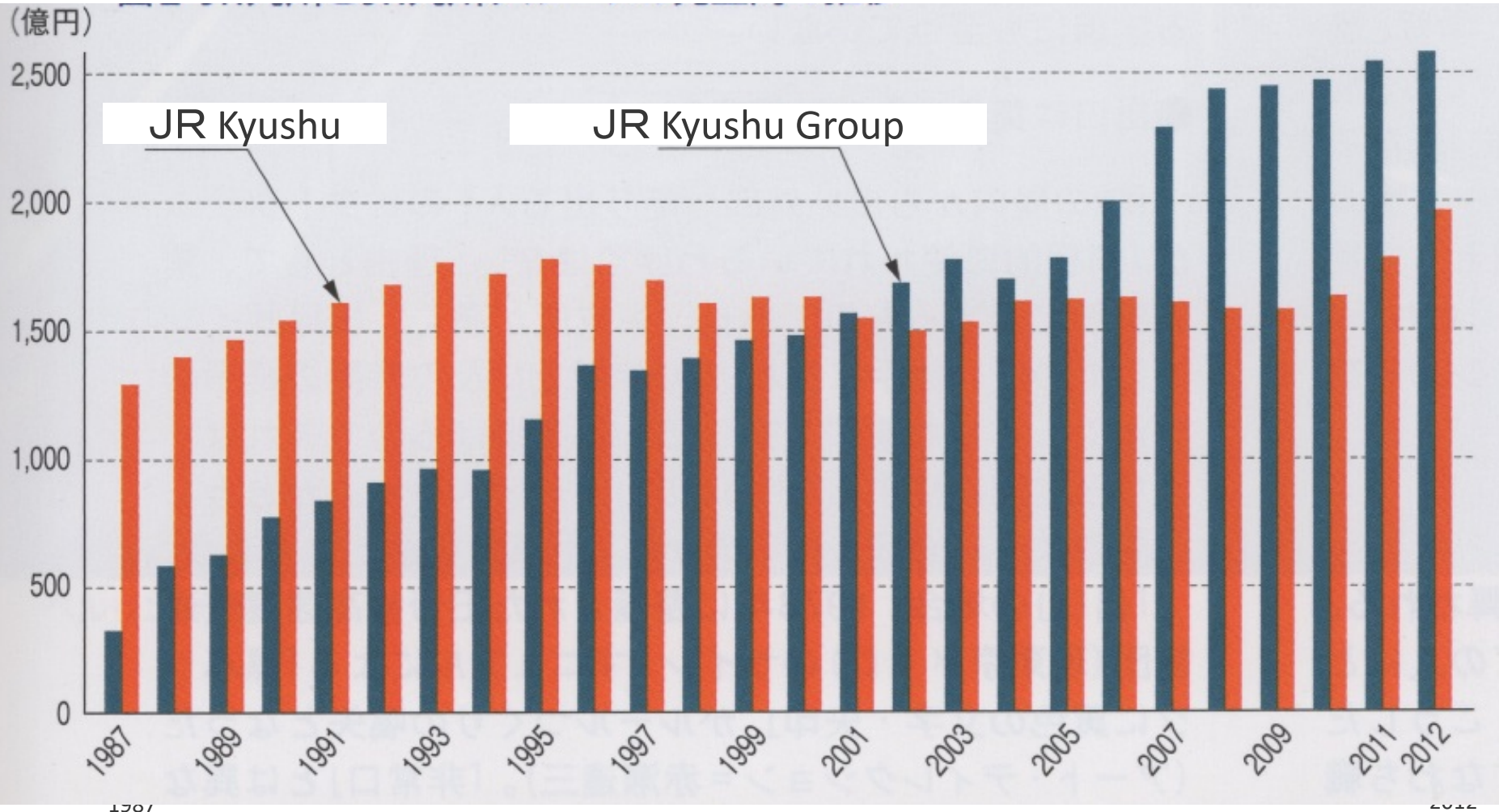
Other Business





JR九州とJR九州グループ企業の売上高推移(鉄道を凌駕した関連部門)

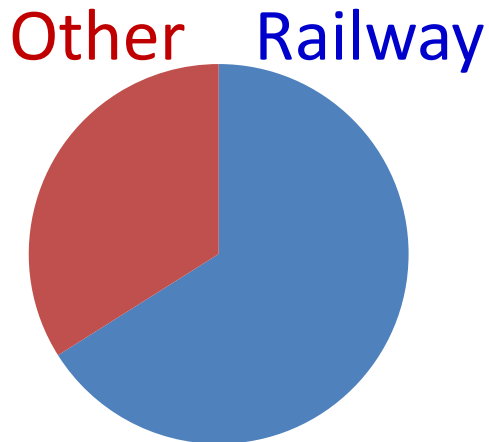
Sales progress of JR Kyushu and JR Kyushu group companies (related divisions surpassing railways)



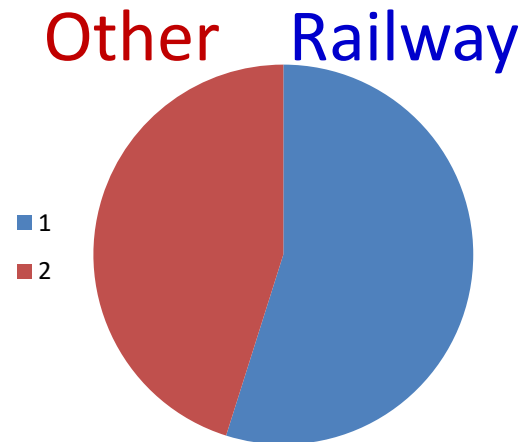
Only JR Kyushu has a larger other business than railway

Percentage of **railway** in the entire group
Fiscal Year 2017

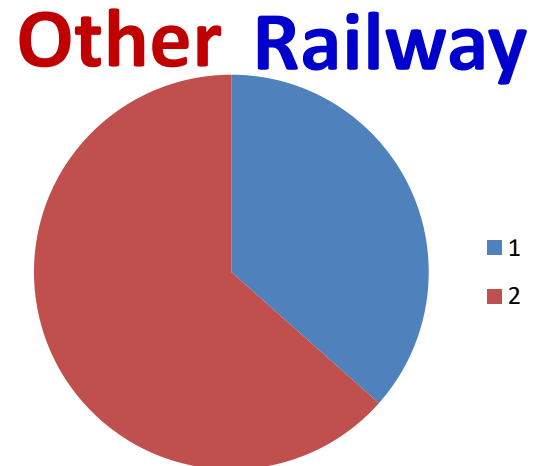
Big 3 Cos.



Small 2 Cos.
without JR Kyushu
and JR Freight



JR Kyushu



Shinkansen Network approaching completion of the aorta



JR北海道

**Shinkansen
Lines of JR
Standard Gauge
2,765 km**

**Usual Lines of JR
Narrow Gauge 19,835 km**

JR西日本

JR東日本

JR九州

JR四国

JR東海

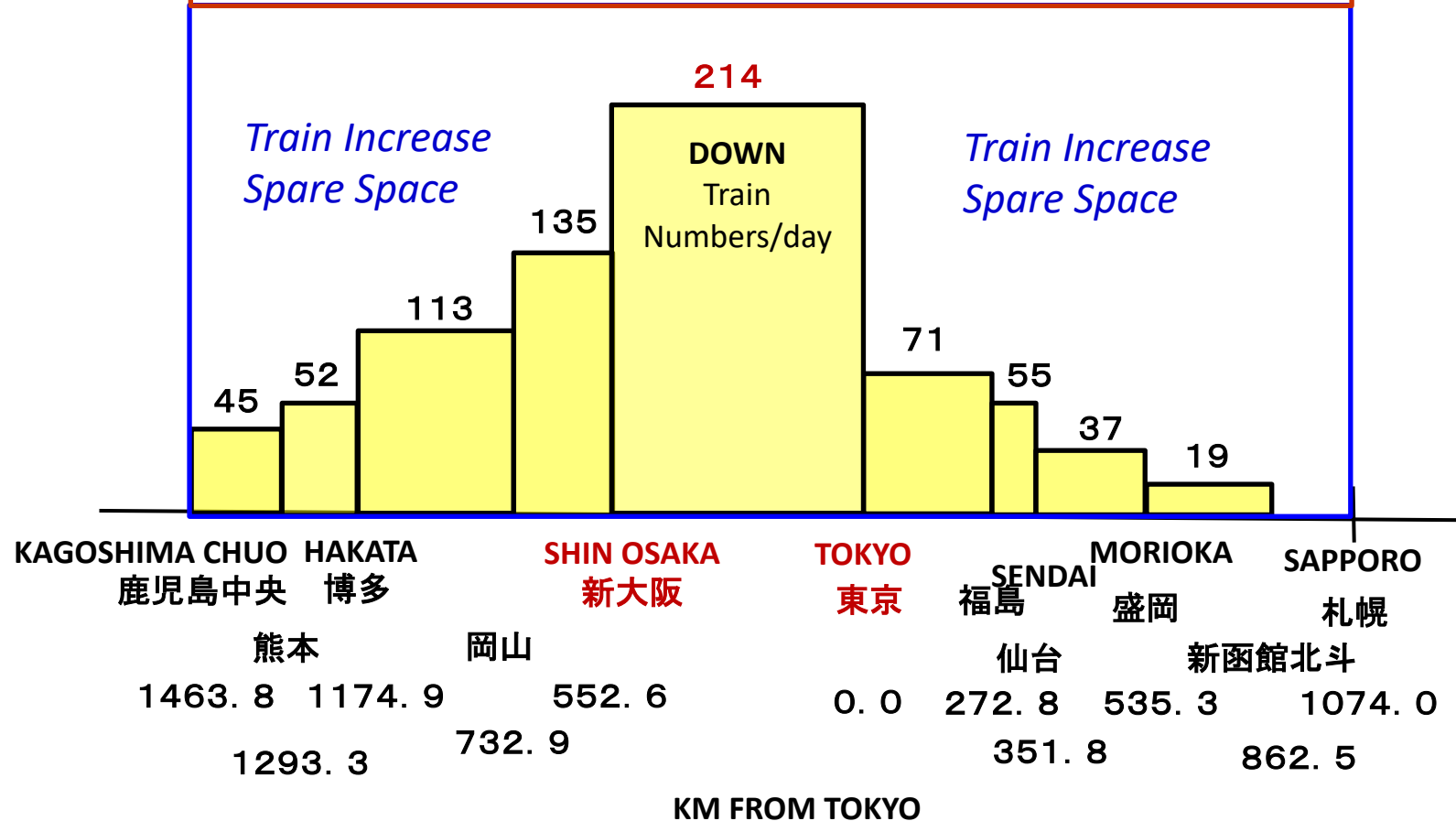


800 series, JR Kyushu

Planned Train Numbers/hour of Shinkansen(2016. 3. 26)



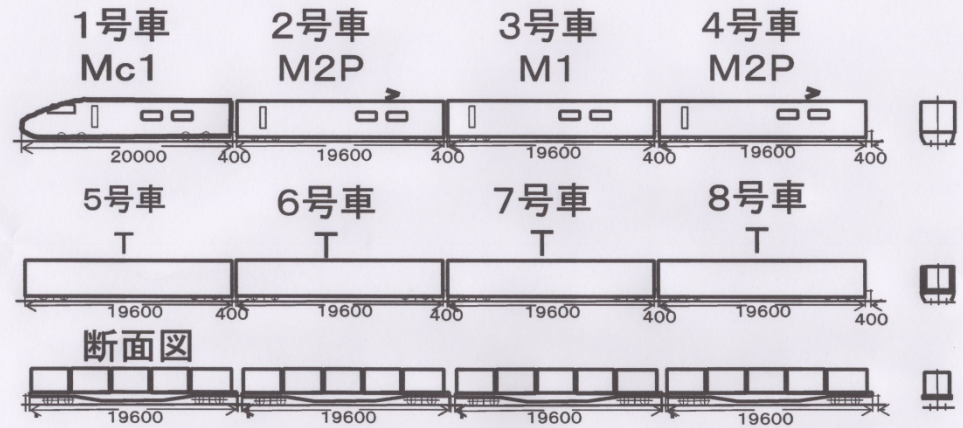
Time Space for Maintenance (6 HOURS)



Freight Transportation by Shinkansen (under plan)

Model A

Shinkansen Container Train

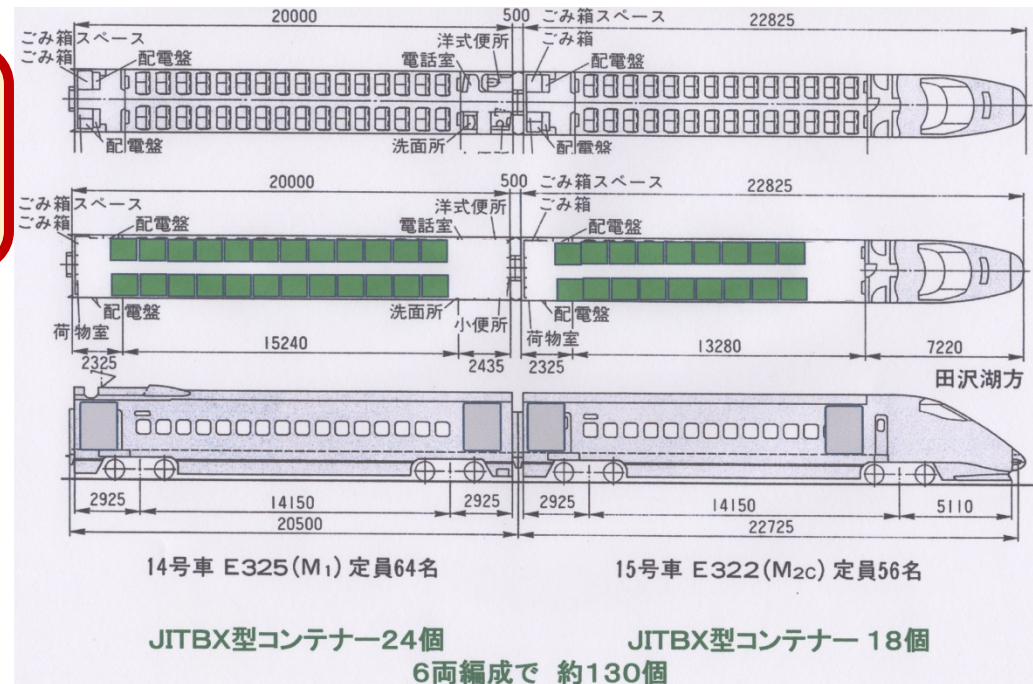
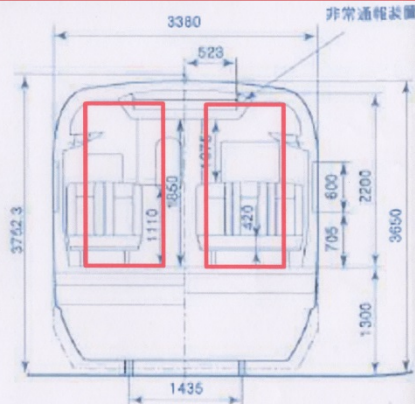


28両編成 8M20T 編成長570m 編成重量1904t
12ftコンテナ100個積載

Model B

Transport of Roll-Jit-Box by 700 Series Shinkansen Remodeled Car

Roll-Jit-Box Type Container



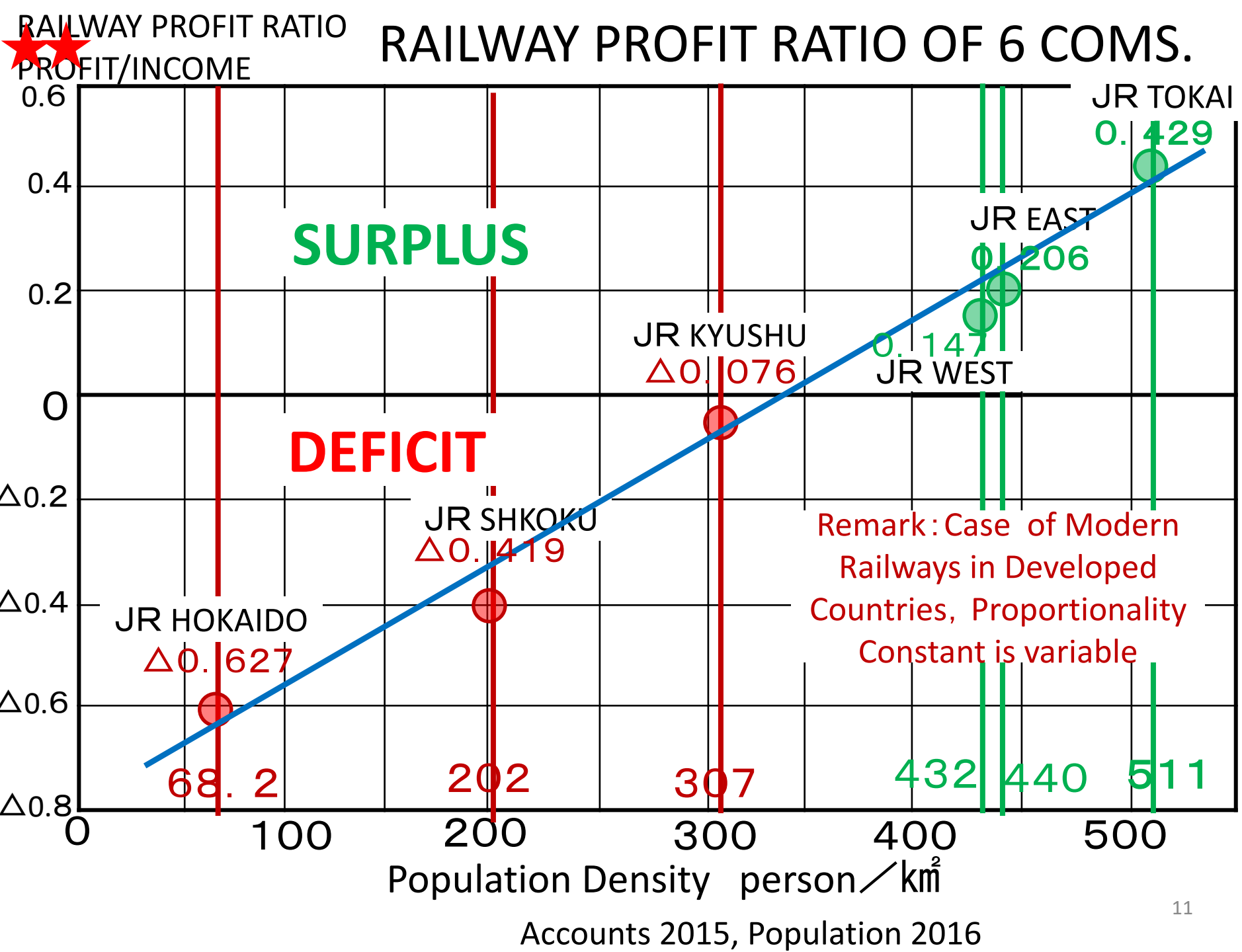
14号車 E325 (M₁) 定員64名

15号車 E322 (M_{2c}) 定員56名

JITBX型コンテナ 24個

JITBX型コンテナ 18個

6両編成で 約130個

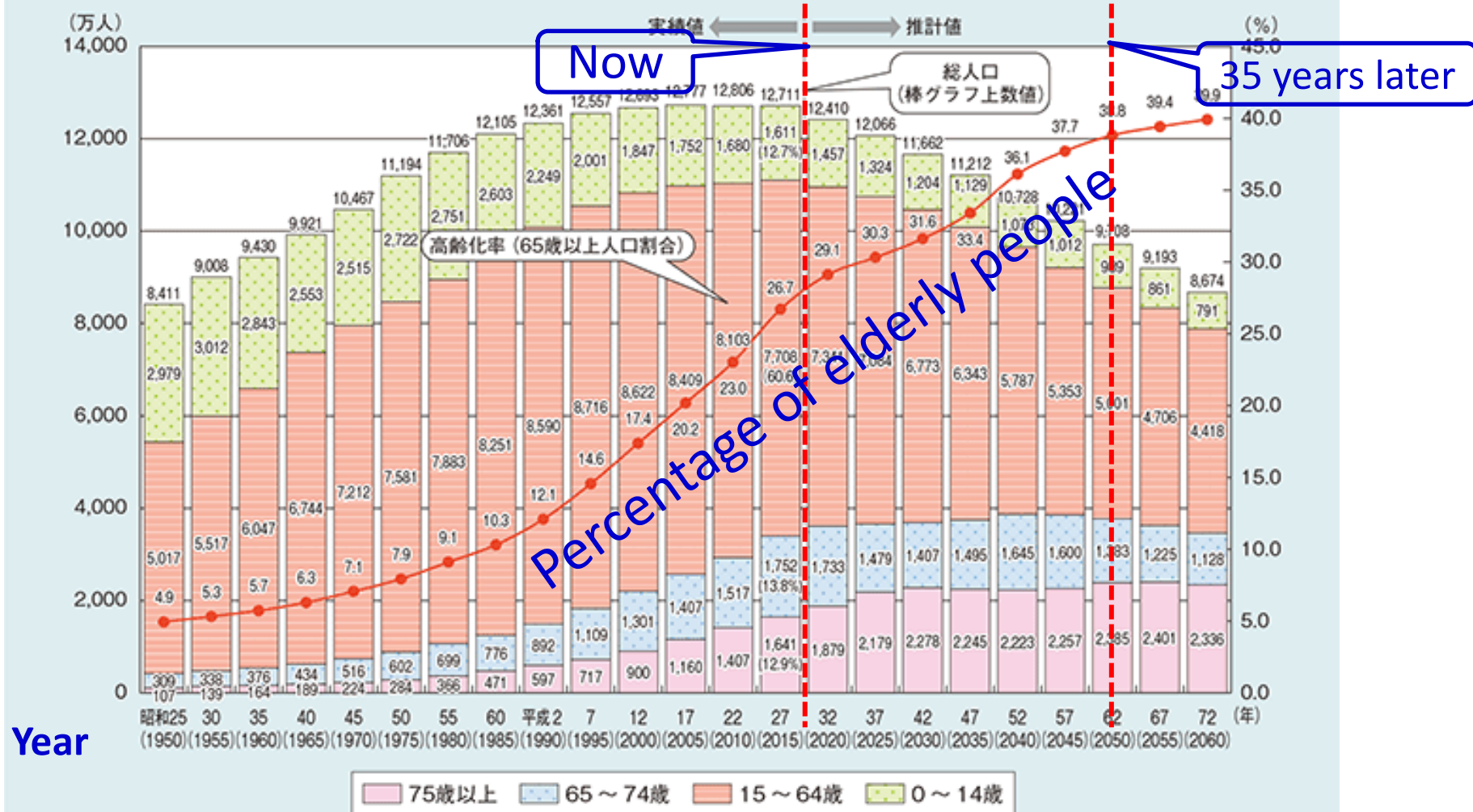


将来人口の推移「高齢社会白書」(内閣府 平成28年版)より

平成27(2015)年実績12,711万人、平成62(2050)年推計9,706万人

図1-1-2 高齢化の推移と将来推計

Population Transition in Japan



資料：2010年までは総務省「国勢調査」、2015年は総務省「人口推計（平成27年国勢調査人口速報集計による人口を基準とした平成27年10月1日現在確定値）」、2020年以降は国立社会保障・人口問題研究所「日本の将来推計人口（平成24年1月推計）」の出生中位・死亡中位假定による推計結果

(注) 1950年～2010年の総数は年齢不詳を含む。高齢化率の算出には分母から年齢不詳を除いている。

東海道新幹線の2分目ダイヤ

Tokaido Shinkansen Diagram

Tokyo 0.0

1 Hour

14 Trains per hour
One way, Today

Shizuoka 180.2

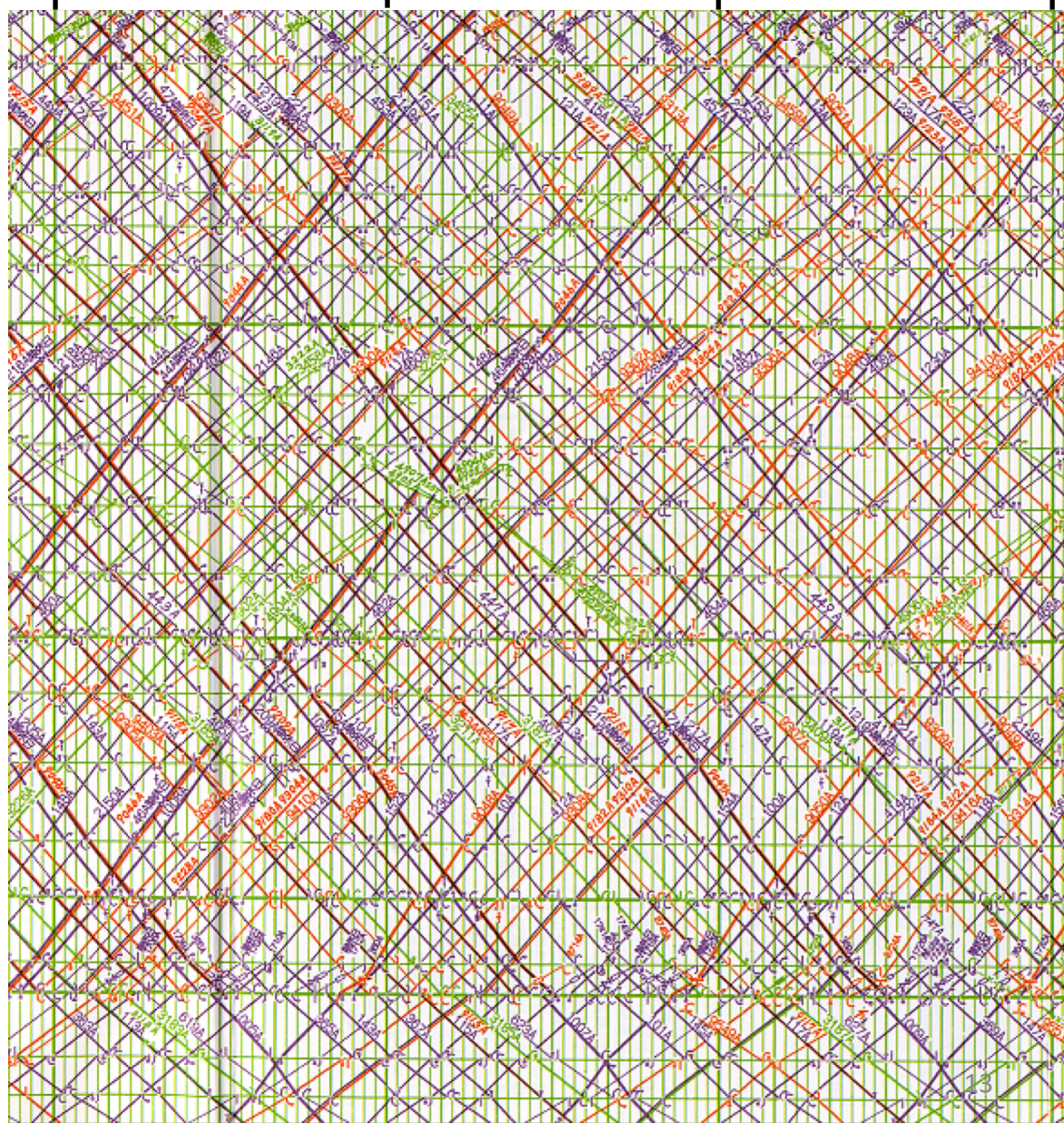
N700
Series



Nagoya 366.0

Kyoto 513.6

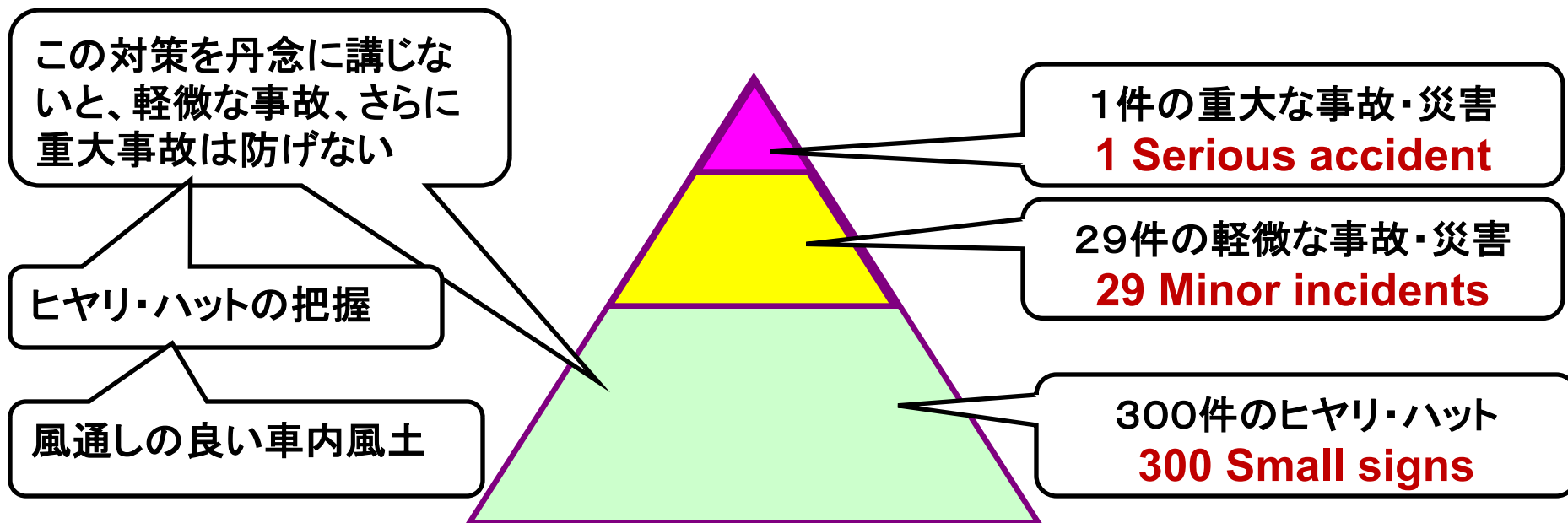
Shinosaka 552.6



ハインリッヒの法則

——限りなき安全への道——

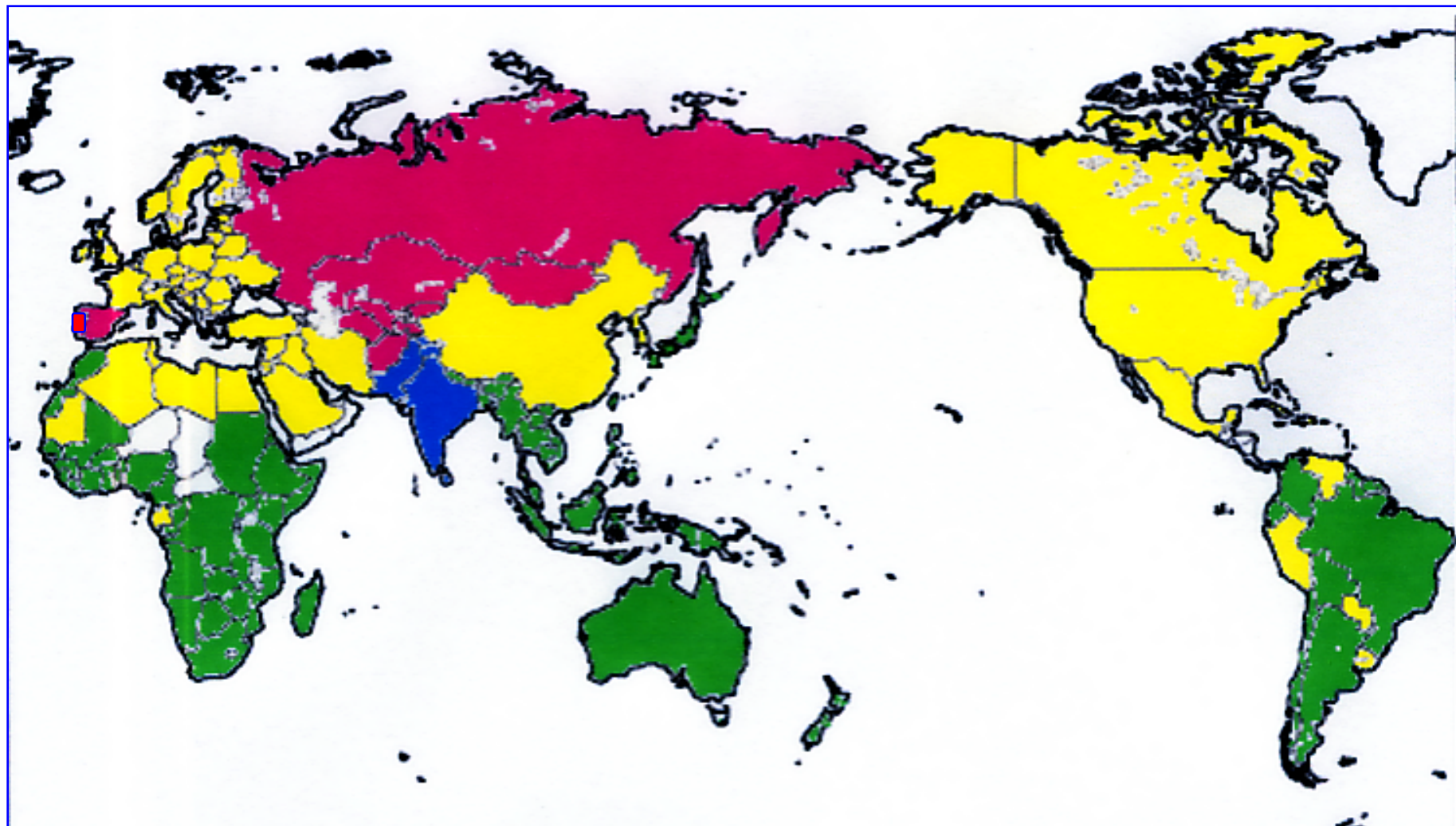
“Herbert William Heinrich`s Law” 1:29:300



労働災害における経験則
1つの重大事故の背後には
29の軽微な事故があり
その背景には300の異常が存在



Distribution of Railway Gauge in the world



Wide 1524
1676



Standard
1435



Narrow 1067
1000



Many



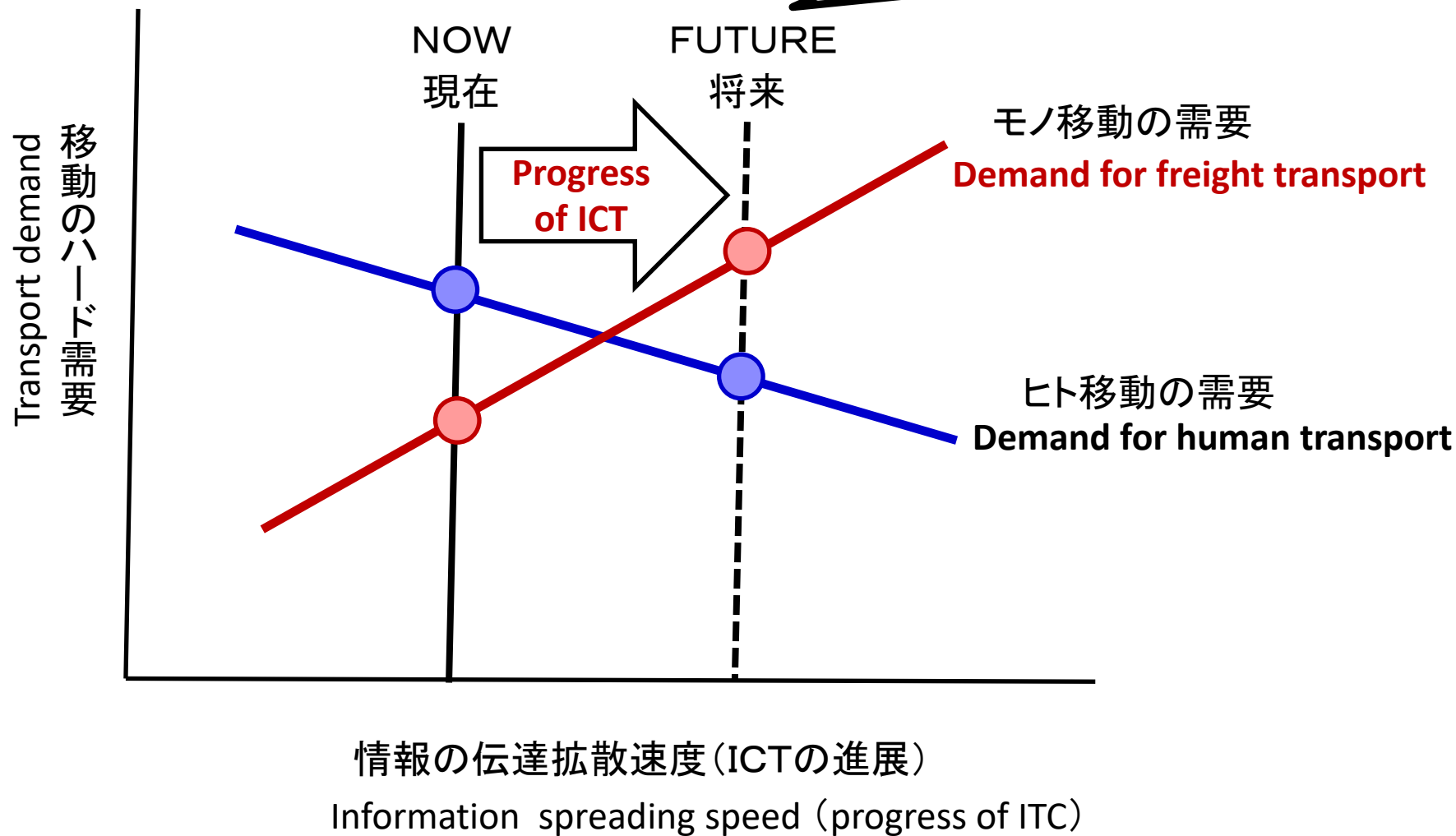
“One Belt One Road” 「一帶一路」



Hard Demand for human and freight transport, forecast

ヒト・モノ移動のハード需要 将来予測

Due to the rapid development of ICT, the demand for human transport are decreasing, but the demand for freight transport are increasing.







Thank You Very Much !

**Messages for Railway Systems:
Based on 30 Years' Experience of**

JR Kyushu Privatization

**Spill-over Effects of High-Speed Rail and
Quality of Life**

ADBI, Tokyo

15 Nov. 2018

Yoshitaka Ishii

Kyushu Railway Company

