

# Infrastructure

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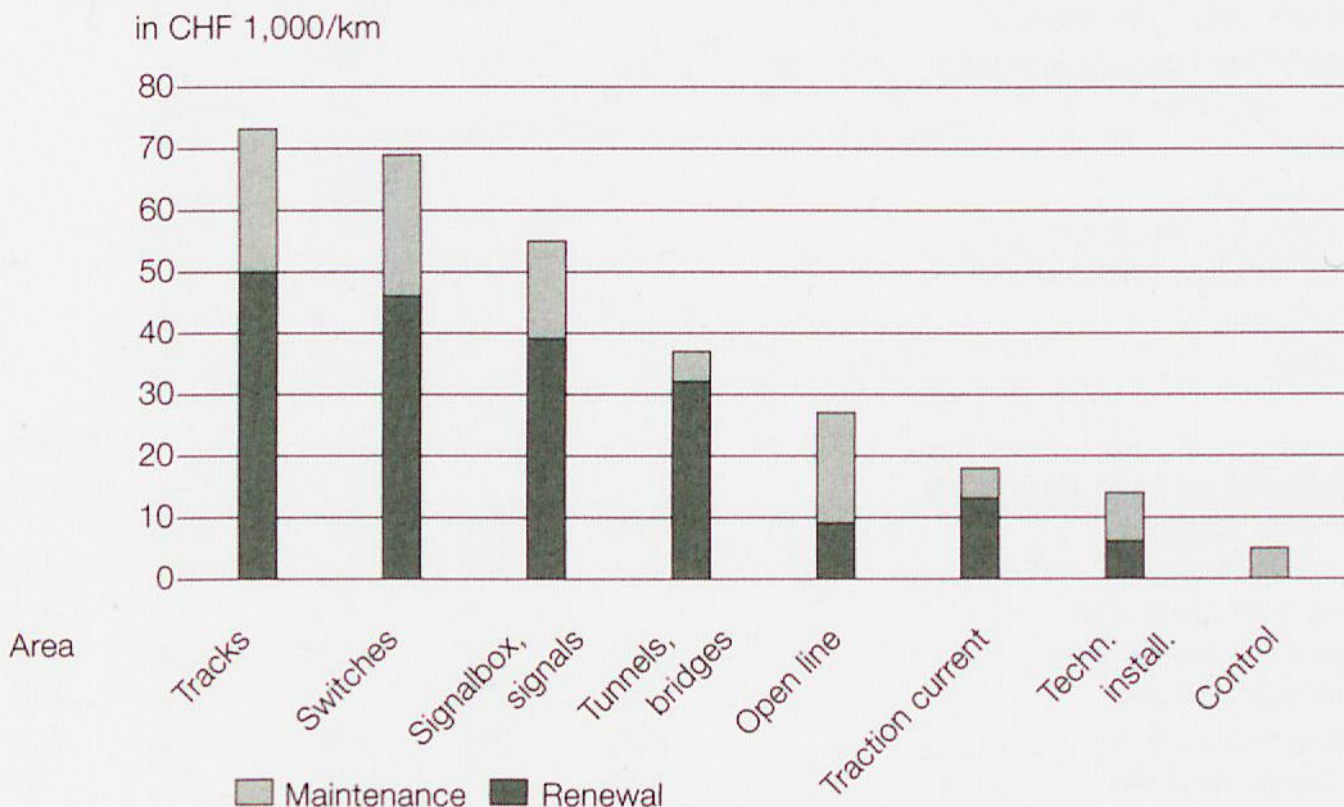
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## What an SBB line kilometre costs.

Average expenses for maintenance and renewal of the railway



## Key projects.

	Overall costs CHF mn	Start of constr. Year	End of constr. Year	Share un- der cons. CHF mn	Share realised CHF mn
<b>Network of the future</b>					
Rail 2000, 1 <sup>st</sup> phase	5,900 <sup>1</sup>	1988	2007	3,100	2,300
Seven S-Bahn systems <sup>2</sup>	1,594	2002	2007	32	16
Facelifting of stations	340	2002	2008	24	41
AlpTransit Gotthard	9,233 <sup>1</sup>	1996	2014	1,554	-
Rail 2000, 2 <sup>nd</sup> phase	5,900	2011	2022	-	-
<b>New technologies</b>					
Automation of the signalboxes	1,700	2002	2010	670	100
European Train Control System ETCS	830	2005	2017	0	0
Global System Mobile for Railways GSM-R	375	2003	2008	20	0

<sup>1</sup> Prognosis of end costs.

<sup>2</sup> Including connection Genève-Eaux-Vives-Annemasse, 1<sup>st</sup> phase, but without 2<sup>nd</sup> through station Zürich HB.

**Financial matters.<sup>1</sup>**

		1999	2000	2001	2002	02-01 ± in %
Operating revenues	CHF mn	<sup>2</sup> 3,041.1	3,092.9	3,105.0	3,105.0	0.4
- Receipts from train paths		<sup>2</sup> 668.5	616.0	540.9	540.9	-12.2
Operating expenses		<sup>2</sup> 2,854.3	2,902.7	3,023.6	3,023.6	4.2
Operating result		<sup>2</sup> 186.8	190.2	81.4	81.4	-57.2
EBIT		<sup>2</sup> 227.3	184.4	143.6	143.6	-22.1
Annual profit		<sup>2</sup> 160.9	130.1	106.5	106.5	-18.1
Gross investments		<sup>2</sup> 1,565.0	1,767.2	1,936.5	1,936.5	9.6

**Operating performance.**

<b>Normal gauge</b>	mn trainkm	127.5	130.8	132.9	135.5	2.0
SBB		...	...	129.4	131.1	1.3
- Passenger trains		...	...	96.5	99.0	2.6
- Freight trains		...	...	30.3	28.9	-4.6
- Service trains		...	...	2.6	3.2	24.6
Third parties		...	...	3.5	4.4	25.1
- Passenger trains		...	...	2.7	3.1	15.3
- Freight trains		...	...	0.7	1.2	68.5
- Service trains		...	...	0.1	0.1	-15.4
<b>Narrow gauge</b>		1.5	1.5	1.6	1.6	0.3
SBB		...	...	1.4	1.4	0.6
- Passenger trains		...	...	1.3	1.3	0.9
- Freight trains		...	...	0.1	0.1	-9.0
- Service trains		...	...	0.0	0.0	12.5
Third parties		...	...	0.2	0.2	-1.7
- Passenger trains		...	...	0.2	0.2	-1.7
- Freight trains		...	...	0.0	0.0	-
- Service trains		...	...	0.0	0.0	-

**Productivity.**

Train path revenues per line-km	CHF	...	0.22	0.21	0.18	-12.1
Train path revenues per train path km		...	0.40	0.36	0.31	-12.6
Operating grant per train path km		0.35	0.35	0.28	0.29	1.8
Train path km per franc of net operating expenses	Trpathkm	...	...	0.063	0.065	3.2
Share of train path revenues in operating expenses	%	-	0.23	0.21	17.7	-15.8

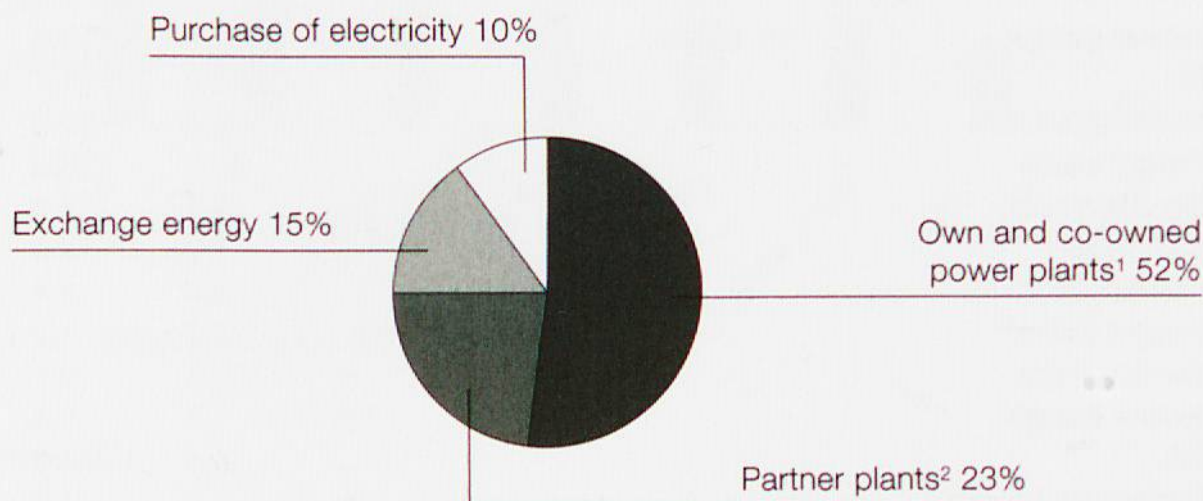
<sup>1</sup> Segment account. Intra-group revenues and expenses not eliminated.

<sup>2</sup> Other accounting structure, not comparable with subsequent years.

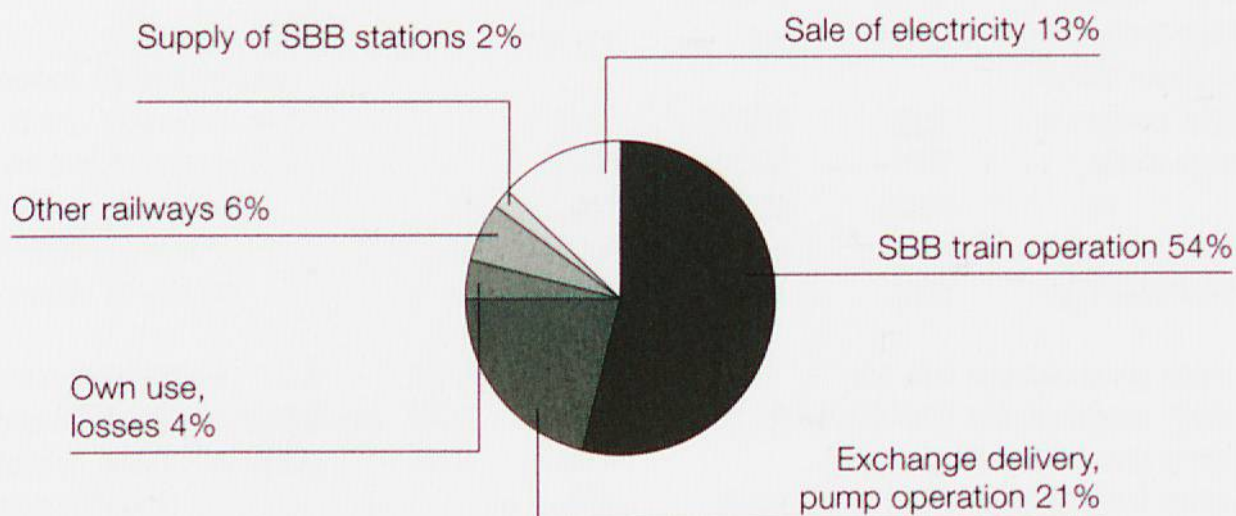
## Energy.

		1999	2000	2001	<b>2002</b>	02-01 ± in %
Total produced and used	GWh	4,321	4,684	4,337	3,465	-20.1
- From renewable sources of energy	%	100.0	99.8	96.9	87.2	-10.0
Used for train traction ex substation	GWh	1,993	2,004	2,057	2,069	0.6
- SBB network		1,812	1,821	1,871	1,878	0.4
- Other networks		181	183	186	191	2.7
Specific energy use of SBB						
- Passenger traffic	kWh/pkm	0.100	0.090	0.106	0.094	-11.0
- Freight traffic	kWh/tkm	0.072	0.079	0.079	0.073	-8.1

### Origin



### Use



<sup>1</sup> Amsteg, Ritom, Vernayaz, Châtelard-Barberine, Massaboden, Trient, Etzel, Göscheneren, Wassen, Ruppertswil-Auenstein

<sup>2</sup> AKEB, ENAG

## Workforce strength and quantity of fixed installations.

		1999	2000	2001	2002	02-01 ± in %
<b>Workforce, annual mean, expressed in full-time jobs</b>						
	Number	11,269	10,166	10,247	10,256	2
Central offices		1	1	1,317	1,683	2
Sales		1	1	31	18	2
Production		1	1	4,327	4,153	2
Maintenance		1	1	4,405	4,180	2
In training <sup>3</sup>		1	1	4	51	2
Other		1	1	163	171	2
<b>Fixed installations</b>						
						±02-01
<b>Operated lines</b>	km	2,979	2,973	2,986	2,982	-5
- Not electrified		17	17	17	17	0
- For freight traffic only		103	95	94	89	-1
- Narrow gauge		74	74	74	74	0
Own lines		3,005	3,000	3,008	3,003	-5
- Single-track lines		1,406	1,390	1,394	1,389	-5
Length of all tracks		7,368	7,364	7,377	7,372	-5
<b>Level crossings</b>	Number	1,408	1,378	1,326	1,268	-58
- Protected by technical means		750	750	746	740	-6
- For private use		422	408	373	344	-29
- For pedestrians only		499	479	439	398	-41
<b>Switches</b>		15,125	14,850	14,575	14,300	-275
Signals for train runs		27,751	...	25,250	26,644	-1,414
Tunnels		267	272	273	274	1
- Length	km	215	218	224	225	1
Railway bridges	Number	5,546	5,768	5,858	5,898	40
- Length	km	85	89	89	89	0.5
<b>Railway stations of the SBB</b>	Number	744	790	792	809	17
- For passenger traffic		...	728	729	733	4
- For freight traffic		481	473	475	475	0
Mean distance between stations in passenger traffic	km	...	3.95	3.97	3.95	-0.02
<b>Rolling stock</b>	Number	...	4,324	4,063	3,817	-246
Power vehicles		...	520	505	513	8
- Diesel-powered		...	501	486	494	8
Service cars and wagons		3,916	3,804	3,558	3,304	-254

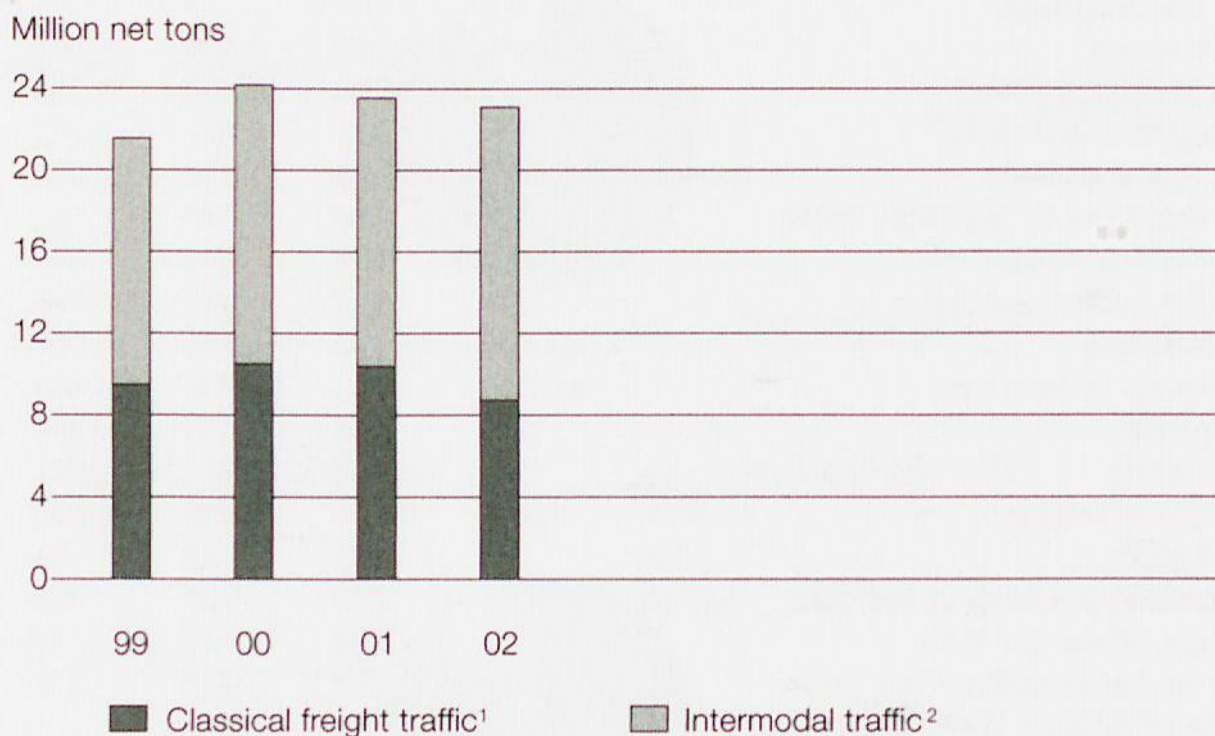
<sup>1</sup> Due to outsourcings, comparison with the previous year is not possible.

<sup>2</sup> Other organisation structure. Comparison with subsequent years is not possible.

<sup>3</sup> From 2001 without occupations controlled by a federal office (newly in login).

## Transalpine railfreight traffic.

in net tons		1999	2000	2001	<b>2002</b>	02-01 ± in %
<b>Gotthard</b>	mn tons	18.1	20.4	19.0	<b>17.4</b>	-8.4
Classical freight traffic <sup>1</sup>		6.2	6.9	6.8	6.0	-11.8
Intermodal traffic <sup>2</sup>		11.9	13.5	12.2	11.4	-6.6
<b>Simplon</b>		3.6	3.8	4.6	<b>5.8</b>	26.1
Classical freight traffic <sup>1</sup>		3.3	3.6	3.6	2.8	-22.2
Intermodal traffic <sup>2</sup>		0.3	0.2	1.0	3.0	200.0
<b>Total</b>		21.7	24.2	23.6	<b>23.2</b>	-1.7
Classical freight traffic <sup>1</sup>		9.5	10.5	10.4	8.8	-15.4
Intermodal traffic <sup>2</sup>		12.2	13.7	13.2	14.4	9.1



<sup>1</sup> Weight of the payload (net weight) without tare weight of the wagons.

<sup>2</sup> Net tons, including the weight of the containers and road vehicles transported also.

Statistics that in intermodal traffic eliminate the weight of the loading equipment (containers, swap bodies, semi-trailers) and road lorries, and which list accompanied and unaccompanied transports separately, are maintained by the Federal Office for Spatial Development (ARE).

They can be ordered under Tel. 031 322 40 60, Fax 031 322 78 69, or viewed in the Internet:

<http://www.are.admin.ch/are/en/verkehr/alpinfo/index.html>