European Commission
DG MOVE

Swiss Confederation
Federal Office of Transport (FOT)

Observation and analysis of transalpine freight traffic flows

Key figures 2017

Photo: Sigmaplan

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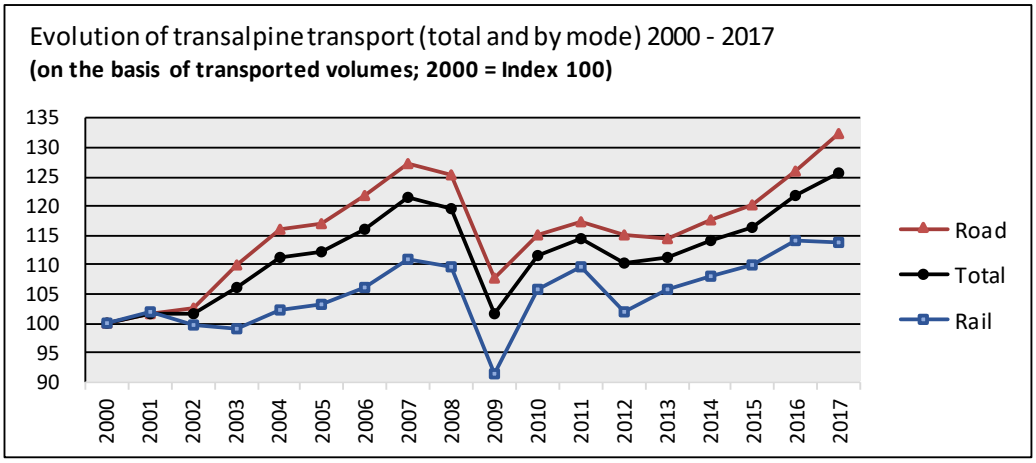
SIGMAPLAN Interface Transport WALTER FUSSEIS TRT

Key findings

- In 2017, the amount of goods carried across the Alps reached a new record of 216.2 million tonnes, 3.3% more than in 2016.
- The number of heavy goods vehicles (HGV) crossing the Alps by road has also reached a new record level at 10.9 million, +4.3% more than in 2016. They carried a total of 145.9 million tonnes of goods (+4.9% compared with 2016) across the Alps. While the number of HGV crossing the Swiss Alps fell by -2.1% (to about 950'000 HGV, a new record low in the past 20 years), it grew by +3.7% in France and by +5.5% in Austria. For the first time, more than 7 million HGV crossed the Austrian Alps, 2.3 million of which on the Brenner alone.
- 70.2 million tonnes of goods were carried by rail across the Alps in 2017, almost the same amount as in 2016. Rail volumes decreased significantly in Switzerland (-5.3%) but increased in Austria (+3.4%) and presumably also in France (no comparison possible due to change in data source). The decrease in Switzerland is mainly due to temporary closures of some main access routes (the Rhine valley line near Rastatt during 50 days in August and September and the Luino line during half a year from June till December 2017).
- Overall, the share of rail in all transalpine traffic fell to 32.5% - only in 2009 was it slightly lower. In Switzerland it fell to 69.9% (after the record level of 71% in 2016). In Austria, the share of rail fell for the first time below 30% (29.8%) while it was stable in France (7.7%).
- Switzerland's share in total transalpine traffic decreased to 18%, the lowest level since 2003 while Austria's share reached a record level of 61.6% (France's share remained more or less constant at 20.4%). This suggests that some traffic has shifted from Switzerland to Austria.

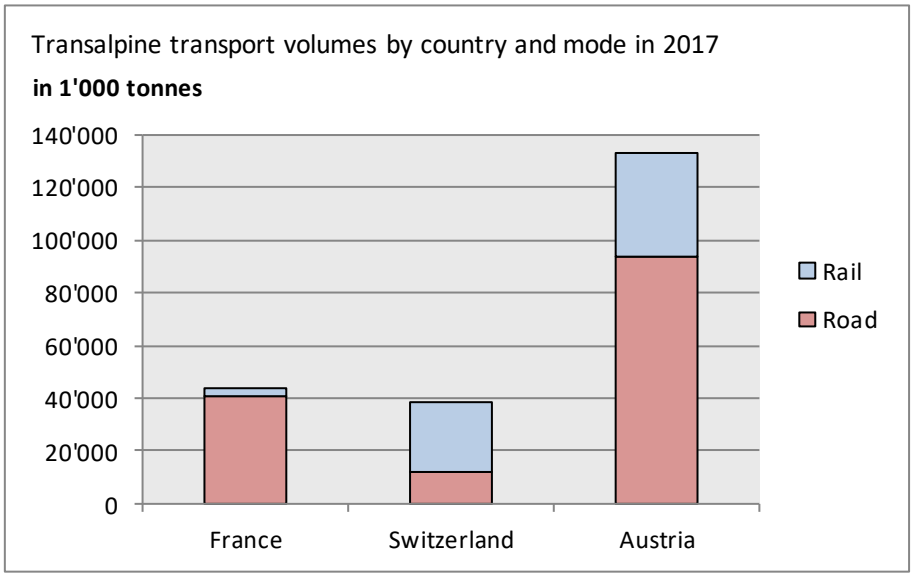
1 Transport volume

Overall, transalpine[1] freight transport volumes rose from 209.4 million tonnes in 2016 to 216.2 million tonnes in 2017 (+3.2%). The amount of freight transported across the Alps thus reached a new record level. More than two thirds (67.5%) of this amount was carried by road. The 145.9 million tonnes represent a new record level, +4.9% more than the previous record in 2007 (before the economic crisis). The remaining 32.5%, or 70.2 million tonnes of freight, were carried by rail, which is slightly below the record value of 2016.



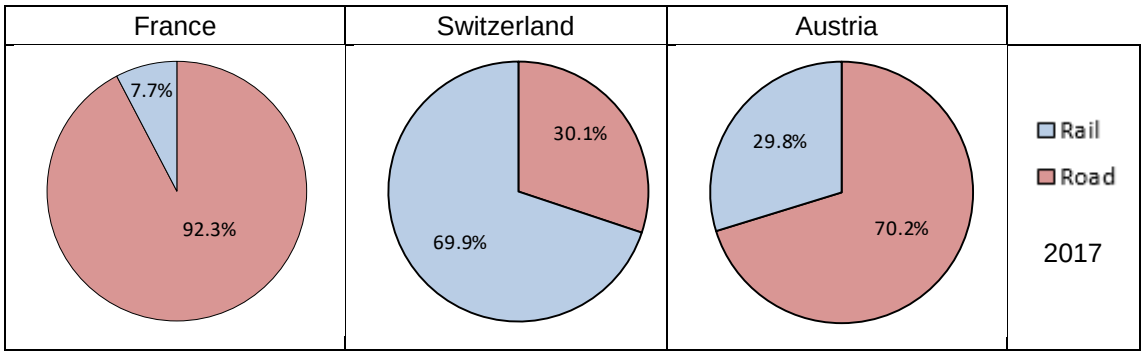
[1] This report covers a total of 16 Alpine crossings between Ventimiglia at the French-Italian border on the Mediterranean coast in the south and the Wechsel crossing between Styria and Lower Austria in the east.

The large majority of freight crossed the Alps in Austria (133.2 million tonnes or 62% of the total transport volume). France assumed an amount of 44.1 million tonnes and Switzerland one of 38.9 million tonnes; 20% and 18% respectively). The share of Switzerland was around one percentage point lower than in 2016 and the lowest since 2003. By contrast, the share of Austria was around one percentage point higher than in 2016 and the highest ever. This suggests that some transalpine traffic has shifted from Switzerland to Austria. This development may partly be explained by the closures of some important rail access lines on the Swiss side and the increase in the Swiss heavy vehicle fee at the beginning of 2017.



2 Modal share

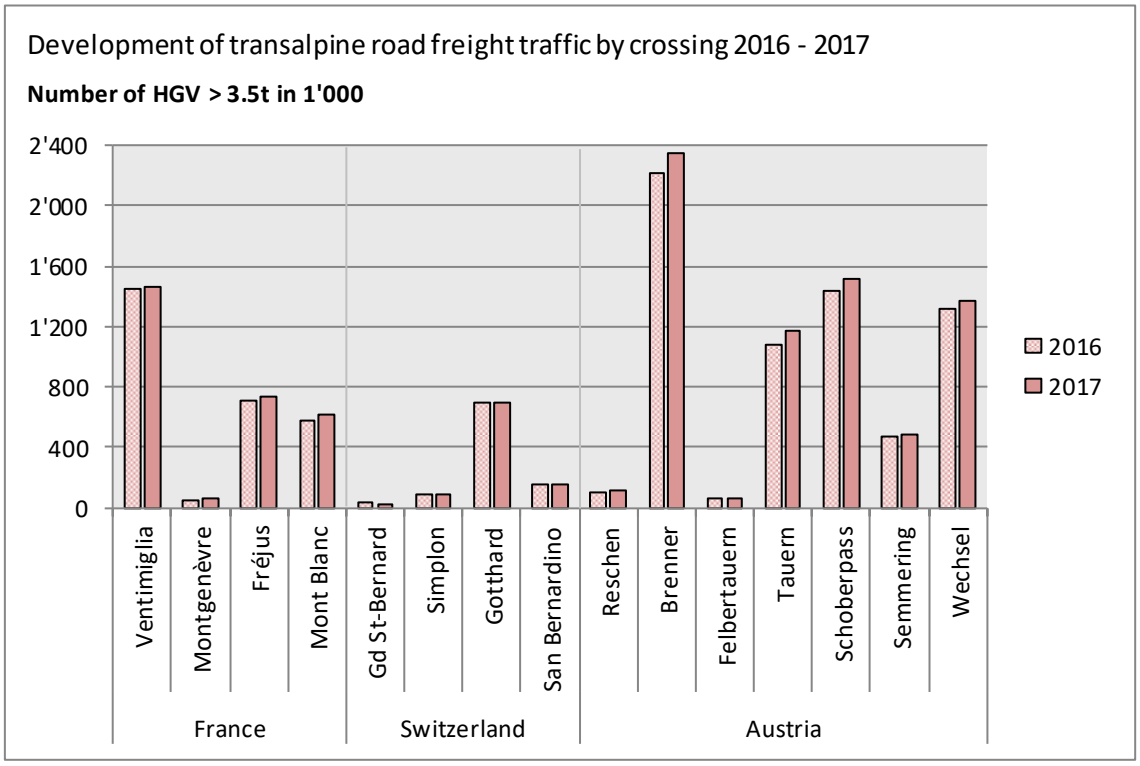
In 2017, the modal share of rail on the whole Alpine arc decreased slightly to 32.5% (after 33.6% in the previous year). Only in 2009 was the share of rail slightly lower (at 32.2%). This is primarily the result of the restricted availability of the rail infrastructure on the access lines to the Swiss Alpine crossings. However, there are big differences between the three countries: in Switzerland, the modal share of rail fell to slightly less than 70% (after the record value of 71% in 2016), in Austria it was for the first time below 30% and in France it only accounted for close to 8% (similar to 2016) of all goods carried across the Alps.



3 Road

In 2017, 145.9 million tonnes of goods were transported by road across the Alps, +4.9% more than in 2016. Road transport volumes increased in Austria (+6.1%) and in France (+3.9%), but hardly changed in Switzerland (-0.2%) despite the disturbances on the rail infrastructure. The distribution across the different countries was as follows: Austria 64%, France 28% and Switzerland 8%.

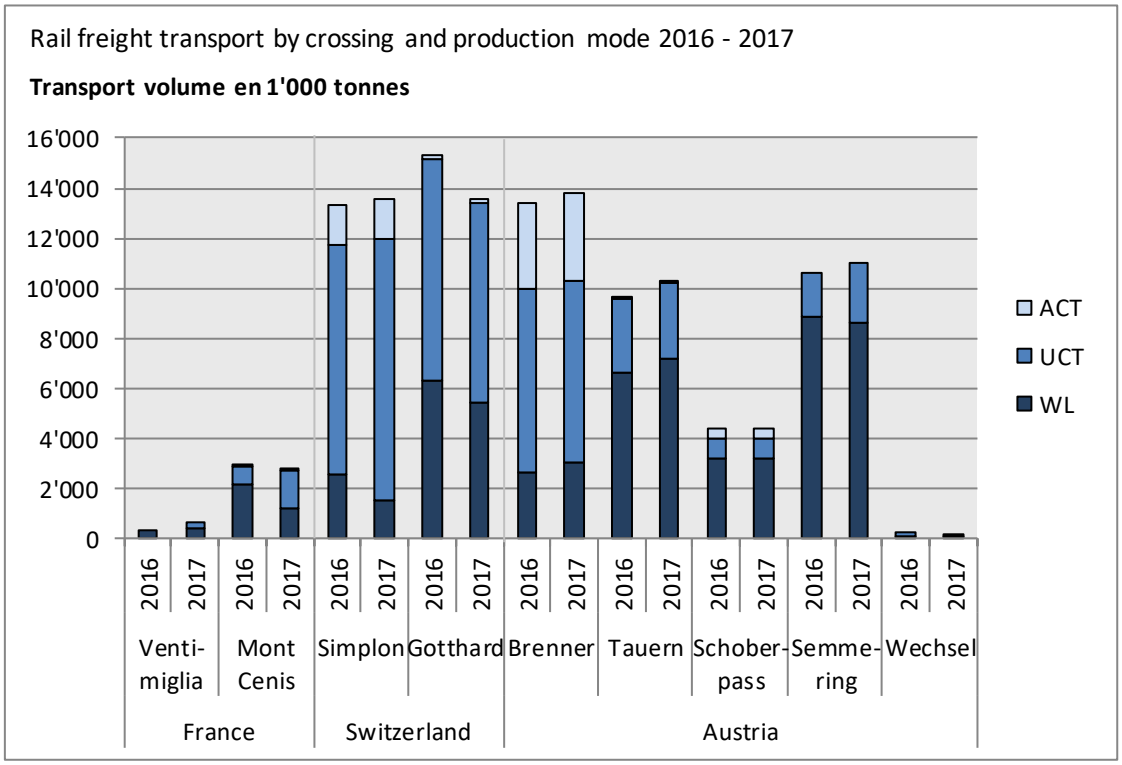
The total number of heavy goods vehicles (HGV) crossing the Alps increased in 2017 by +4.3% and reached a new record of 10.9 million HGV. The number of HGV was +5.5% higher in Austria and +3.7% higher in France, while in Switzerland it decreased by -2.1%. The number of HGV crossing the Alps in Switzerland fell to about 950'000 HGV in 2017, the lowest level since the mid-1990s. For the first time, more than 7 million HGV crossed the Austrian Alps. The figure below shows the evolution of the number of HGV by crossing from 2016 to 2017.



Among the most important road crossings (share of HGV more than 4% of the total), only Gotthard saw a slight decrease (-0.4% fewer HGV). The range of growth rates of the other important crossings is between +3.5% (Semmering) and +8.1% (Mont Blanc). The strong increase on the Mont Blanc is partly due to the closure of the nearby Grand St. Bernard tunnel for most of the fourth quarter 2017. The Brenner remains by far the most important road crossing: 2.3 million HGV (21.5% of the total) used that crossing in 2017, +6.1% more than in 2016.

4 Rail

After the record of 70.3 million tonnes of goods that were carried by rail across the Alps in 2016, transalpine rail volumes decreased marginally by -0.1% in 2017. Switzerland was mostly affected by the restricted availability of rail infrastructure on important access lines which is why its transalpine rail volumes decreased by -5.3%. By contrast, the rail transport volumes increased in Austria (+3.4%) and presumably in France (no comparison with previous years possible due to change in data source). The distribution across the different countries was: Austria 56%, Switzerland 39% and France 5%. The figure below shows the transport volumes in 2016 and 2017 by crossing and by production mode: conventional wagon load (WL), unaccompanied combined transport (containers, semi-trailers, swap bodies, UCT) and accompanied combined transport (whole HGV with drivers, ACT).



The evolution of transport volumes by rail between 2016 and 2017 was rather heterogeneous. Lower volumes were recorded at the Mont Cenis and especially at the Gotthard (-11.4%) which was mostly affected by the difficulties on the access lines in the north (incident at Rastatt) and the south (works to build the "4-meter-corridor" on the Luino line). The latter was the main reason for the shift of reserved capacities for freight trains from the Gotthard to the Simplon crossing. All other important crossings show increasing transport volumes. In France, no comparison with the corresponding values of the previous year is possible due to a change of data source. The increase on the Austrian crossings almost compensated the losses in Switzerland.

Looking at all Alpine crossings, the different production modes evolved as follows: the volumes in unaccompanied combined transport (UCT) show a strong growth (+6.3%) while the volumes in conventional wagon load decreased by -6.1%. Transport volumes in accompanied combined transport (ACT) which account for only 8% of the total transalpine transport volume on rail did not change (-0.1%).

Transalpine traffic and transport data 2016 – 2017

		2016						
		Road		Rail				
				Total	WL	UCT	ACT	
		KHGV	Kt	Kt	Kt	Kt	Kt	KHGV
France	Ventimiglia	1'450.3	19'338.8	336.8	336.8	0.0		
	Montgenèvre	51.7	532.8					
	Fréjus/Mont Cenis	703.9	10'578.7	2'918.2	2'192.3	674.5	51.4	2.2
	Mont Blanc	574.8	8'736.1					
Total France		**2'780.7**	**39'186.3**	**3'254.9**	**2'529.0**	**674.5**	**51.4**	**2.2**
Switzerland	Gd St-Bernard	37.2	437.2					
	Simplon	89.1	1'087.4	13'353.1	2'572.0	9'166.9	1'614.2	93.5
	Gotthard	700.7	8'435.4	15'309.2	6'275.7	8'881.9	151.6	9.6
	San Bernardino	148.1	1'765.3					
Total Switzerland		**975.1**	**11'725.2**	**28'662.3**	**8'847.7**	**18'048.8**	**1'765.8**	**103.2**
Austria	Reschen	105.0	1'162.3					
	Brenner	2'209.9	33'484.7	13'402.1	2'619.2	7'334.6	3'448.3	157.0
	Felbertauern	59.7	664.9					
	Tauern	1'084.0	15'064.3	9'682.4	6'661.8	2'903.7	116.9	7.9
	Schoberpass	1'440.5	17'219.9	4'375.8	3'245.6	727.4	402.8	27.9
	Semmering	471.0	5'421.2	10'635.6	8'863.4	1'772.2		
	Wechsel	1'312.5	15'158.7	259.9	136.5	123.4		
Total Austria		**6'682.6**	**88'176.0**	**38'355.8**	**21'526.5**	**12'861.3**	**3'968.0**	**192.8**
Total 3 countries		**10'438.3**	**139'087.6**	**70'273.0**	**32'903.2**	**31'584.7**	**5'785.2**	**298.2**

		2017						
		Road		Rail				
				Total	WL	UCT	ACT	
		KHGV	Kt	Kt	Kt	Kt	Kt	KHGV
France	Ventimiglia	1'465.0	19'534.5	672.7	429.0	243.7		
	Montgenèvre	56.7	584.6					
	Fréjus/Mont Cenis	740.6	11'130.6	2'739.2	1'242.8	1'463.2	33.3	1.4
	Mont Blanc	621.5	9'445.5					
Total France		**2'883.8**	**40'695.3**	**3'411.9**	**1'671.8**	**1'706.8**	**33.3**	**1.4**
Switzerland	Gd St-Bernard	25.5	300.6					
	Simplon	80.7	984.5	13'588.9	1'563.8	10'381.1	1'643.9	100.2
	Gotthard	697.7	8'568.7	13'562.1	5'469.7	7'932.6	159.7	9.0
	San Bernardino	150.4	1'848.0					
Total Switzerland		**954.2**	**11'701.8**	**27'150.9**	**7'033.5**	**18'313.7**	**1'803.7**	**109.2**
Austria	Reschen	108.7	1'190.8					
	Brenner	2'344.0	35'617.3	13'809.8	3'079.5	7'242.1	3'488.2	159.5
	Felbertauern	62.1	691.6					
	Tauern	1'167.0	16'278.3	10'270.2	7'162.0	3'040.7	67.5	4.4
	Schoberpass	1'518.4	18'126.6	4'398.9	3'208.8	804.8	385.3	26.8
	Semmering	487.6	5'690.1	11'009.7	8'633.0	2'376.7		
	Wechsel	1'364.7	15'946.9	180.8	94.9	85.9		
Total Austria		**7'052.4**	**93'541.6**	**39'669.4**	**22'178.2**	**13'550.2**	**3'941.0**	**190.7**
Total 3 countries		**10'890.4**	**145'938.7**	**70'232.2**	**30'883.5**	**33'570.8**	**5'777.9**	**301.4**

		Difference 2016/2017 in percent						
		Road		Rail				
				Total	WL	UCT	ACT	
		KHGV	Kt	Kt	Kt	Kt	Kt	KHGV
France	Ventimiglia	+1.0%	+1.0%	---	---	---		
	Montgenèvre	+9.7%	+9.7%					
	Fréjus/Mont Cenis	+5.2%	+5.2%	---	---	---	---	---
	Mont Blanc	+8.1%	+8.1%					
Total France		**+3.7%**	**+3.9%**	**---**	**---**	**---**	**---**	**---**
Switzerland	Gd St-Bernard	-31.3%	-31.2%					
	Simplon	-9.4%	-9.3%	1.8%	-39.2%	+13.2%	1.8%	+7.5%
	Gotthard	-0.4%	+1.6%	-11.4%	-12.8%	-10.7%	+5.4%	-6.5%
	San Bernardino	+1.5%	+4.7%					
Total Switzerland		**-2.1%**	**-0.2%**	**-5.3%**	**-20.5%**	**+1.5%**	**+2.1%**	**+6.2%**
Austria	Reschen	+3.5%	+2.5%					
	Brenner	+6.1%	+6.4%	+3.0%	+17.6%	-1.3%	+1.2%	+1.6%
	Felbertauern	+4.0%	+4.0%					
	Tauern	+7.7%	+8.1%	+6.1%	+7.5%	+4.7%	-42.3%	-44.3%
	Schoberpass	+5.4%	+5.3%	+0.5%	-1.1%	+10.6%	-4.3%	-3.9%
	Semmering	+3.5%	+5.0%	+3.5%	-2.6%	+34.1%		
	Wechsel	+4.0%	+5.2%	-30.4%	-30.5%	-30.4%		
Total Austria		**+5.5%**	**+6.1%**	**+3.4%**	**+3.0%**	**+5.4%**	**-0.7%**	**-1.1%**
Total 3 countries		**+4.3%**	**+4.9%**	**-0.1%**	**-6.1%**	**+6.3%**	**-0.1%**	**+1.2%**

Abbreviations:

KHGV	1000 heavy goods vehicles
Kt	1000 tonnes
WL	conventional wagon load transport
UCT	unaccompanied combined transport
ACT	accompanied combined transport (rolling motorway)

Data sources:

France: Road data: ATMB, SFTRF, MEEDDAT and Autostrada dei Fiori (Italy)
Road data processing for Montgenèvre: SOeS
Rail data: RFI (Italy)

Switzerland: Road and rail data: Federal Office of Transport (FOT), Matthias Wagner

Austria: Road data: ASFINAG and government of Tyrol
Rail data: ÖBB (data processing: BMVIT, Reinhard Koller)

Notes:

Swiss data are not yet definitive and might slightly change.

Due to the change of data source, the comparison of French rail data of 2017 and 2016 is not significant enough to be displayed.