

GRUNDLAGEN

---

# Schweizerische Verkehrsperspektiven 2050

---

Schlussbericht

16. November 2021



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

**Bundesamt für Raumentwicklung ARE**  
**Office fédéral du développement territorial ARE**  
**Ufficio federale dello sviluppo territoriale ARE**  
**Uffizi federal da svilup dal territori ARE**

## IMPRESSUM

---

### Herausgeber

Bundesamt für Raumentwicklung (ARE)

### Auftraggeber

Bundesämter für Raumentwicklung (ARE), Strassen (ASTRA),  
Verkehr (BAV), Umwelt (BAFU) und Energie (BFE)

### Autoren dieser Publikation

Andreas Justen, PL (ARE)

Raphaël Lamotte, Stv. PL (ARE)

Nicole Mathys (ARE)

Christian Schiller (Berater ARE)

Jörg Jermann, PL (Rapp)

Florian Harder, Stv. PL (Rapp)

Christopher Heath (Rapp)

Stefan Angliker (Rapp)

Oliver Buschor (Rapp)

Michael Hoser (Rapp)

Jörg Uhlig (PTV)

Jens Landmann (PTV)

Birgit Dugge (PTV)

Christian Weiß (PTV)

Martin Eichler (BAK)

Balz Bodenmann (Strittmatter Partner)

Pascal Bürki (Strittmatter Partner)

Susanne Täschler (Strittmatter Partner)

Hans-Paul Kienzler (Prognos)

Alex Auf der Maur (Prognos)

Andreas Brutsche (Prognos)

### Projektoberleitung

Ulrich Seewer (ARE, Vorsitz)

Paul Steffen (BAFU)

Erwin Wieland (ASTRA)

Anna Barbara Remund (BAV)

Pascal Previdoli (BFE)

Marcel Buffat (GS-UVEK)

### Fach- und Begleitgruppe Bundesämter

Martin Tschopp (ARE)

Jean-Luc Poffet (ASTRA)

Andreas Catillaz (BAFU)

Harald Jenk (BAFU)

Max Schulthess (BAZL)

Maik Hömke (ASTRA)

Lisa Wildi (BK)

Martin Babst (BFE)

Sébastien Pearron (BAV)

Eliane Forster (BAZL)

Marc Zahner (SECO)

Mark Reinhard (BFS)

Marionna Lutz (BAV), ab 1.4.21

Wolf-Dieter Deuschle (BAV), bis 31.3.21

Christine Rohn (BAKOM)

Manuel Widmer (EFV)

Matthias Wagner (BAV)

Franziska Borer Blindenbacher (ARE)

### Produktion

Rudolf Menzi, Leiter Kommunikation ARE

### Bezugsquellen

Elektronische Version: [www.are.admin.ch/verkehrsperspektiven](http://www.are.admin.ch/verkehrsperspektiven)

---

## Summary

Transport use will continue to grow in the future, according to DETEC's Transport Outlook 2050, but at a slower rate than the population. In Transport Outlook 2050's 'Basis' scenario, travel volumes (in person-kilometres) will increase by only 11 per cent by 2050 compared to the reference year 2017, while the population is expected to grow by 21 per cent. This development is mainly due to the impact that various social and economic trends will have on mobility. According to the Basis scenario, the trend towards working from home will continue. This in turn will lead to a fall in commuter trips. In addition, the ageing of the population is leading to a fall in the proportion of people in employment, which in turn means that there will be fewer trips to and from the workplace. Spatial development will also have an influence on transport, as more densely populated areas have recreational and shopping opportunities close by.

The results of the Basis scenario follow the assumption that the transport and spatial planning strategy decided by the Federal Council in "Mobility and Space 2050" will be consistently implemented. This includes measures such as inward urban development in locations that are well connected to public transport. In addition, the Basis scenario assumes that transport policy measures will be introduced, such as the increased internalisation of external costs from 2035 onwards. Under these conditions, the modal share of public transport (in terms of person-kilometres) will increase from 21 to 24 per cent in the Basis scenario, while the share for cycling will double. The modal share of the car remains significant, but falls from 73 to 68 per cent.

Social and economic trends also have an impact on freight transport. Under the Basis scenario it rises significantly by 31 per cent, but not as strongly as economic development and the corresponding increase of 57 per cent in GDP. Decarbonisation and increasing electromobility mean that in future less fuel and heating oil will be imported. Freight also increasingly consists of small loads, and less of bulk cargo. The rise of online retail will lead to an increase in delivery van trips. Increased bundling of goods at transloading points favours rail transport, for example of general cargo. Overall, goods are increasingly transported by rail; with the share rising from 37 to 39 per cent.

**The four scenarios:** The Basis scenario is based on the principles of "Mobility and Space 2050", the sectoral plan for transport, program part, and thus reflects a development towards resource-efficient mobility of people and goods. The other three scenarios are alternative development paths. All scenarios are based on different assumptions, such as how quickly environmentally friendly technologies become established. The Business-as-Usual (BAU) scenario envisages proceeding as now within the current regulative framework, with little change. The two scenarios Individualised Society and Sustainable Society assume that transport is strongly impacted by technical innovations, such as the automation of passenger vehicles.

An overview of the available results of the transport outlook 2050 is provided in the document «VP-2050\_Datenbezug», which is available on the project website.

<b>Zusammenfassung</b>	<b>II</b>
<b>Résumé</b>	<b>III</b>
<b>Riassunto</b>	<b>IV</b>
<b>Summary</b>	<b>V</b>
<b>Teil A: (Hauptbericht)</b>	<b>8</b>
<b>1. Einleitung</b>	<b>8</b>
1.1. Ausgangslage	8
1.2. Abgrenzungen	8
1.3. Wirkungszusammenhänge	9
1.4. Methodisches Vorgehen	11
<b>2. Retrospektive Entwicklung</b>	<b>14</b>
2.1. Sozioökonomie	14
2.2. Raumentwicklung	17
2.3. Güterverkehr	24
2.4. Personenverkehr	37
2.5. Synthese Retrospektive Entwicklung	46
2.6. Vergleich VP 2040 mit 2010-2018	46
2.7. Umgang mit Covid-19	56
<b>3. Prospektive Entwicklung</b>	<b>57</b>
3.1. Sozioökonomie	58
3.2. Raumentwicklung	63
3.3. Güterverkehr	65
3.4. Personenverkehr	70
3.5. Synthese Prospektive Entwicklung	78
<b>4. Szenarien</b>	<b>79</b>
4.1. Bildung der Szenarien	80
4.2. Gemeinsamkeiten aller Szenarien	80
4.3. Ausrichtung der Szenarien	81
4.4. Bildung der Stellgrößen	87
4.5. Stellgrößen über alle Szenarien	103
<b>5. Resultate und Einordnung der Ergebnisse</b>	<b>128</b>
5.1. Überblick	128
5.2. Szenario WWB	131
5.3. Szenario BASIS	153
5.4. Szenario NTG	175
5.5. Szenario ITG	197
5.6. Ergebnisse der Szenarien im Vergleich	219

---

<b>Teil B: Technische Ausführung</b>	<b>223</b>
<b>6. Modelle &amp; Annahmen</b>	<b>223</b>
6.1. Vorgehen Modellierung	223
6.2. Raumentwicklung	226
6.3. Güterverkehr	233
6.4. Personenverkehr	242
6.5. Parameterbildung für die Modellierung	257
<b>Literaturverzeichnis</b>	<b>270</b>
<b>Anhang</b>	<b>276</b>

---