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**Figures 1999**

VBBahn 2003  
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#### Editor

General Secretariat SBB, CH-3000 Bern 65

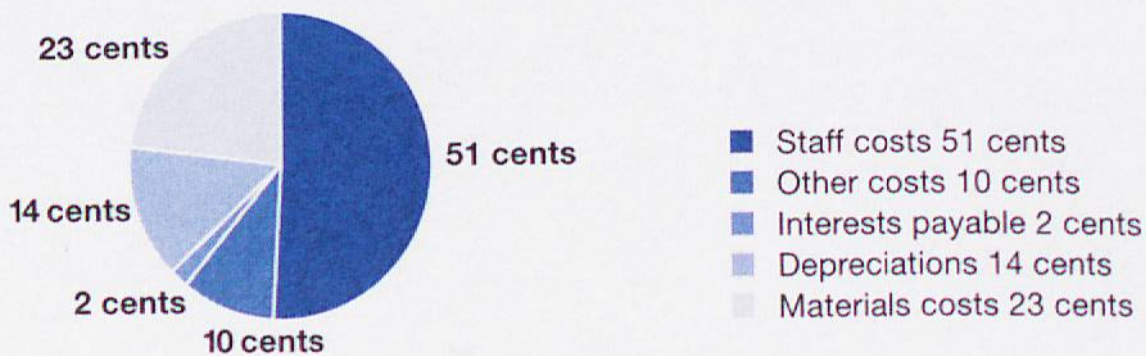
#### Sources (German initials)

BFS, OZD, BFE, ASB, National Bank,  
OECD, UIC, Traffic police Uri, FRS, SHV

## Where did the money come from in 1999?



## Where did the money go in 1999?

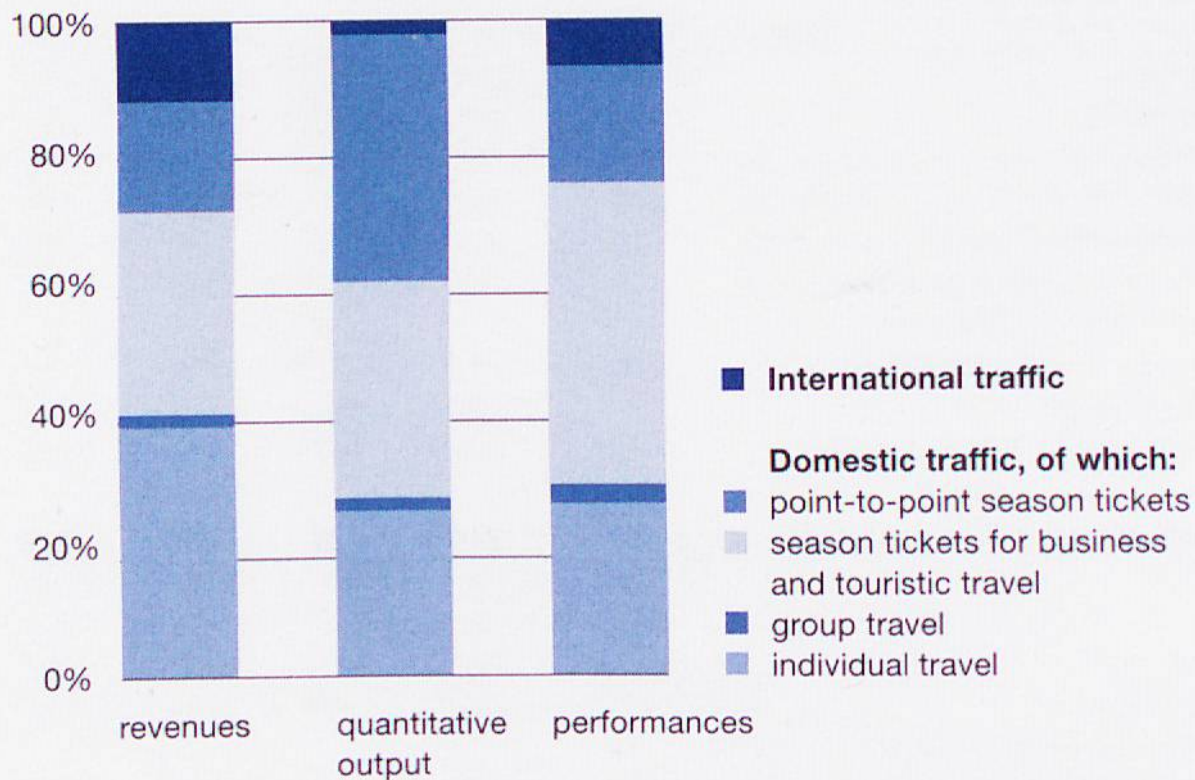


|                                                            |       | 1985  | 1990   | 1995   | 1998                | 1999                |
|------------------------------------------------------------|-------|-------|--------|--------|---------------------|---------------------|
| <b>Profit and Loss Account</b>                             |       |       |        |        |                     |                     |
| Earnings <sup>1)</sup>                                     | CHF m | 3 870 | 5 367  | 6 244  | 6 448               | 5 984               |
| Traffic earnings                                           |       | 3 062 | 3 301  | 3 429  | 3 136               | 3 300               |
| – Passenger traffic                                        |       | 1 191 | 1 423  | 1 578  | 1 534               | 1 604               |
| – Freight traffic                                          |       | 1 179 | 1 286  | 1 033  | 864                 | 1 013               |
| – PSO grants <sup>1)</sup>                                 |       | 604   | 592    | 818    | 738                 | 683                 |
| Ancillary earnings (incl. operation services)              |       | 510   | 593    | 842    | 923                 | 790                 |
| Own performances for investment account <sup>1)</sup>      |       | 140   | 264    | 311    | 290                 | 299                 |
| Own performances for Alp Transit                           |       |       |        | 8      |                     |                     |
| Performances for storage mandates                          |       | 112   | 69     | 77     | 92                  | 83                  |
| Coverment payments <sup>1)</sup>                           |       |       | 1 090  | 1 450  | 1 805               | 1 273               |
| Other earnings                                             |       | 46    | 50     | 127    | 202                 | 239                 |
| Expenditures <sup>1)</sup>                                 |       | 4 151 | 5 364  | 6 740  | 6 469               | 5 864               |
| Staff                                                      |       | 2 431 | 3 006  | 3 481  | 3 100               | 2 990               |
| Materials                                                  |       | 904   | 1 134  | 1 278  | 1 263               | 1 351               |
| Depreciations                                              |       | 499   | 598    | 847    | 916                 | 831                 |
| Interests payable                                          |       | 225   | 460    | 676    | 659                 | 131                 |
| Major maintenance from investment mandates                 |       | 85    | 118    | 286    | 257                 | 304                 |
| Infrastructure contribution to Confederation <sup>1)</sup> |       |       | 37     |        |                     |                     |
| Other expenditures                                         |       | 7     | 11     | 172    | 274                 | 257                 |
| Surplus/deficit <sup>1)</sup>                              |       | -281  | 3      | -496   | -21                 | 120                 |
| Covering of expenditures                                   | %     | 93,2  | 100,1  | 92,6   | 99,7                | 102,1               |
| <b>Investment Statement</b>                                |       |       |        |        |                     |                     |
| Total (gross)                                              |       | 1 011 | 1 932  | 1 814  | 1 749 <sup>2)</sup> | 1 881 <sup>2)</sup> |
| – Fixed assets and installations                           |       | 817   | 1 396  | 1 411  | 1 749               | 1 881               |
| – Vehicles                                                 |       | 194   | 537    | 369    |                     |                     |
| – Reduction of input tax VAT                               |       |       |        | 34     |                     |                     |
| Contribution from third parties, various earnings          |       | -222  | -157   | -107   | -80                 | -109                |
| <b>Balance sheet/Statement of assets (purchase values)</b> |       |       |        |        |                     |                     |
| – Fixed assets and installations                           |       | 9 938 | 11 717 | 15 996 | 20 121              | 19 282              |
| – Vehicles                                                 |       | 5 256 | 6 545  | 8 006  | 8 697               | 9 920               |

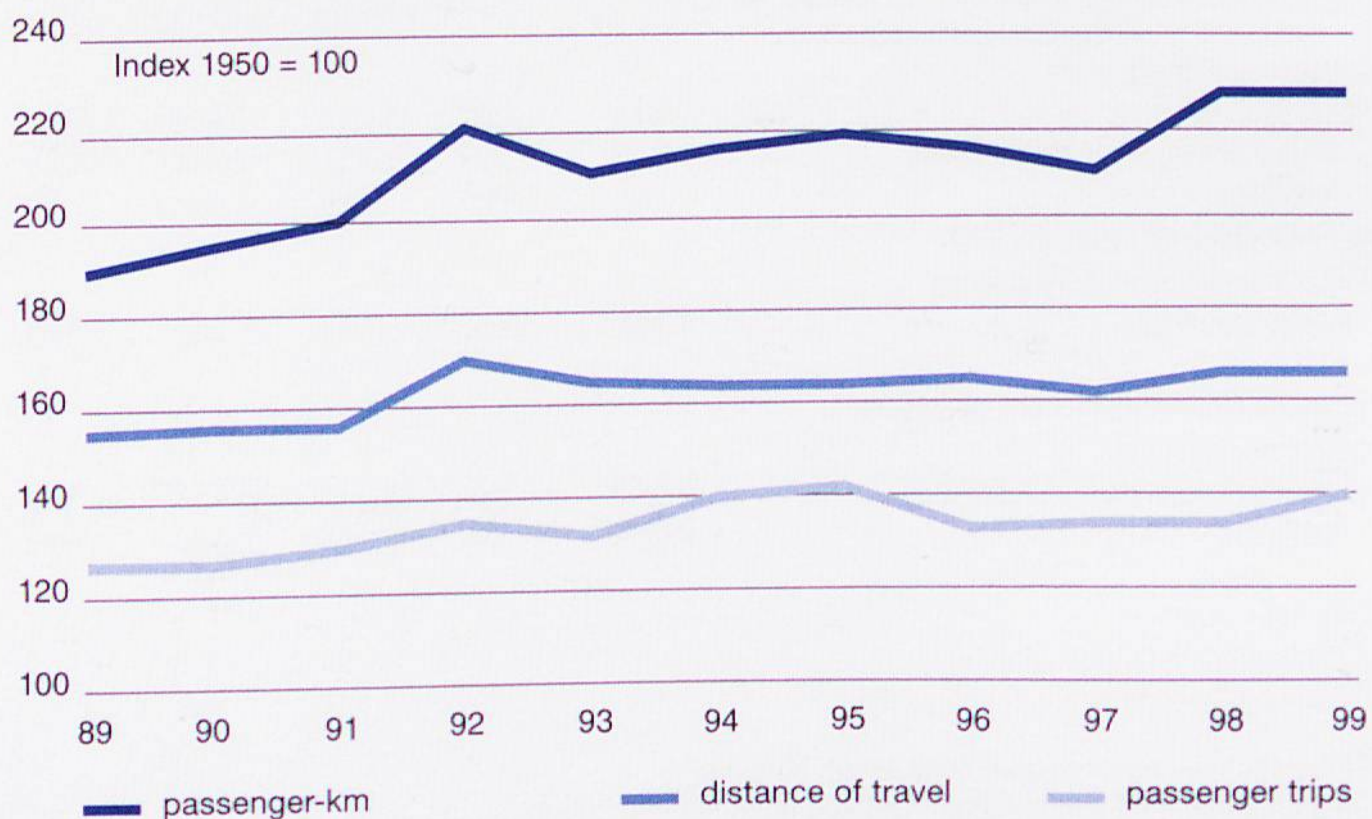
<sup>1)</sup> From 1987 new PSO mandate, comparisons of figures and indications with previous years have only limited value.

<sup>2)</sup> Incl. Vehicles

## Structure of passenger traffic 1999



## Development of passenger traffic



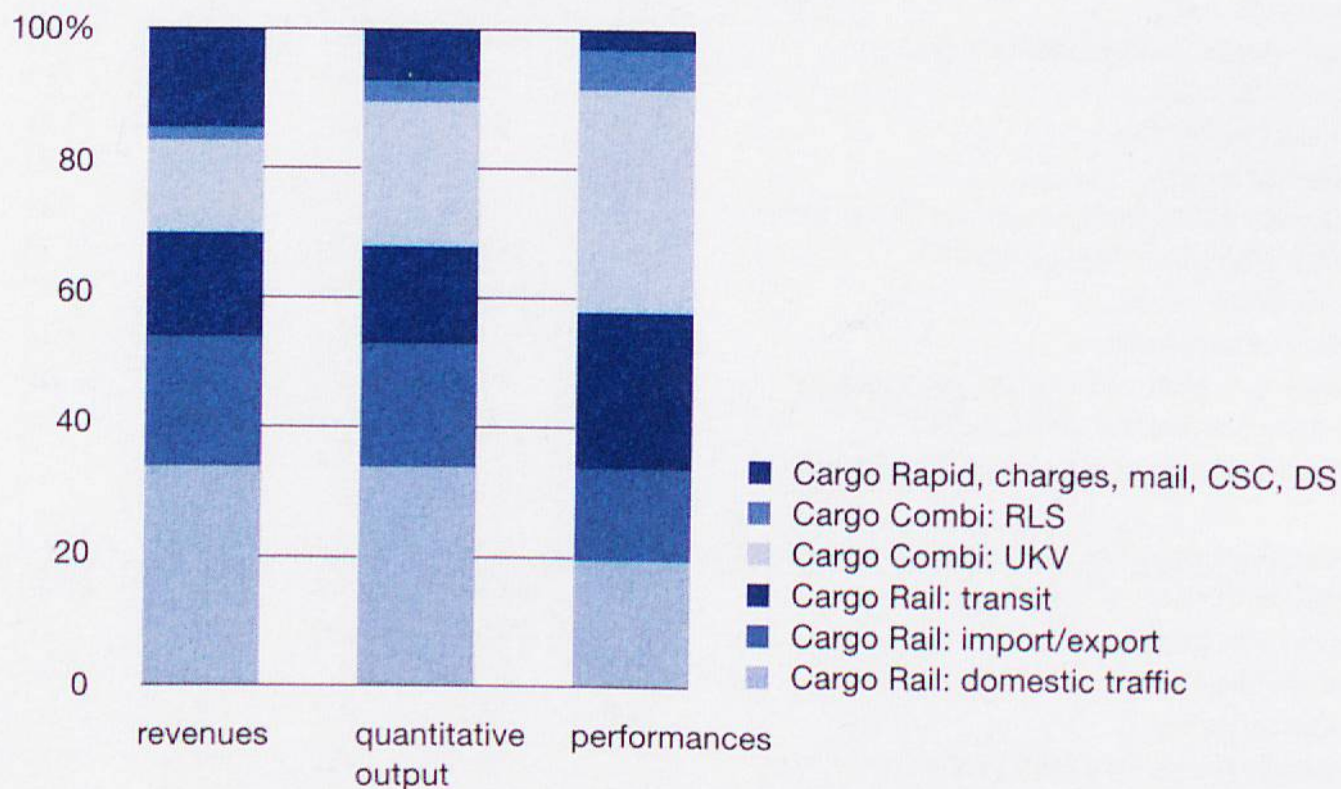
|                                                                |             | 1985          | 1990          | 1995          | 1998          | 1999          |
|----------------------------------------------------------------|-------------|---------------|---------------|---------------|---------------|---------------|
| <b>Earnings total</b>                                          | CHF m       | <b>1 191</b>  | <b>1 423</b>  | <b>1 578</b>  | <b>1 534</b>  | <b>1 604</b>  |
| <b>Transportation of passengers<sup>1)</sup></b>               |             | <b>1 166</b>  | <b>1 392</b>  | <b>1 547</b>  | <b>1 513</b>  | <b>1 581</b>  |
| Domestic traffic                                               |             | 900           | 1 145         | 1 334         | 1 326         | 1 402         |
| – Individual travel                                            |             | 555           | 597           | 603           | 581           | 625           |
| – Group travel                                                 |             | 41            | 44            | 35            | 34            | 33            |
| – Season tickets for business and tourist travel               |             | 120           | 248           | 437           | 480           | 498           |
| – Point-to-point season tickets                                |             | 184           | 210           | 260           | 254           | 258           |
| – Other earnings                                               |             |               | 45            | –1            | –23           | –12           |
| International traffic                                          |             | 263           | 248           | 213           | 187           | 178           |
| <b>Luggage, incl. special performances<sup>1)</sup></b>        |             | <b>21,5</b>   | <b>24,1</b>   | <b>26</b>     | <b>20,3</b>   | <b>22,3</b>   |
| <b>Accompanied motor vehicles<sup>1)</sup></b>                 |             | <b>3,5</b>    | <b>6,6</b>    | <b>1</b>      | <b>0,2</b>    | <b>0,5</b>    |
| <b>Shipping services Lake of Constance</b>                     |             |               |               | <b>4</b>      |               |               |
| <b>Quantity output total million passenger trips</b>           |             | <b>197</b>    | <b>244</b>    | <b>254</b>    | <b>266</b>    | <b>276</b>    |
| <b>Transportation of passengers<sup>1)</sup></b>               |             | <b>197,3</b>  | <b>244,4</b>  | <b>253,2</b>  | <b>266,1</b>  | <b>275,9</b>  |
| Domestic traffic                                               |             | 187,5         | 236,2         | 246,4         | 260,2         | 270           |
| – Individual travel                                            |             | 81,3          | 84,2          | 68,1          | 66,4          | 75,6          |
| – Group travel                                                 |             | 5,8           | 5,9           | 4,0           | 4,3           | 5,4           |
| – Season tickets for business and tourist travel <sup>2)</sup> |             | 9,7           | 39,3          | 72,0          | 88,6          | 83,4          |
| – Point-to-point season tickets                                |             | 90,7          | 106,8         | 102,3         | 101,9         | 106,3         |
| International traffic                                          |             | 9,8           | 8,2           | 6,7           | 5,9           | 5,9           |
| <b>Shipping services Lake of Constance</b>                     |             |               |               | <b>0,9</b>    |               |               |
| <b>Performances total</b>                                      | million pkm | <b>8 793</b>  | <b>11 001</b> | <b>11 721</b> | <b>12 485</b> | <b>12 615</b> |
| <b>Transportation of passengers<sup>1)</sup></b>               |             | <b>8 793</b>  | <b>11 001</b> | <b>11 711</b> | <b>12 485</b> | <b>12 615</b> |
| Domestic traffic                                               |             | 7 200         | 9 514         | 10 637        | 11 606        | 11 778        |
| – Individual travel                                            |             | 3 544         | 4 151         | 3 367         | 3 243         | 3 363         |
| – Group travel                                                 |             | 474           | 506           | 341           | 323           | 304           |
| – Season tickets for business and tourist travel               |             | 1 114         | 2 345         | 4 690         | 5 896         | 5 908         |
| – Point-to-point season tickets                                |             | 2 067         | 2 512         | 2 239         | 2 235         | 2 303         |
| International traffic                                          |             | 1 593         | 1 487         | 1 075         | 879           | 837           |
| <b>Shipping services Lake of Constance</b>                     |             |               |               | <b>10</b>     |               |               |
| <b>Tickets sold</b>                                            | 1000        | <b>63 153</b> | <b>69 278</b> | <b>58 509</b> | <b>53 811</b> | <b>54 961</b> |
| of which sold with ticket machines                             | 1000        | 12 106        | 19 421        | 18 585        | 20 162        | 21 418        |
| Reserved seats                                                 | 1000        | 1 989         | 3 256         | 3 377         | 3 337         | 3 699         |
| Special trains for firms and associations <sup>3)</sup>        |             | 659           | 774           | 1 175         | 1 305         | 1 357         |
| General Abonnements in circulation                             |             | 17 700        | 58 738        | 163 943       | 225 700       | 224 027       |
| Bicycles hired out                                             |             | 58 902        | 110 959       | 89 429        | 80 065        | 75 000        |
| <b>Mean values</b>                                             |             |               |               |               |               |               |
| Earnings per passenger trip                                    | cents       | 591           | 570           | 611           | 569           | 584           |
| Earnings per pkm                                               |             | 13,3          | 12,7          | 13,2          | 12,1          | 12,6          |
| Travel distance per person                                     | km          | 44,6          | 45            | 46,3          | 46,9          | 46,2          |

<sup>1)</sup> From 1993 without shipping service Lake of Constance

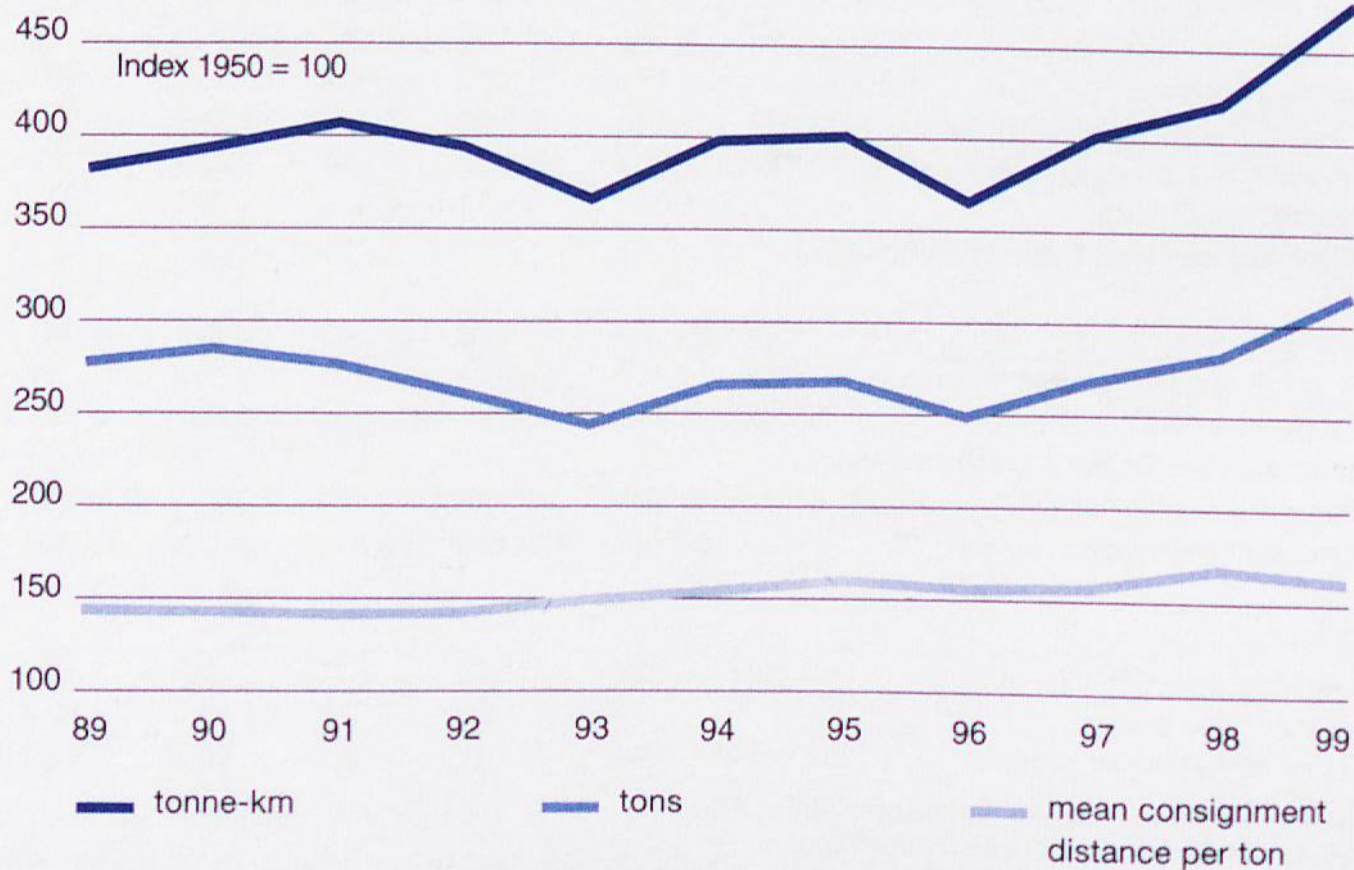
<sup>2)</sup> As from 1987 inclusion of children travelling free

<sup>3)</sup> As from 1986 new calculation method

## Structure of goods traffic 1999



## Development of goods traffic

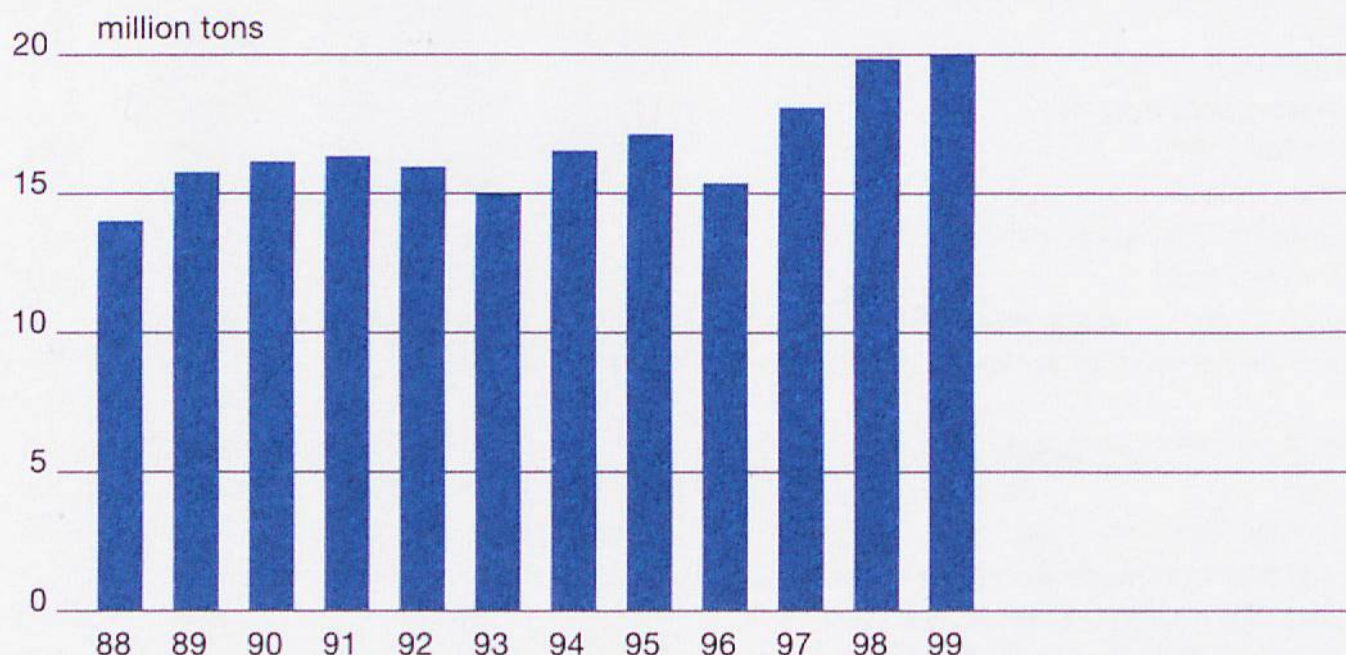


|                                               |              | 1985         | 1990         | 1995         | 1998         | 1999                      |
|-----------------------------------------------|--------------|--------------|--------------|--------------|--------------|---------------------------|
| <b>Earnings total</b>                         | CHF m        | <b>1 179</b> | <b>1 286</b> | <b>1 033</b> | <b>864</b>   | <b>1 013<sup>2)</sup></b> |
| Cargo Rail                                    |              | 797          | 857          | 752          | 634          | 740                       |
| – Domestic traffic                            |              | 316          | 338          | 348          | 291          | 357                       |
| – Import/export traffic                       |              | 283          | 281          | 239          | 200          | 215                       |
| – Transit traffic                             |              | 198          | 238          | 165          | 143          | 168                       |
| Cargo Combi                                   |              | 59           | 90           | 95           | 119          | 177                       |
| – Unaccompanied intermodal traffic            |              |              | 78           | 83           | 107          | 155                       |
| – Rolling Road                                |              |              | 12           | 11           | 12           | 22                        |
| Cargo Rapid, charges, mail, CSC               |              | 322          | 339          | 186          | 112          | 114                       |
| Earnings per ton (Cargo Rail and Combi) cents |              | 2 516        | 2 385        | 2 097        | 1 699        | 1 726                     |
| <b>Transported freight tons total</b>         | million tons | <b>44,52</b> | <b>51,83</b> | <b>47,35</b> | <b>49,00</b> | <b>57,34</b>              |
| Cargo Rail                                    |              | 38,29        | 41,48        | 35,07        | 34,07        | 38,49                     |
| – Domestic traffic                            |              | 17,62        | 18,14        | 15,69        | 14,10        | 19,07                     |
| – Import/export traffic                       |              | 13,31        | 13,49        | 10,67        | 11,53        | 11,05                     |
| – Transit traffic                             |              | 7,36         | 9,85         | 8,71         | 8,45         | 8,37                      |
| Cargo Combi                                   |              | 4,97         | 8,87         | 11,74        | 14,41        | 14,65                     |
| – Unaccompanied intermodal traffic            |              |              | 7,30         | 10,28        | 12,65        | 12,74                     |
| – Rolling Road                                |              |              | 1,57         | 1,46         | 1,76         | 1,90                      |
| Cargo Rapid, charges, mail, CSC <sup>1)</sup> |              | 1,27         | 1,47         | 0,54         | 0,51         | 4,20                      |
| <b>Performances total</b>                     | million tkm  | <b>7 050</b> | <b>8 303</b> | <b>8 157</b> | <b>8 738</b> | <b>9 797</b>              |
| Cargo Rail                                    |              | 5 612        | 5 896        | 5 067        | 4 877        | 5 614                     |
| – Domestic traffic                            |              | 1 783        | 1 750        | 1 518        | 1 404        | 1 838                     |
| – Import/export traffic                       |              | 1 638        | 1 552        | 1 329        | 1 299        | 1 401                     |
| – Transit traffic                             |              | 2 191        | 2 593        | 2 220        | 2 174        | 2 375                     |
| Cargo Combi                                   |              | 1 282        | 2 231        | 3 030        | 3 803        | 3 858                     |
| – Unaccompanied intermodal traffic            |              |              | 1 750        | 2 570        | 3 262        | 3 283                     |
| – Rolling Road                                |              |              | 480          | 459          | 541          | 575                       |
| Cargo Rapid, charges, mail, CSC <sup>1)</sup> |              | 156          | 176          | 60           | 58           | 325                       |
| <b>Mean transport distance per ton</b>        | km           | <b>158,3</b> | <b>160,2</b> | <b>172,3</b> | <b>178,3</b> | <b>170,9</b>              |

<sup>1)</sup> 1995 outsourcing of Cargo Domizil services;  
1996 outsourcing of Cargo Services Center Basel  
1999 service consignments included

<sup>2)</sup> decreases in revenue excluded (18 MFr)

## Development of transalpine transit traffic through Switzerland on the railway



### Definitions

#### Conventional traffic

**WLV** = Wagonload traffic with traditional freight wagons.

#### Combined traffic

**UKV** = The unaccompanied combined traffic is a future-oriented traffic system based on containers which can be transported on special railway wagons, on road lorries, and in part also on ships. Among them are high-volume containers, swap bodies and semi-trailers. They are transshipped by cranes.

**RLS** = The Rolling Road (both the driver and his lorry are travelling on the train) is an offer directed to road hauliers who have not (yet) adapted their fleet for unaccompanied combined traffic. The driver drives the whole lorry onto the train composed of low-floor wagons with continuous loading platform. The driver is accommodated in a special carriage where he can rest.

#### Nota bene: payloads

In combined traffic, the tare weight of the road vehicle (lorry, semi-trailer), resp. of the swap body or high-volume container is included. With wagonload traffic, only the weight of the transported goods is charged.

A presentation taking only the weight of the transported goods into account, is edited by the Federal Department for Transport and Energy «Dienst für Gesamtverkehrsfragen», under the title «Alpinfo» (GVF-News). It can be ordered by telephone 031 322 55 55, by fax 031 322 78 06).

|                                                       |       |              | 1990  | 1995  | 1996  | 1998  | 1999  |
|-------------------------------------------------------|-------|--------------|-------|-------|-------|-------|-------|
| <b>Transalpine transit traffic<br/>as per product</b> |       |              |       |       |       |       |       |
| Gotthard                                              | WLV   | million tons | 5,99  | 4,77  | 3,62  | 4,53  | 4,98  |
|                                                       | UKV   |              | 4,71  | 6,68  | 6,39  | 9,14  | 9,01  |
|                                                       | RLS   |              | 1,57  | 1,46  | 1,42  | 1,76  | 1,87  |
|                                                       | Total |              | 12,27 | 12,91 | 11,43 | 15,43 | 15,86 |
| Simplon                                               | WLV   |              | 3,07  | 3,39  | 3,10  | 3,40  | 2,68  |
|                                                       | UKV   |              | 0,66  | 0,52  | 0,30  | 0,29  | 0,22  |
|                                                       | Total |              | 3,72  | 3,91  | 3,40  | 3,69  | 2,90  |
| Total                                                 | WLV   |              | 9,06  | 8,16  | 6,72  | 7,93  | 7,66  |
|                                                       | UKV   |              | 5,37  | 7,20  | 6,69  | 9,43  | 9,23  |
|                                                       | RLS   |              | 1,57  | 1,46  | 1,42  | 1,76  | 1,87  |
|                                                       | Total |              | 15,97 | 16,82 | 14,83 | 19,12 | 18,76 |

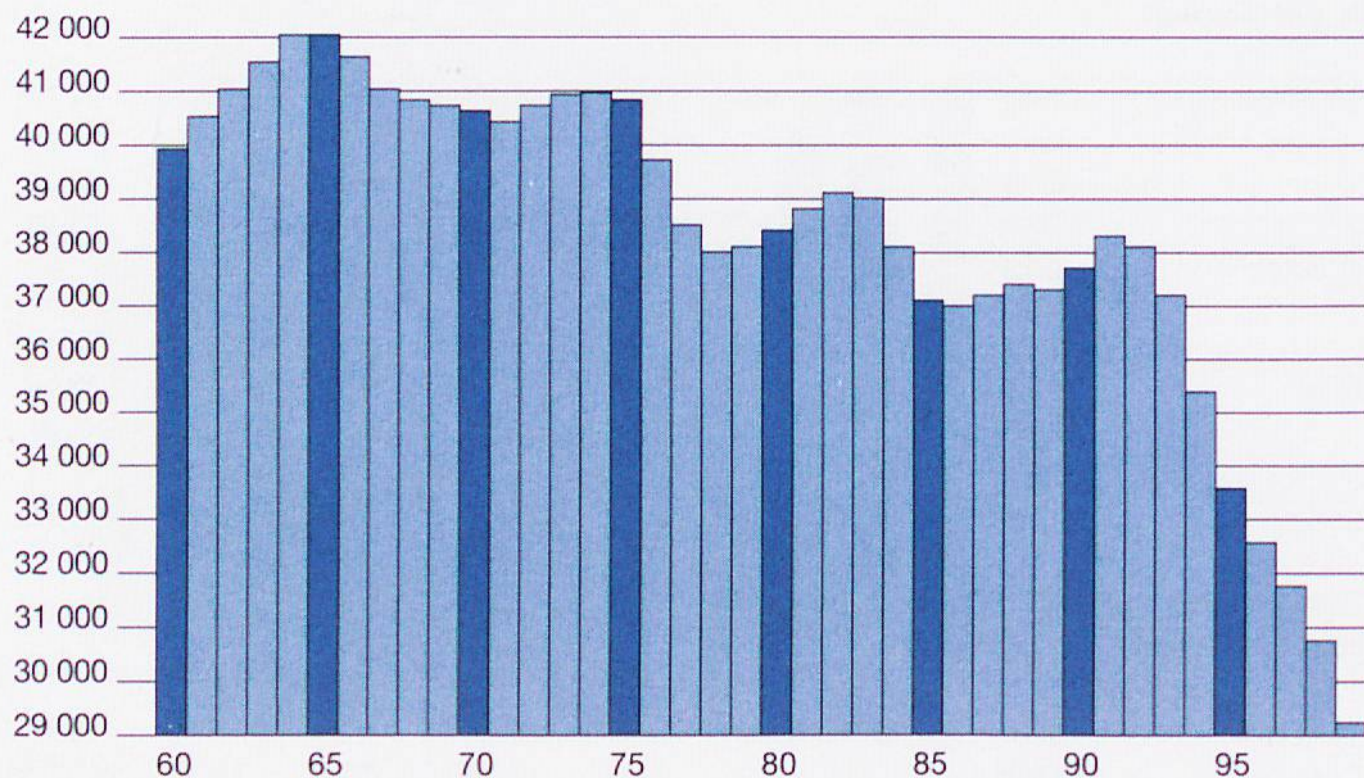
**Total transalpine traffic as per product**  
(domestic, export, import, transit)

|          |       |              |       |       |       |       |       |
|----------|-------|--------------|-------|-------|-------|-------|-------|
| Gotthard | WLV   | million tons | 8,51  | 6,44  | 4,88  | 5,67  | 6,19  |
|          | UKV   |              | 5,09  | 7,74  | 7,32  | 10,10 | 10,06 |
|          | RLS   |              | 1,57  | 1,46  | 1,42  | 1,76  | 1,87  |
|          | Total |              | 15,18 | 15,64 | 13,62 | 17,53 | 18,12 |
| Simplon  | WLV   |              | 3,73  | 3,99  | 3,70  | 4,07  | 3,34  |
|          | UKV   |              | 0,68  | 0,55  | 0,35  | 0,31  | 0,24  |
|          | Total |              | 4,40  | 4,54  | 4,05  | 4,37  | 3,58  |
| Total    | WLV   |              | 12,24 | 10,43 | 8,58  | 9,74  | 9,53  |
|          | UKV   |              | 5,77  | 8,29  | 7,67  | 10,40 | 10,30 |
|          | RLS   |              | 1,57  | 1,46  | 1,42  | 1,76  | 1,87  |
|          | Total |              | 19,58 | 20,18 | 17,67 | 21,90 | 21,70 |

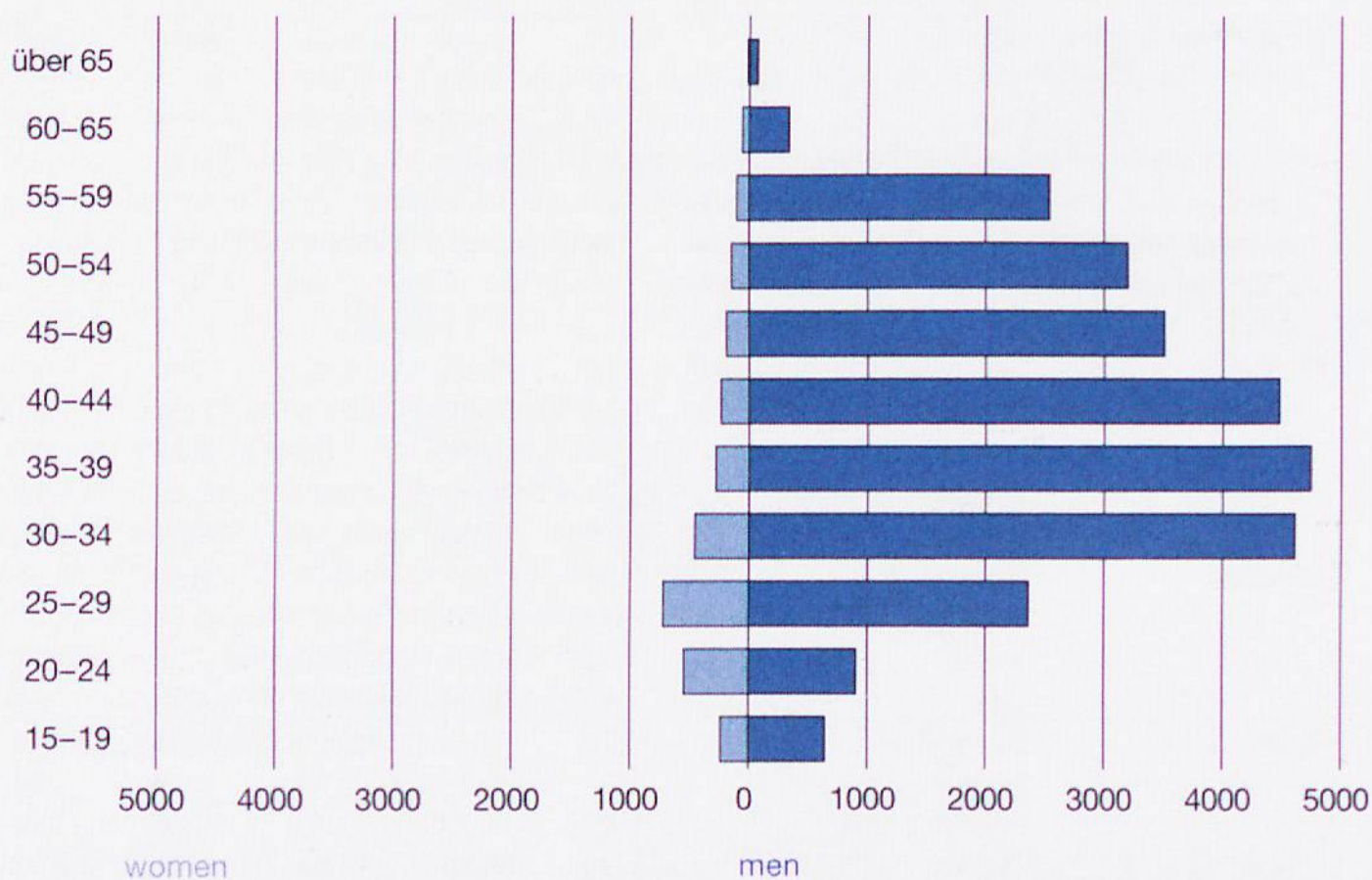
**Total transalpine traffic  
as per type of traffic**

|          |          |              |       |       |       |       |       |
|----------|----------|--------------|-------|-------|-------|-------|-------|
| Gotthard | Domestic | million tons | 1,26  | 0,65  | 0,50  | 0,44  | 0,43  |
|          | Export   |              | 0,75  | 1,10  | 0,88  | 0,93  | 1,04  |
|          | Import   |              | 0,89  | 0,97  | 0,80  | 0,73  | 0,79  |
|          | Transit  |              | 12,27 | 12,91 | 11,43 | 15,43 | 15,86 |
|          | Total    |              | 15,18 | 15,63 | 13,61 | 17,53 | 18,12 |
| Simplon  | Export   |              | 0,32  | 0,37  | 0,46  | 0,45  | 0,46  |
|          | Import   |              | 0,34  | 0,26  | 0,19  | 0,23  | 0,22  |
|          | Transit  |              | 3,72  | 3,91  | 3,40  | 3,69  | 2,90  |
|          | Total    |              | 4,40  | 4,54  | 4,05  | 4,37  | 3,58  |
| Total    | Domestic |              | 1,26  | 0,65  | 0,50  | 0,45  | 0,43  |
|          | Export   |              | 1,07  | 1,47  | 1,34  | 1,38  | 1,50  |
|          | Import   |              | 1,23  | 1,23  | 0,99  | 0,95  | 1,01  |
|          | Transit  |              | 15,99 | 16,82 | 14,83 | 19,12 | 18,76 |
|          | Total    |              | 19,58 | 20,17 | 17,66 | 21,90 | 21,70 |

## Workforce 1960–1999

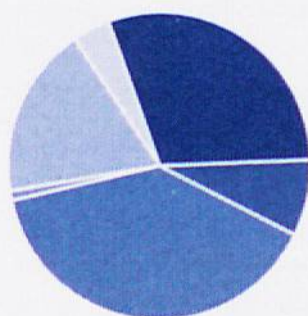


## Age structure of staff 1999



|                             |                      | 1980          | 1990          | 1998          | 1999          |
|-----------------------------|----------------------|---------------|---------------|---------------|---------------|
| <b>Workforce</b>            | annual mean          | <b>38 367</b> | <b>37 694</b> | <b>30 861</b> | <b>29 202</b> |
| – women                     |                      | 1 725         | 3 047         | 3 117         | 2 629         |
| – non-Swiss nationals       |                      | 1 803         | 3 681         | 3 732         | 3 047         |
| – in training <sup>1)</sup> |                      | 1 687         | 2 694         | 993           | 889           |
| <b>Entries</b>              | number               | <b>2 292</b>  | <b>3 725</b>  | <b>504</b>    | <b>387</b>    |
| in percent of workforce     | %                    | 6,0           | 9,9           | 1,6           | 1,3           |
| <b>Employees</b>            | per 100 000 train-km | <b>39,8</b>   | <b>30,8</b>   | <b>26,3</b>   | <b>24,0</b>   |

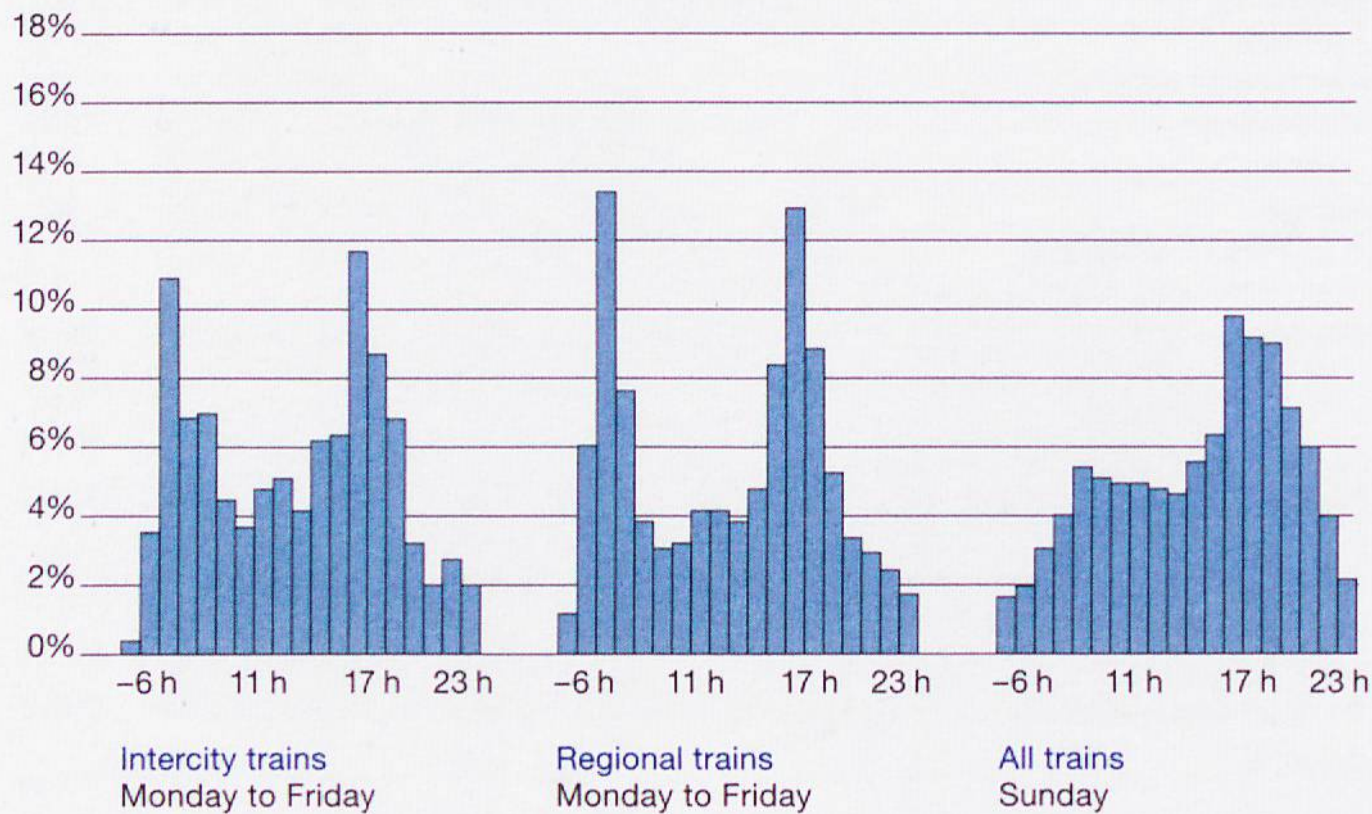
|                                             |               |            |
|---------------------------------------------|---------------|------------|
| <b>Personnel functions of divisions</b>     |               | %          |
| Central services                            | 1 032         | 4          |
| Passenger traffic                           | 8 757         | 30         |
| Goods traffic                               | 2 395         | 8          |
| Infrastructure                              | 11 269        | 39         |
| Brünig/Detaché                              | 193           | 1          |
| Traction/Heavy maintenance of rolling stock | 5 427         | 18         |
| Detaché                                     | 129           |            |
| <b>Total</b>                                | <b>29 202</b> | <b>100</b> |



- Passenger traffic 30%
- Goods traffic 8%
- Infrastructure 39%
- Brünig/Detaché 1%
- Traction/Heavy maintenance of rolling stock 18%
- Central services 4%

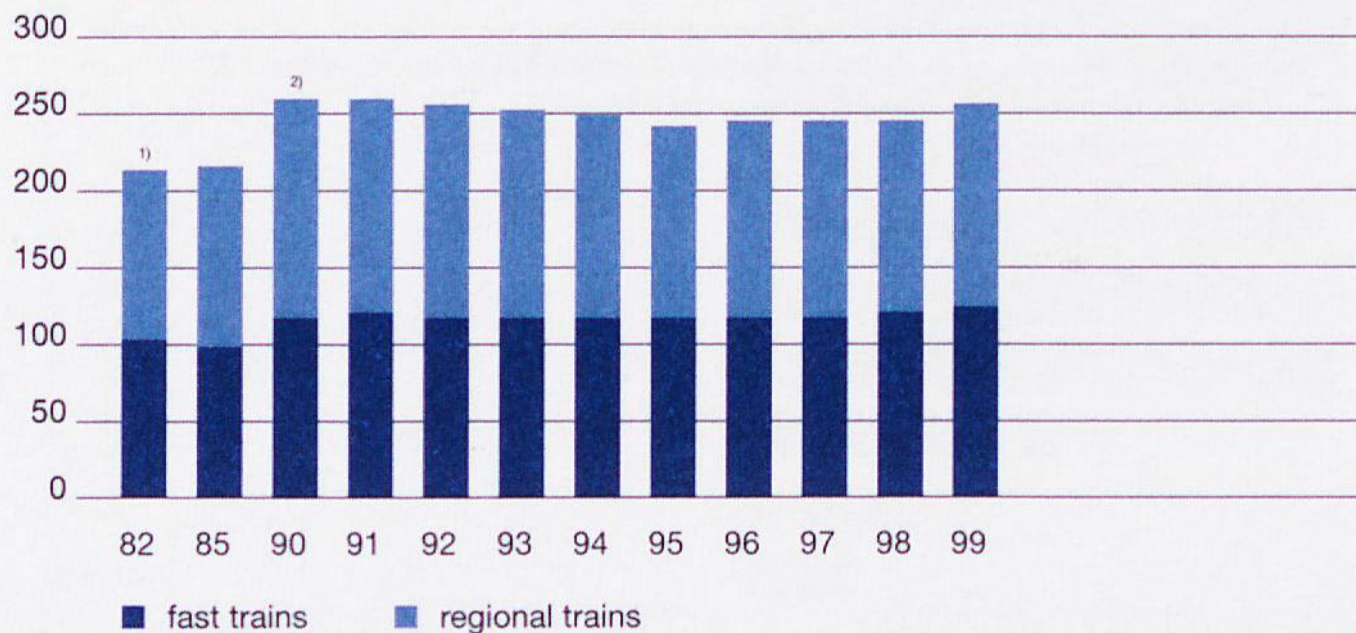
<sup>1)</sup> From 1985 including trainees for driving and technical control.

## Load factors of passenger trains 1999 in the course of the day



## Passenger train timetable

Performances in 1000 km



<sup>1)</sup> Introduction of cadenced timetable

<sup>2)</sup> Introduction of S-Bahn Zurich

|                                   |            | 1980        | 1985         | 1990         | 1998              | 1999              |
|-----------------------------------|------------|-------------|--------------|--------------|-------------------|-------------------|
| <b>Train movements all trains</b> | million km | <b>96,3</b> | <b>106,6</b> | <b>122,3</b> | <b>123,5</b>      | <b>127,5</b>      |
| Passenger trains                  |            | 66,9        | 80,1         | 94,7         | 91,6              | 94,8              |
| – long-distance traffic           | %          | ...         | 46,7         | 44,4         | 51,1              | 48,8              |
| – regional traffic                |            | 51,3        | 49,6         | 47,3         | 48,9              | 46,0              |
| Freight trains                    | million km | 29,0        | 25,8         | 27,1         | 25,9              | 26,6              |
| Service trains                    |            | 0,4         | 0,7          | 0,5          | 6,0 <sup>3)</sup> | 6,1 <sup>3)</sup> |

**Train traffic density**

|                         |        |             |             |              |              |              |
|-------------------------|--------|-------------|-------------|--------------|--------------|--------------|
| <b>per day and line</b> | number | <b>89,9</b> | <b>98,3</b> | <b>112,5</b> | <b>116,3</b> | <b>120,0</b> |
| – Passenger trains      |        | 62,5        | 73,9        | 85,6         | 86,3         | 89,3         |
| – Freight trains        |        | 27,1        | 28,8        | 24,9         | 24,4         | 25,0         |

|                                                       |   |           |           |           |           |
|-------------------------------------------------------|---|-----------|-----------|-----------|-----------|
| <b>Punctuality rate Passenger trains<sup>1)</sup></b> | % | <b>90</b> | <b>92</b> | <b>95</b> | <b>94</b> |
|-------------------------------------------------------|---|-----------|-----------|-----------|-----------|

|                                          |  |            |            |            |            |            |
|------------------------------------------|--|------------|------------|------------|------------|------------|
| <b>Seats offered per passenger train</b> |  | <b>424</b> | <b>416</b> | <b>447</b> | <b>454</b> | <b>472</b> |
|------------------------------------------|--|------------|------------|------------|------------|------------|

|                                                  |   |      |      |      |      |      |
|--------------------------------------------------|---|------|------|------|------|------|
| Average number of passengers per passenger train |   | 137  | 117  | 119  | 136  | 137  |
| Average load factor                              | % | 32,3 | 28,1 | 26,7 | 29,8 | 28,9 |

|                                     |   |            |            |            |            |            |
|-------------------------------------|---|------------|------------|------------|------------|------------|
| <b>Gross tons per freight train</b> | t | <b>629</b> | <b>650</b> | <b>702</b> | <b>795</b> | <b>699</b> |
|-------------------------------------|---|------------|------------|------------|------------|------------|

|                                    |   |      |      |      |      |      |
|------------------------------------|---|------|------|------|------|------|
| Transported tons per freight train |   | 253  | 272  | 304  | 310  | 343  |
| Proportion net/gross tons          | % | 40,2 | 41,8 | 43,2 | 47,0 | 49,0 |

|                                           |             |             |
|-------------------------------------------|-------------|-------------|
| <b>Shipping service Lake of Constance</b> | <b>1998</b> | <b>1999</b> |
|-------------------------------------------|-------------|-------------|

**Fleet**

- four motor boats with 1970 seats
- ferry boat with 100 seats
- ferry boat EUREGIA with 300 seats

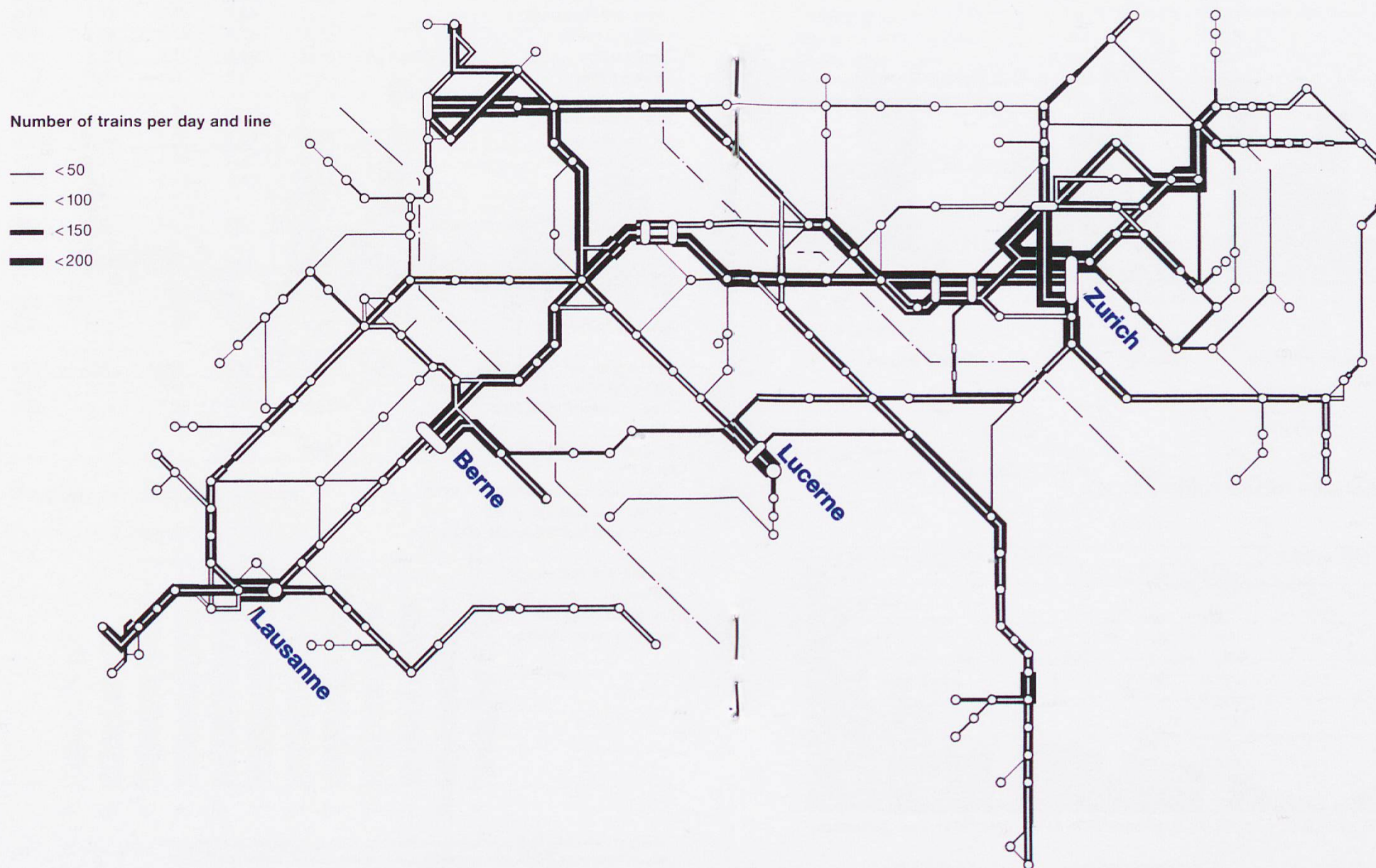
|                        |                       |                       |
|------------------------|-----------------------|-----------------------|
| Passengers transported | 820 921 <sup>2)</sup> | 776 038 <sup>2)</sup> |
| Motorcars transported  | 57 970                | 60 850                |
| Lorries transported    | 19 374                | 21 061                |
| Movements in ship/km   | 219 842               | 200 614               |

<sup>1)</sup> Share of trains departing with less than 5 minutes delay, as registered in the stations Basel, Bellinzona, Berne, Biel, Lausanne, Lucerne, Sargans, St. Gallen and Zurich.

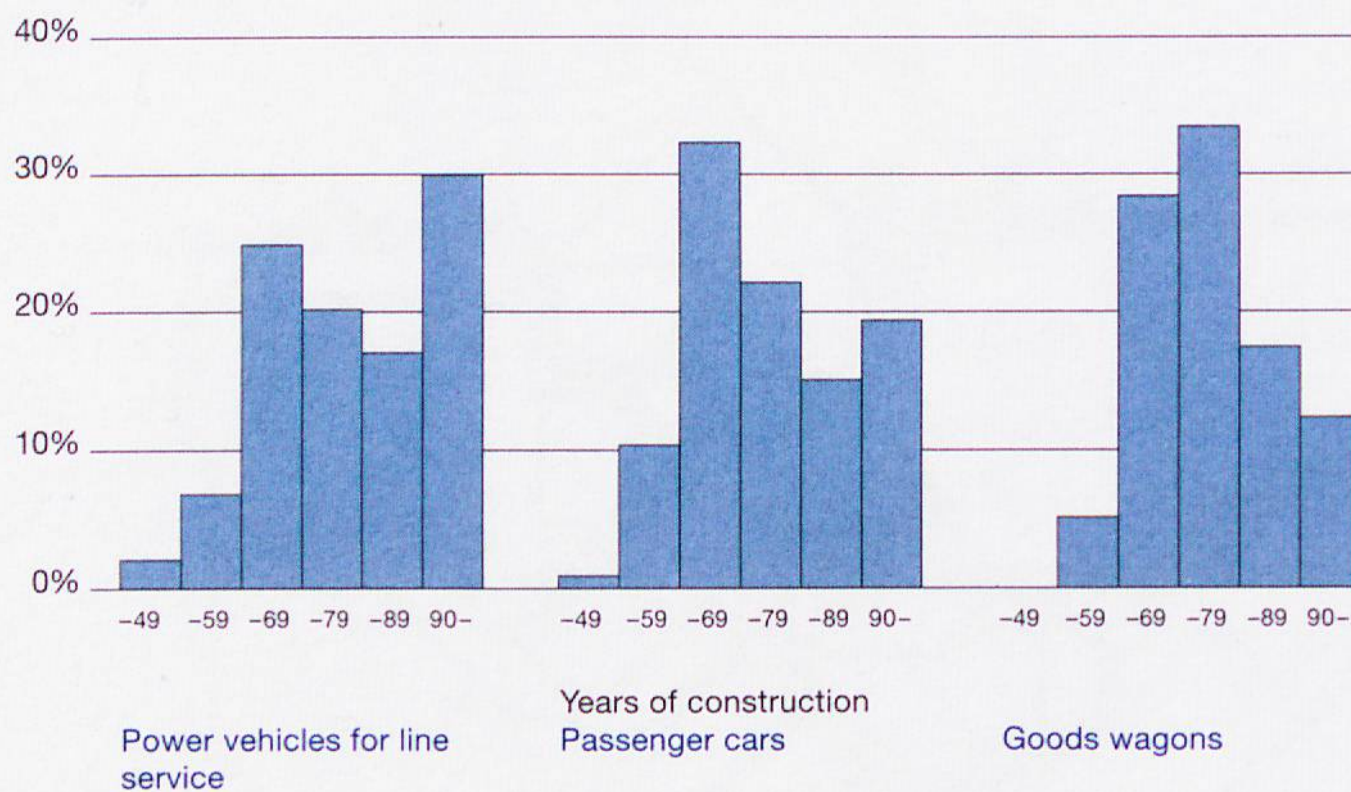
<sup>2)</sup> Including ferry Romanshorn–Friedrichshafen and passenger boats Rorschach–Lindau–Friedrichshafen in joint operation with the DB AG Bodensee-Schiffsbetriebe.

<sup>3)</sup> Including loco-only trains and «empties» trains.

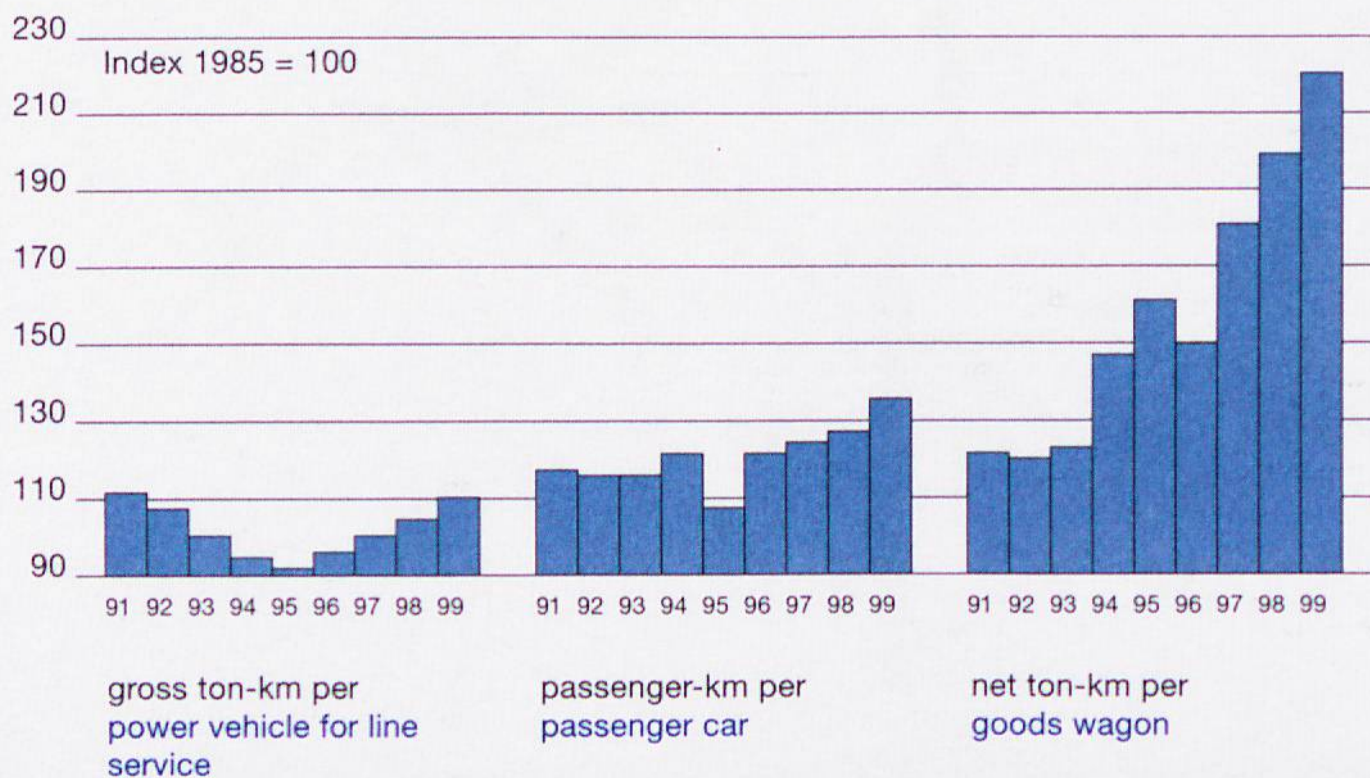
## Average number of trains per day, 1999



## Age structure of the rolling stock 1999



## Performances of the rolling stock



Stock on 1<sup>st</sup> January (without historical vehicles)

|                                 | 1998         | 1999         | 2000         | Power in kW<br>per vehicle |
|---------------------------------|--------------|--------------|--------------|----------------------------|
| <b>Traction vehicles</b>        | number       |              |              |                            |
| <b>Total</b>                    | <b>2 053</b> | <b>2 032</b> | <b>2 015</b> | <b>2 227</b>               |
| – narrow gauge                  | 35           | 35           | 35           | 769                        |
| Electrical line locomotives     | 761          | 752          | 752          | 5 003                      |
| Electrical power cars           | 234          | 234          | 234          | 1 815                      |
| Shunting and Diesel locomotives | 310          | 307          | 299          | 568                        |
| Shunting and Diesel tractors    | 713          | 704          | 695          | 150                        |

|                                                          |              |              |              | Seats<br>per car | proportion<br>1 <sup>st</sup> class |
|----------------------------------------------------------|--------------|--------------|--------------|------------------|-------------------------------------|
| <b>Passenger cars (2000: Brünig excluded)</b>            |              |              |              |                  |                                     |
| <b>Total SBB</b>                                         | <b>3 975</b> | <b>3 993</b> | <b>3 847</b> |                  |                                     |
| – narrow gauge                                           | 95           | 95           | ...          |                  |                                     |
| – air-conditioned                                        | 990          | 974          | ...          |                  |                                     |
| Passenger cars 1 <sup>st</sup> and 2 <sup>nd</sup> class | 3 153        | 3 229        | 3 002        | 78,4             | 23,3%                               |
| Dining cars                                              | 49           | 44           | 43           | 46,2             |                                     |
| Couchette cars                                           | 60           | 60           | 59           | 60,0             |                                     |
| Sleeping cars                                            | 13           | 13           | 16           | 34,4             |                                     |
| Driving trailers                                         | 416          | 432          | 439          | 83,5             | 0,05%                               |
| Power cars                                               | 284          | 215          | 288          | 59,5             | 8,1%                                |

|                                    |     |     |     | Load capa-<br>city in tons<br>per wagon |
|------------------------------------|-----|-----|-----|-----------------------------------------|
| Luggage vans                       | 332 | 374 | 222 | 12,2                                    |
| Mail vans (property of «Die Post») | 488 | 488 | 471 | 13,4                                    |

|                                             |               |               |                   | 4 axels      | Load capa-<br>city in tons<br>per wagon |
|---------------------------------------------|---------------|---------------|-------------------|--------------|-----------------------------------------|
| <b>Goods wagons (2000: Brünig excluded)</b> |               |               |                   |              |                                         |
| <b>Total SBB</b>                            | <b>14 230</b> | <b>13 745</b> | <b>13 021</b>     | <b>4 727</b> | <b>41,10</b>                            |
| – narrow gauge                              | 111           | 111           | ...               | ...          | ...                                     |
| E open, standard type                       | 2 666         | 2 444         | 2 273             | 1 592        | 49,11                                   |
| F open, special type                        | 713           | 700           | 691               | 163          | 45,80                                   |
| G covered, standard type                    | 750           | 691           | 683               | –            | 26,06                                   |
| H covered, special type                     | 3 787         | 3 765         | 3 754             | 200          | 29,28                                   |
| K flat, standard type                       | 1 320         | 1 307         | 1 304             | –            | 27,97                                   |
| L flat, special type                        | 28            | 23            | 19                | –            | 25,74                                   |
| R flat, 4 axles, standard type              | 872           | 865           | 865               | 865          | 55,71                                   |
| S flat, 4 axles, special type               | 1 582         | 1 640         | 1 641             | 1 641        | 74,37                                   |
| T with roof that can be opened              | 1 401         | 1 355         | 1 343             | 179          | 31,51                                   |
| U special wagons/lowfloor wagons            | 1 111         | 955           | 448 <sup>1)</sup> | 87           | 32,77                                   |
| P private wagons in SBB fleet               | 6 459         | 6 374         | 6 770             | 3 638        | 57,75                                   |

<sup>1)</sup> 2000: private wagons

## Fixed installations

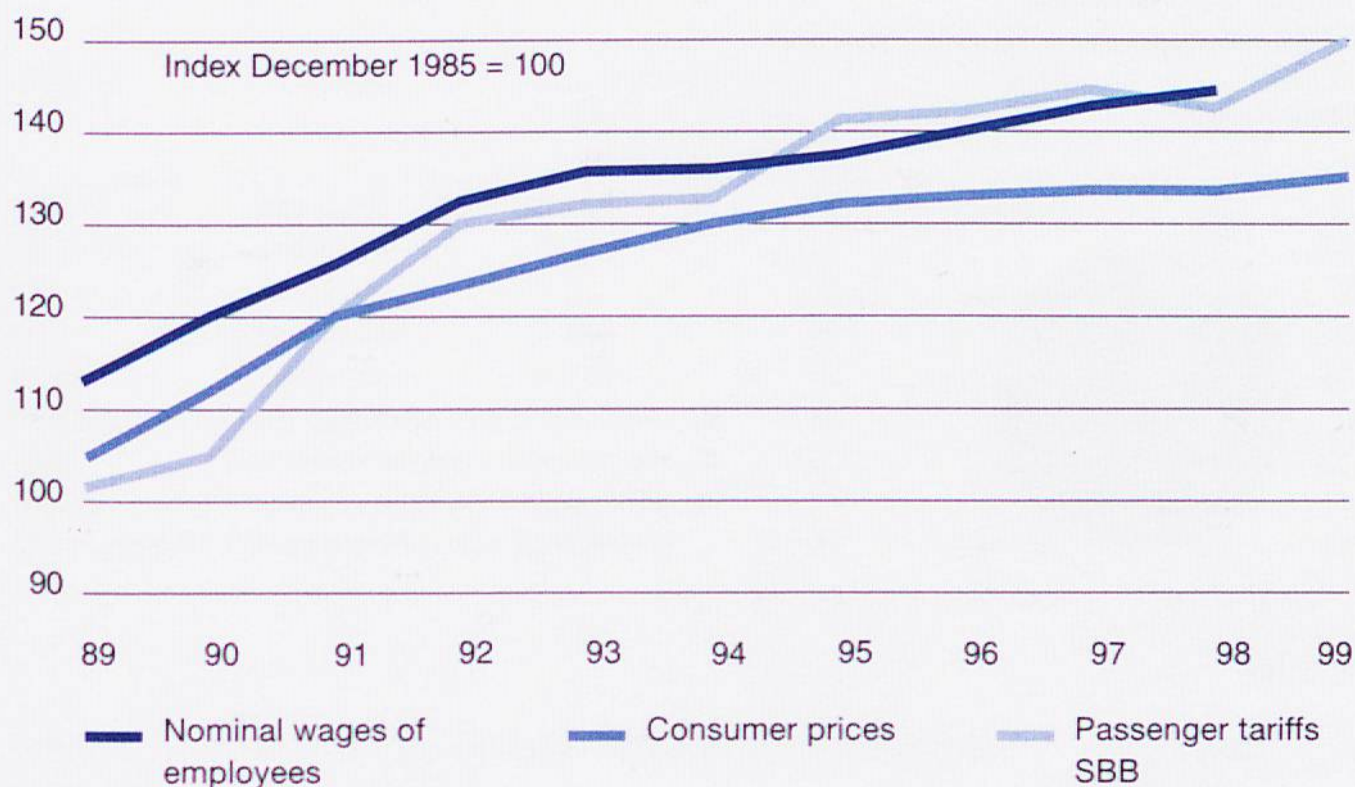
|                                                      |        | 1971         | %          | 1998         | %          | 1999         | %          |
|------------------------------------------------------|--------|--------------|------------|--------------|------------|--------------|------------|
| <b>Number of SBB stations</b>                        | number | <b>816</b>   |            | <b>757</b>   |            | <b>744</b>   |            |
| – open for passenger traffic                         |        | 807          |            | 750          |            | ...          |            |
| – open for goods traffic                             |        | 677          |            | 458          |            | 481          |            |
| Number of private sidings                            |        | 1 631        |            | 1 840        |            | 1 822        |            |
| – SBB clients with private sidings                   |        | 2 319        |            | 2 364        |            | 2 358        |            |
| <b>Operated lines</b>                                | km     | <b>2 913</b> | <b>100</b> | <b>2 910</b> | <b>100</b> | <b>2 902</b> | <b>100</b> |
| – with goods traffic only                            |        | 14           | 0,5        | 103          | 3,5        | 110          | 3,5        |
| – not electrified                                    |        | 16           | 0,5        | 8            | 0,3        | 8            | 0,3        |
| – with narrow gauge                                  |        | 74           | 2,5        | 74           | 2,5        | 74           | 2,5        |
| – with train radio <sup>1)</sup>                     |        | 481          |            | 1 400        | 48,1       | 1 400        | 48,1       |
| <b>Lines used by SBB trains</b>                      |        | <b>2 973</b> |            | <b>2 977</b> |            | <b>2 977</b> |            |
| <b>Own lines</b>                                     |        | <b>2 926</b> | <b>100</b> | <b>3 005</b> | <b>100</b> | <b>3 005</b> | <b>100</b> |
| – single track                                       |        | 1 582        | 54,0       | 1 412        | 47,0       | 1 402        | 47,0       |
| – straight line                                      |        | 1 832        | 62,6       | 1 757        | 58,5       | 1 757        | 58,5       |
| – level lines                                        |        | 939          | 32,1       | 903          | 30,0       | 903          | 30,0       |
| <b>Tunnels</b>                                       | number | <b>241</b>   |            | <b>267</b>   |            | <b>267</b>   |            |
| – length                                             | km     | 188          |            | 215          |            | 215          |            |
| <b>Bridges</b>                                       | number | <b>3 843</b> |            | <b>5 546</b> |            | <b>5 546</b> |            |
| – length                                             | km     | 45           |            | 85           |            | 85           |            |
| <b>Length of tracks</b>                              |        | <b>6 737</b> |            | <b>7 369</b> |            | <b>7 369</b> |            |
| – main tracks                                        |        | 4 288        | 100        | 4 570        | 100        | 4 580        | 100        |
| – welded track                                       |        | 2 907        | 68,0       | 4 376        | 95,8       | 4 386        | 95,8       |
| <b>Road crossings</b>                                | number | <b>6 776</b> |            | <b>5 944</b> |            | <b>5 944</b> |            |
| – overpasses                                         |        | 802          |            | 993          |            | 993          |            |
| – underpasses                                        |        | 2 703        |            | 3 301        |            | 3 301        |            |
| – level crossings                                    |        | 3 271        |            | 1 650        |            | 1 650        |            |
| <b>Locally operated barriers for level crossings</b> |        | <b>307</b>   |            | <b>0</b>     |            | <b>0</b>     |            |

## Superlative

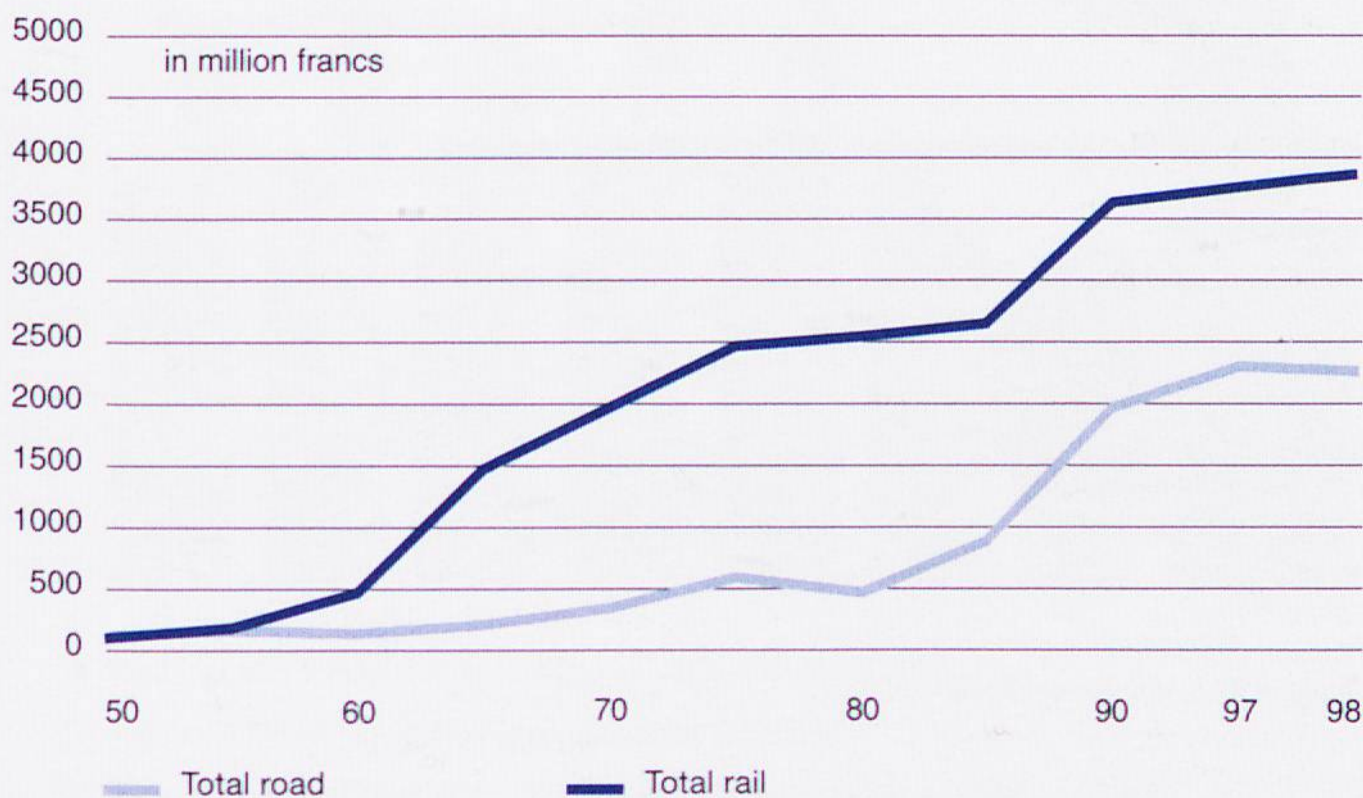
|                       |             |                                           |
|-----------------------|-------------|-------------------------------------------|
| steepest gradients    | 878 ‰       | Piotta–Piora (funicular)                  |
|                       | 121 ‰       | Brünig–Meiringen (metre gauge, rack)      |
|                       | 38,8 ‰      | Beinwil am See–Reinach SBB (normal gauge) |
| longest level line    | 9,8 km      | Solothurn–Arch                            |
| longest straight line | 19,2 km     | Brig–Iselle di Trasquera (Simplon)        |
| highest station       | 1141 m ü.M. | Airolo                                    |
| lowest station        | 202 m ü.M.  | Riazzino–Cugnasco                         |
| longest bridge        | 1266 m      | Hardturm viaduct Zurich                   |
| highest bridge        | 77 m        | Reuss bridge near Intschi (Gotthard)      |
| longest tunnel        | 19 823 m    | Simplon II                                |
| shortest tunnel       | 7 m         | Moutier III                               |
| oldest line           | 9.8.1847    | Zurich–Baden (Spanisch-Brötli-Bahn)       |

<sup>1)</sup> Level 1.1.1997

## Prices, tariffs, wages



## Development of the investments for traffic infrastructure

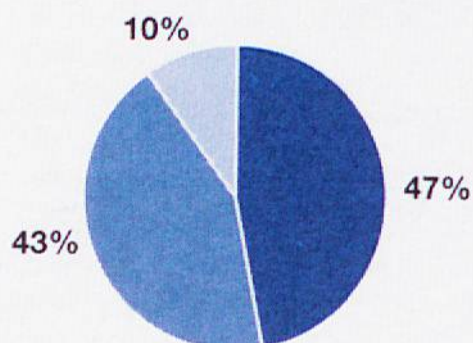


## Energy turnover 1999

Total = 4321 million kwh

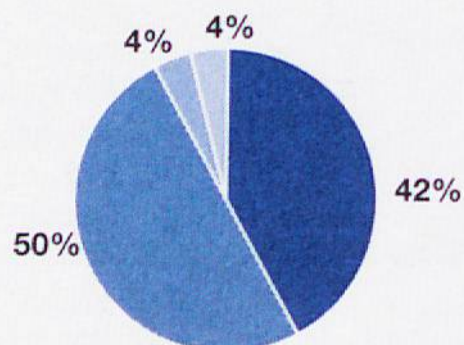
SBB-train operation = 1812 million kwh

Source 1999



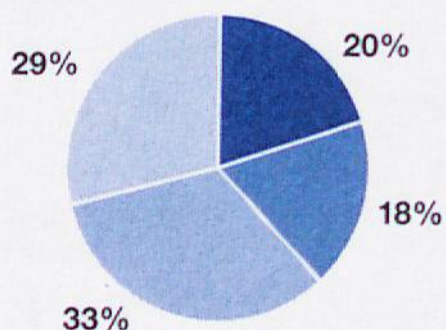
- Own and jointly operated power plants<sup>1)</sup> 47%
- Partly owned plants<sup>2)</sup> 43%
- Other power plants, and energy from other railways 10%

Use 1999



- SBB train operation 42%
- Other plants/operation of pumps 50%
- Own consumption and leaks 4%
- Private railways/foreign railways 4%

Break-up of energy consumption 1998 on the national scale



- Agriculture/the crafts/ service industry 20%
- Industry 18%
- Transport 33%
- Households 29%

Total = 847 100 Tera-Joule

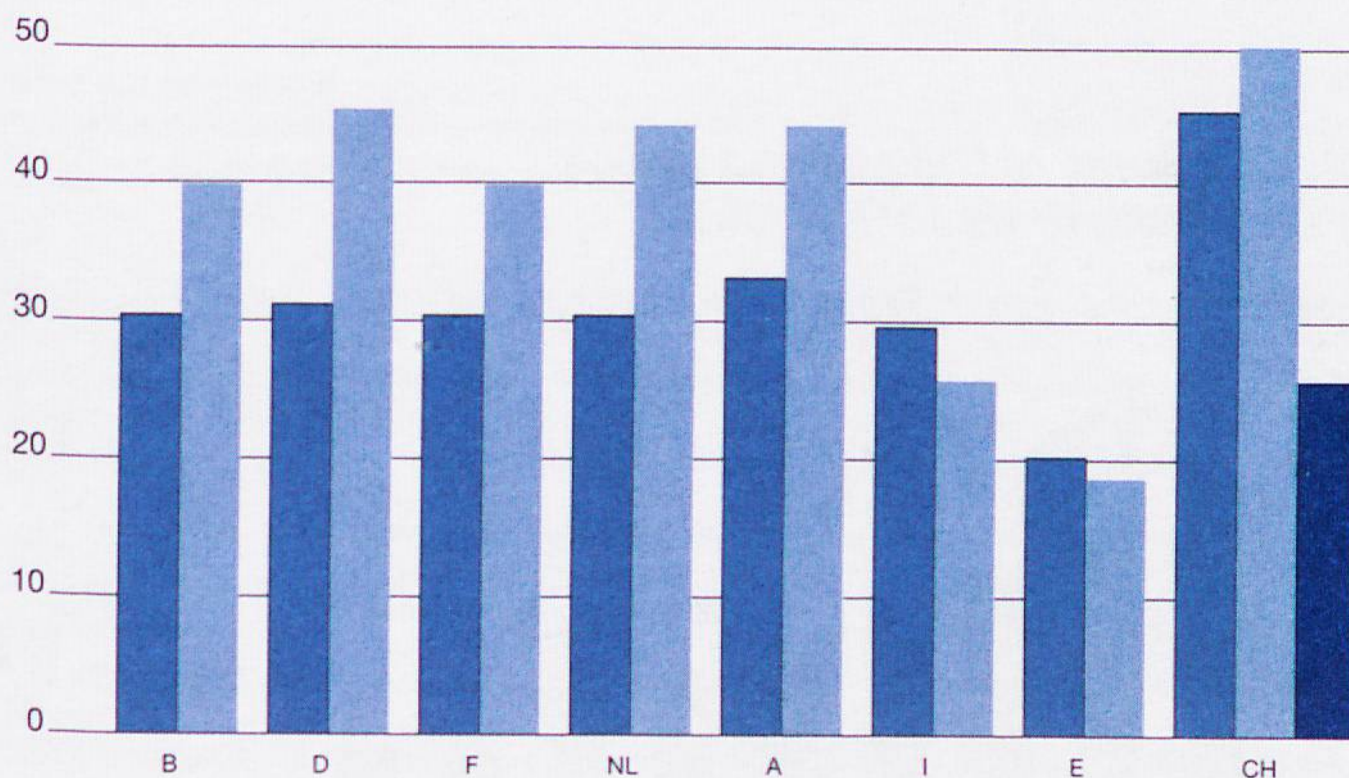
<sup>1)</sup> Amsteg, Ritom, Vernayaz, Châtelard-Barberine, Massaboden, Trient, Etzel, Göschenen, Wassen, Rupperwil-Auenstein

<sup>2)</sup> Electra Massa, CTV-Vouvry, AKEB, ENAG, KKW Gösigen and Leibstadt

## European railways in comparison, with figures 1998

| railway  | country         | network length |                        | staff   | trips per inhabitant |
|----------|-----------------|----------------|------------------------|---------|----------------------|
|          |                 | km             | of which electrified % |         |                      |
| DB AG    | Germany         | 38 127         | 49                     | 209 600 | 16                   |
| DSB/BS   | Denmark         | 2 264          | 20                     | ...     | 28                   |
| FS       | Italy           | 16 041         | 65                     | 118 300 | 8                    |
| NS       | The Netherlands | 2 808          | 73                     | 26 600  | 20                   |
| ÖBB      | Austria         | 5 643          | 60                     | 53 500  | 22                   |
| RENFE    | Spain           | 12 303         | 56                     | 35 000  | 10                   |
| SBB      | Switzerland     | 2 910          | 100                    | 30 900  | 37                   |
| SNCB     | Belgium         | 3 410          | 74                     | 40 000  | 14                   |
| SNCF/RFF | France          | 31 724         | 45                     | 175 100 | 14                   |

## Fares in relation to Gross National Product per inhabitant 1998



■ Yearly Gross National Product per inhabitant in 1000 francs

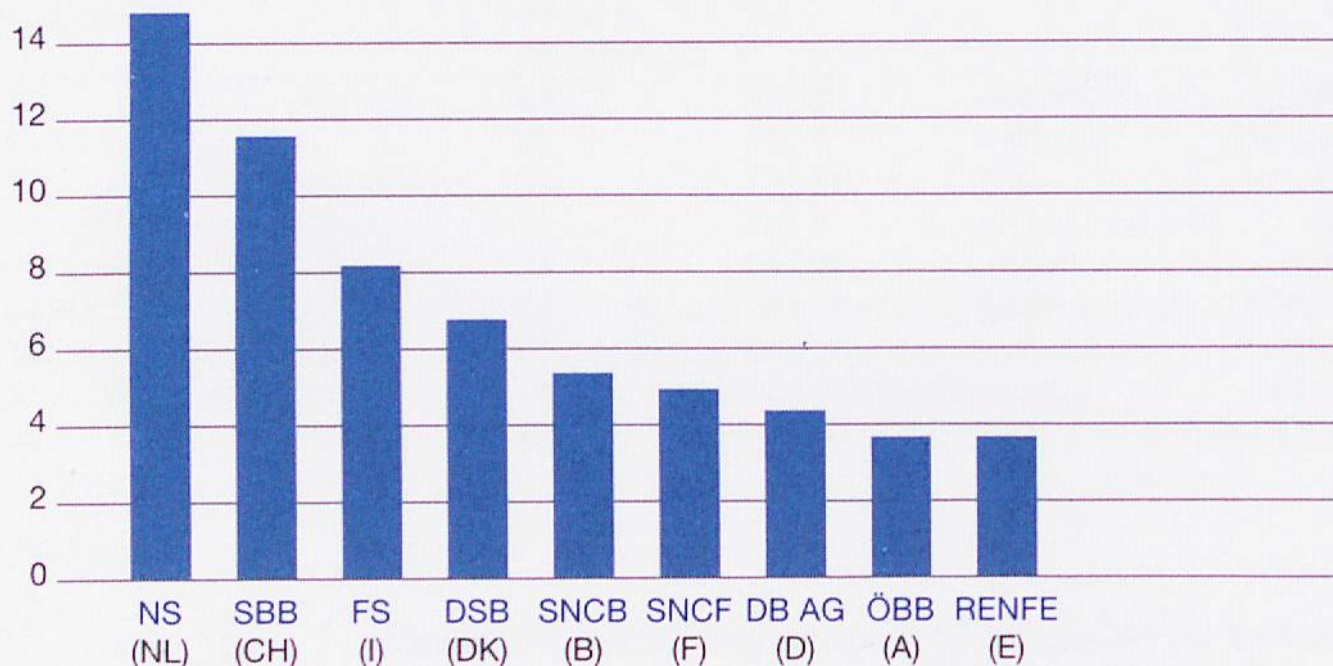
■ Fare of a return ticket 2nd class in francs (100 km)<sup>1)</sup>

■ Fare of a return ticket 2nd class in francs (100 km) with a Half-Fare Card

<sup>1)</sup> The graph compares ordinary fares. The individual railways offer different tariff facilities.

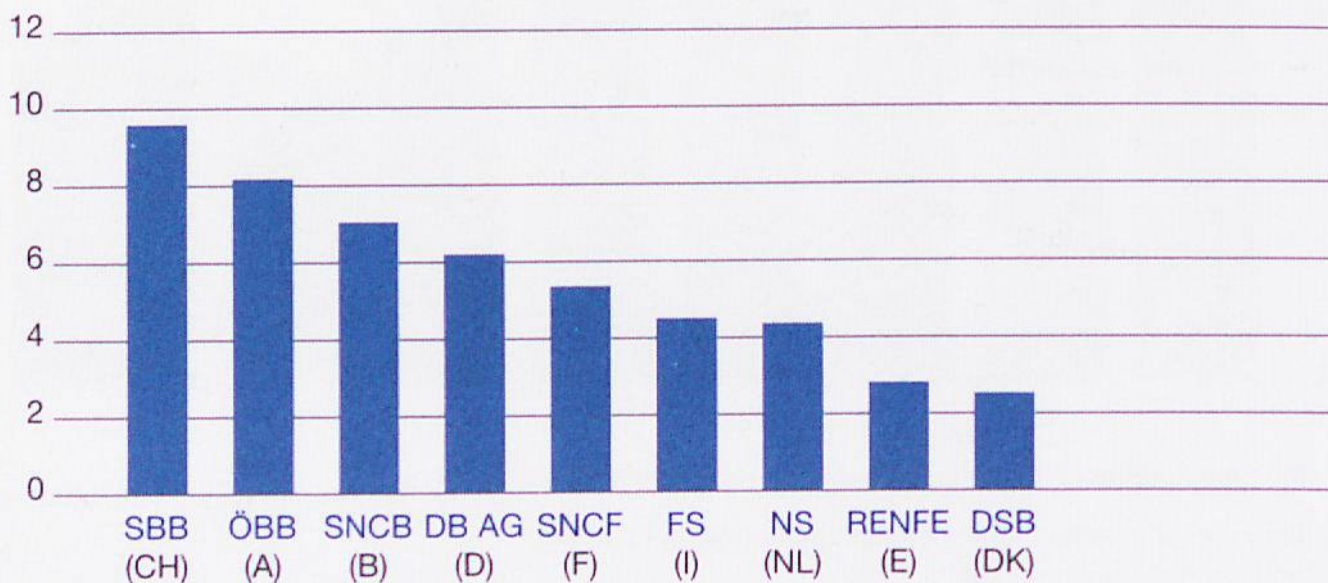
## Mean number of passengers per day and line 1998<sup>1)</sup>

in 1000 persons



## Mean volume of transported goods per working day and line 1998<sup>2)</sup>

in 1000 tons



<sup>1)</sup> Pkm: network length: 365

<sup>2)</sup> Tkm: network length: 309

## The Swiss transport sector

|                                            |                         | 1970 | 1980 | 1990 | 1995 | 1996 <sup>1)</sup> |
|--------------------------------------------|-------------------------|------|------|------|------|--------------------|
| <b>Modal shares in passenger transport</b> |                         |      |      |      |      |                    |
| - Rail                                     | % of p-km <sup>2)</sup> | 16,0 | 12,5 | 13,2 | 14,0 | ...                |
| - Road                                     |                         | 82,5 | 85,9 | 84,8 | 83,5 | ...                |
| of which public transport                  |                         | 5,1  | 4,3  | 4,8  | 5,7  | ...                |
| - Air traffic                              |                         | 1,2  | 1,4  | 1,8  | 2,3  | ...                |
| - Waterways                                |                         | 0,3  | 0,2  | 0,2  | 0,2  | ...                |

### Modal shares in goods transport

|                           |           |      |      |      |      |      |
|---------------------------|-----------|------|------|------|------|------|
| - Rail                    | % of t-km | 53,1 | 45,3 | 41,1 | 37,8 | 34,7 |
| - Road                    |           | 36,7 | 42,1 | 48,3 | 55,9 | 59,2 |
| - Pipelines (oil and gas) |           | 9,0  | 11,8 | 9,6  | 5,4  | 5,4  |
| - Waterways/air           |           | 1,2  | 0,8  | 1,0  | 0,9  | 0,7  |

|                           |    | 1980   | 1990   | 1995   | 1998   | 1999   |
|---------------------------|----|--------|--------|--------|--------|--------|
| <b>Length of networks</b> |    |        |        |        |        |        |
| Rail, lines owned         | km | 4 982  | 5 030  | 5 041  | ...    | ...    |
| Road <sup>3)</sup>        |    | 66 544 | 71 099 | 71 372 | 71 278 | 71 330 |
| - Motorways               |    | 1 170  | 1 495  | 1 540  | 1 638  | 1 857  |
| Pipelines (oil)           |    | 239    | 239    | 239    | 110    | 110    |

### Gotthard road tunnel

|                                                    |        |       |        |        |        |        |
|----------------------------------------------------|--------|-------|--------|--------|--------|--------|
| - Average daily number of vehicles                 | number | 8 240 | 15 592 | 17 259 | 18 255 | 17 806 |
| - Average daily number of lorries and motorcoaches |        | 742   | 2 057  | 2 877  | 3 405  | 3 523  |

### Motorization rate

|                                          |         |             |             |             |             |             |
|------------------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
|                                          |         | <b>2,56</b> | <b>3,81</b> | <b>4,12</b> | <b>4,35</b> | <b>4,47</b> |
| Private cars                             | million | 2,26        | 2,99        | 3,2         | 3,4         | 3,5         |
| - Inhabitants per motorcar               | number  | 2,8         | 2,3         | 2,2         | 2,1         | 2,1         |
| Vehicles for the transportation of goods | 1000    | 166         | 272         | 262         | 267         | 274         |

### Tourism

|                                              |      |        |        |        |        |        |
|----------------------------------------------|------|--------|--------|--------|--------|--------|
| Arrivals in hotels and health establishments | 1000 | 10 937 | 13 047 | 11 962 | 12 647 | 12 907 |
| - of which foreigners                        |      | 6 676  | 7 978  | 6 961  | 7 196  | 7 167  |
| Overnights:                                  |      |        |        |        |        |        |
| hotels and health establishments             |      | 35 716 | 37 548 | 32 616 | 32 924 | 33 197 |

<sup>1)</sup> latest available figures from the Federal Statistics Office

<sup>2)</sup> new calculation of season tickets for unlimited number of trips, as from 1980, and inclusion of children travelling free as from 1987

<sup>3)</sup> Municipal and cantonal roads (level 1984/97)  
motorways (level December 1999)

## General data on the Swiss economy

|                                         |                       | 1980         | 1990         | 1998       | 1999                |
|-----------------------------------------|-----------------------|--------------|--------------|------------|---------------------|
| <b>Inhabitants</b>                      |                       |              |              |            |                     |
| Yearly average                          | 1000                  | 6 385        | 6 796        | 7 132      | 7 164 <sup>1)</sup> |
| – up to 19 years old                    |                       | 1 756        | 1 578        | 1 656      | 1 661 <sup>1)</sup> |
| – more than 65 years old                |                       | 875          | 978          | 1 073      | 1 087 <sup>1)</sup> |
| – gainfully employed persons            |                       | 3 166        | 3 821        | 3 848      | 3 873 <sup>1)</sup> |
| <b>Gross National Product (nominal)</b> | <b>billion francs</b> | <b>177,3</b> | <b>327,6</b> | <b>...</b> | <b>...</b>          |

### Foreign trade

|                                |                |               |                            |                            |            |
|--------------------------------|----------------|---------------|----------------------------|----------------------------|------------|
| Import                         | millions de t  | 45,2          | 40,2                       | 42,4                       | 42,4       |
| – foodstuffs and animal feed   |                | 3,3           | 3,3                        | 3,5                        | 3,7        |
| – liquid fuels and propellants |                | 13,5          | 13,0                       | 15,7                       | 14,8       |
| – solid fuels                  |                | 0,6           | 0,4                        | 0,2                        | 0,2        |
| – metals                       |                | 2,8           | 2,8                        | 2,8                        | 2,7        |
| Value                          | billion francs | 96,6          | 94,5                       | 115,8                      | 120,1      |
| Export                         | million tons   | 7,7           | 9,3                        | 11,6                       | 12,2       |
| Value                          | billion francs | 88,7          | 95,8                       | 114,1                      | 120,7      |
| Balance                        |                | –8,4          | 1,3                        | –1,8                       | 0,7        |
| <b>Balance of earnings</b>     | <b>CHF m</b>   | <b>11 995</b> | <b>24 984<sup>1)</sup></b> | <b>34 600<sup>1)</sup></b> | <b>...</b> |

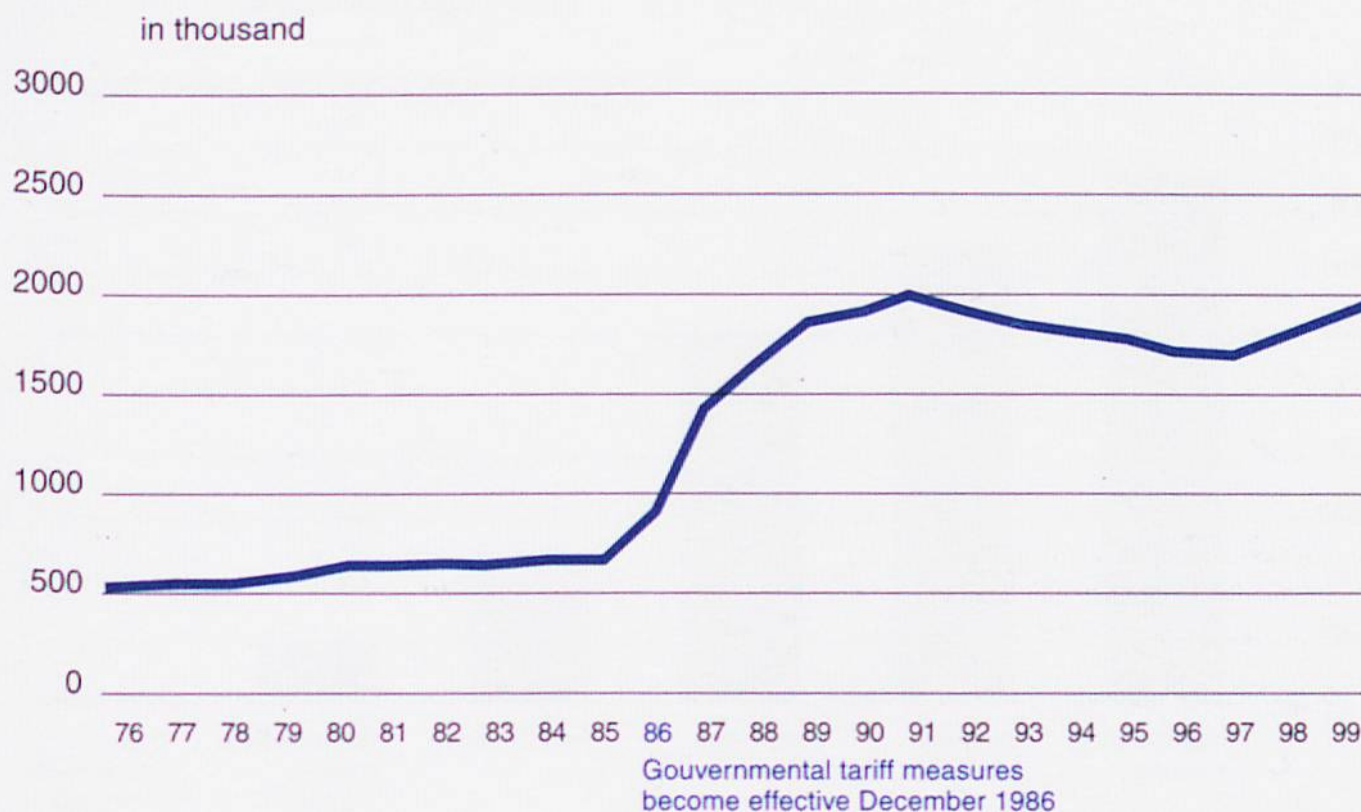
### Degree of profitability

|                                                       |      | 1980        | 1990        | 1997         | 1998        |
|-------------------------------------------------------|------|-------------|-------------|--------------|-------------|
| <b>Railway account</b> (with PSO grant)               | in % | <b>76,8</b> | <b>83,8</b> | <b>82,7</b>  | <b>84,7</b> |
| – SBB (incl. payments for infrastructure)             |      | 79,4        | 91,0        | 89,1         | 91,5        |
| – licenced (private) railways                         |      | 66,0        | 56,5        | 62,2         | 62,9        |
| <b>Road account</b> (capital statement) <sup>2)</sup> |      | <b>87,2</b> | <b>96,0</b> | <b>101,5</b> |             |
| – motorcars                                           |      | 99,6        | 95,8        | 100,4        |             |
| – private motorcoaches                                |      | 56,1        | 89,6        | 104,2        |             |
| – heavy goods vehicles (over 3,5 tons)                |      | 54,3        | 104,0       | 114,7        |             |
| – semi-trailers and trailers                          |      | 5,5         | 67,7        | 84,0         |             |

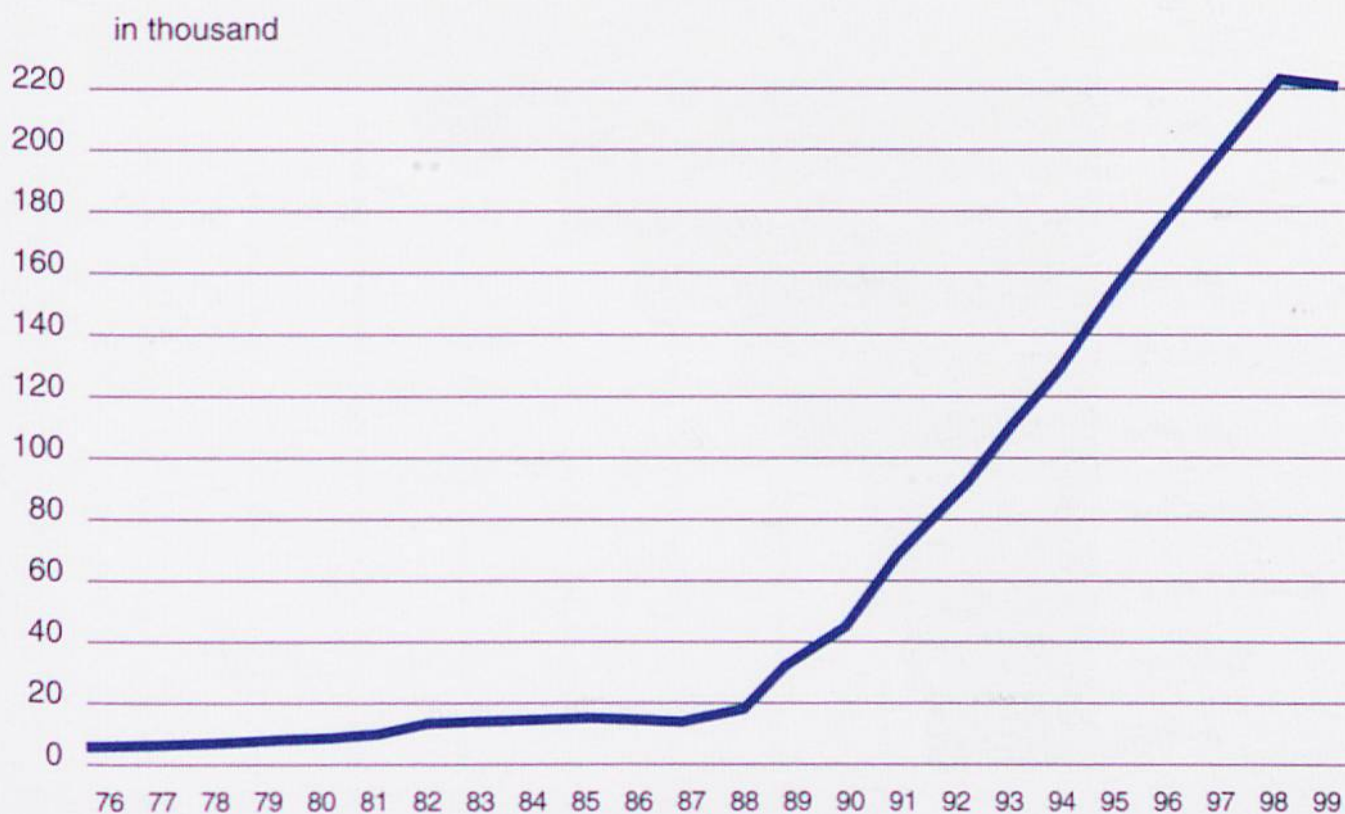
<sup>1)</sup> provisional

<sup>2)</sup> new methodology as from 1985

## Sales development of Half-Fare Cards



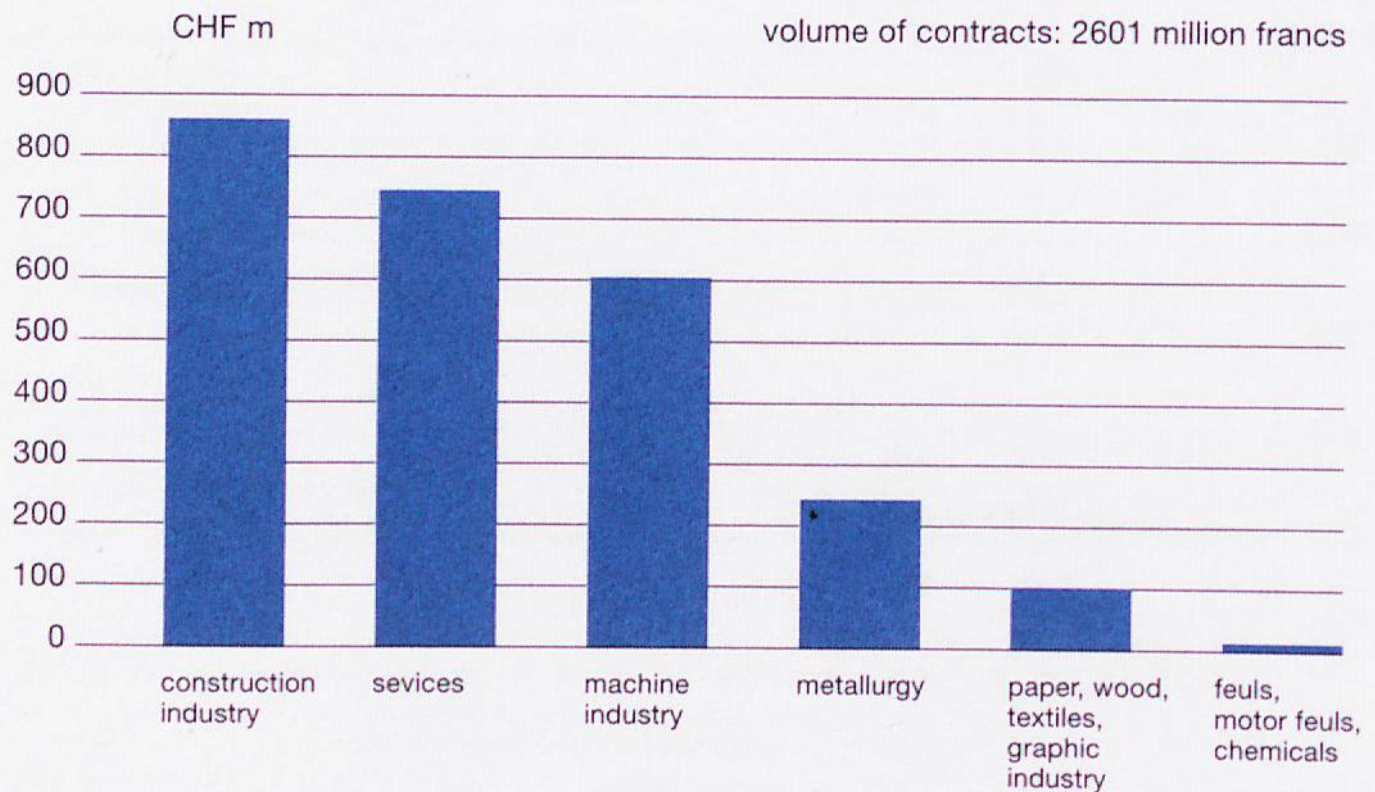
## Sales development of General Abonnements



## The SBB as contract placers 1999

24 071 suppliers

23 236 within Switzerland (=96,5%)



## The most important stations 1999

Passenger traffic

As per turnover (million francs)

