

New Road Transport Hall and Arena for the 50th anniversary of the Swiss Museum of Transport



On 27 June 2009, the 50th birthday of the Swiss Museum of Transport, the new two-storey Road Transport Hall with a spectacular display store, an interactive car theatre, exciting theme islands and a display workshop will be officially opened to the public. At the same time, the redesigned multifunctional open-air arena with children's traffic training area and roadbuilding arena will also be opened. And of course there will also be birthday celebrations appropriate to the occasion. These are just some of the exciting attractions and events awaiting visitors at the Swiss Museum of Transport in its anniversary year!

A dazzling display of traffic signs – 344 in all!

The facade of the new Road Transport Hall is just as eye-catchingly unique as that of the FutureCom entrance building – little wonder, they were both designed by Zurich architects Gigon/Guyer. All four sides of the hall – an area of some 1,600 m² – are brightly adorned with road signs, a total of 344 from all regions of Switzerland. Each face of the facade is dedicated to a specific type of sign – motorway, A-road and urban road signs and a neutral rear wall. The west facade facing the new arena is hence blue, the south facade green and the north facade white. A solar energy system has been installed on the roof of the hall, with an area of 290 m² and 192 high-performance modules. Once it is fully up and running the system will generate 41,000 kWh of electricity annually, corresponding to the consumption of approximately ten 4-person households.

The two-storey hall with an exhibition area of roughly 2,000 m² comprises a display store, an interactive car theatre, a diverse range of individually designed theme islands covering topics such as safety, commercial traffic, car & work, changing visions and more, and a display workshop.

Exhibition highlights

Display store – a high-bay warehouse packed with artefacts

The addition of the display store – an automated high-bay storeroom with a robotized parking system – is a fascinating and highly attractive addition to the national collection of means of transport. Some 80 artefacts dated between 1860 and 2005 on 42 pallets are stacked from floor to ceiling, from horse carriages to bicycles to automobiles. The upper bays provide insights into the entire spectrum of road transport, with special focus on Swiss developments. Lower down, the display store presents 20 of the world-wide most significant car designs.

(Presenting Partner: AMAG Automobil und Motoren AG)

Car theatre – the visitor-operated presentation system

The car theatre is a novel interactive show area with an elevated visitor gallery. Museum visitors operate a red button to select the vehicle they want to see, and the robotized system conveys the technological masterpiece onto a turntable for closer inspection. The car can then be viewed from every angle, and the details are highlighted in an entertaining and informative manner. The car theatre

uses modern technology to communicate the history and some anecdotes of the vehicles. In computer terms one could designate the new Road Transport Hall as “RTH v2.0”!
(Presenting Partner: Migros-Genossenschafts-Bund)

Theme islands

Crash test – what does a collision feel like?

The “driver” and passengers (up to four persons) sit in a VW Golf with a safety cage; the car is then accelerated down a runway and brought to an abrupt halt. Of course nobody is injured, and the car remains undamaged. The ride simulates a collision at only 13 km/h – nevertheless it is a very impressive experience, and a “crash” that will shatter any illusions that back-seat belts are an unnecessary luxury. A VW Golf that was wrecked in a 50 km/h frontal collision is suspended from the ceiling, as an illustration of the forces at work at higher speeds, and video sequences in super slow motion show impressive collisions at typical traffic speeds.
(Exhibition Partner: AXA Versicherungen AG)

Safety – people, vehicles and roads

Accident prevention as a success story. Three tracks – each with a table surface, media and play stations – converge to create a roof over the area, which also sports a small children’s merry-go-round. The theme island is designed to encourage adults to reflect on the topic of “safety”. Each track has a so-called aggressometer, a multitasking simulator and a self-assessment personality test that also allows visitors to evaluate their driving habits. The traffic engineer game provides insights into safety-related infrastructure elements.

Good vision is a vital prerequisite for good driving. Visitors can test their eyesight at four testing stations for distance, colour, close and stereo vision.

(Exhibition Partners: Swiss Council for Accident Prevention bfu, SOV Schweizer Optikverband, Algra AG)

Sensitive cars – sensors for safety

The third track on the “Safety” theme island is dedicated to vehicle technology. The most important sensors installed in a modern car are correctly positioned on 230 metal cables over a table area. The sensor networks combine to create the skeleton of a car, and a media station with monitors demonstrates just how these sensor networks combine in a car to enhance the safety of road users.
(Exhibition Partner: Bosch GmbH)

Commercial traffic and commercial vehicles – beneficial for all

This theme is presented on a platform created by a segmented trailer. A real-time film (the time in the film corresponds to museum time) shows a typical day in the life of a truck driver. A play area allows visitors to find out how well they could manoeuvre a heavy goods vehicle. Twenty booths present different aspects of goods traffic, and X-ray images of specialised trucks illustrate how specific design features meet the requirements posed by specific loads. As a further interesting feature, 17 hazardous-cargo symbols affixed to the back of the trailer are explained.

All aboard: climb into a new-generation MAN TGA semitrailer truck (Trucknology Generation A) and find out what it feels like to be in the cabin of a heavy goods vehicle. All-around vision is vital – through the windscreen and side windows, of course, but also via the many mirrors: main mirror, wide-angle mirror, ramp mirror and blind spot mirror. Clamber aboard and find out just how important these crucial vision aids are.

(Exhibition Partner: ASTAG, MAN (Schweiz) AG)

Changing visions – the development of individual mobility

Looking back in history can help us find our way in the present – and thus to shape a better future. Arranged on a timeline, 200 remarkable capsule chronicles provide an overview of the development of individual mobility. Cinema films, for example, show vastly differing visions of individual mobility. As a

concluding highlight, a large display window provides bold answers to the challenging question of how individual mobility could develop in the decades to come.
(Exhibition Partner: Credit Suisse)

Hybrid technology: the zero-emissions target

This island is dedicated to environmentally friendly mobility options. Progress in this field means harnessing state-of-the-art technologies such as hybrid propulsion, with the aim of crafting options for zero-impact mobility. To create a visual link to the natural world, the content of this theme island is presented on honeycomb structures. Incorporating significant aspects of energy recovery and reutilization, some of the solutions featured here are already in use. Each step in the product life cycle is explained, with illustrative descriptions of how the specific challenges were tackled and met.
(Exhibition Partner: Toyota (Schweiz) AG)

Electricity production – no mobility without energy

Arranged around the “ElectriCity” which depicts all types of electricity sources, for example water and wind, there is a resource pool with a media station providing all the relevant information for each source. A 4-lane track – reminiscent of a slot-car circuit – leads around and through the installation. The players collect points and thus electricity to power their cars by answering questions along the way. The questions focus on electricity and electricity generation. Wrong answers mean that the player’s power supply will swiftly decline and the vehicle will come to a halt: game over!
(Exhibition Partner: Axpo Holding AG)

Innovation and pleasure – fascination on wheels

The quest for excellence: innovative ideas have consistently shaped the over 100-year-old history of the motor vehicle. Fifteen fields of automobile innovation have been selected and highlighted in display frames. Each display outlines the quest for better results to meet the challenges of ever more complex needs and wishes. And as soon as an idea has been transformed into an innovative product, someone somewhere will be working hard to improve it.

The journey is the reward. Contemplating the innovative spirit that drives the world of automobile development, one wonders whether the end really justifies the cost and effort involved. To answer this question, the world’s 10 most impressive roads are presented on this theme island. The joy of driving the perfect car on the perfect road is the end that justifies the means! A walk-in Formula 1 box serves to illustrate the fascination surrounding this sport, and visitors can drive a few laps on a Formula 1 racetrack at a gaming station.
(Exhibition Partner: BMW (Schweiz) AG)

Cars and work – dexterity and brainpower

Career options in Switzerland’s automobile sector. Six plan chests are grouped around a body shell growing out of layered aluminium panels, with a key automobile-related profession portrayed in each of the drawers. These are the specialists who keep us mobile with their high-quality services. A self-test station allows visitors to weigh their inclinations against the demands posed by the various professions. In addition to the job descriptions, the drawers offer games that require and promote motor skills, and typical tools and auto parts. This theme island thus helps define the personal qualities required for a career in the automobile industry. For the youngest visitors, the island also sports a play garage area.

“Mechanics in Africa” conjures up images of talented tinkerers repairing cars with makeshift tools. But organisations such as Swisscontact provide significant help in ensuring that mechanics in developing countries receive qualified vocational training to enable them to work in modern dealerships. Three large-screen monitors present a comprehensive view of the life and training of motor mechanics in Benin – a window to another world.
(Exhibition Partner: AMAG, Swisscontact)

Electromobiles – mobility from a wall socket

A didactic 1:1 scale model of the Chevrolet Volt shows the energy storage and drive units of this electric vehicle. In contrast to a hybrid vehicle, the Volt is driven exclusively by an electric motor. The motor is powered by a battery that is charged from a home wall socket. A fully charged battery gives

the car a range of approximately 50 kilometres. In Switzerland, a large percentage of car trips are shorter than that, and if the trip is longer the vehicle's power management system automatically activates a generator powered by a petrol engine. A hydrogen-powered back-up unit is planned. Experiments with magnets and electric current help visitors understand how the electric drive system works.

(Exhibition Partner: Chevrolet (Schweiz) AG)

Mobilab – mobility of the future: heaven or hell?

Various installations take a look at the future of mobility. Two big, almost room-height fabric pipes with built-in projectors present artistic visions of mobility heaven and mobility hell. The "FutureFlipper" allows visitors to write texts on an LED tape that zigzags its way up to the hall ceiling. Media stations depicting three mobility epochs are positioned between the FutureFlipper and the LED tape; the stations offer snapshots of the future.

(Exhibition Partner: Touring Club Schweiz)

Matchbox lift – an interactive miniature display store

The 40 cylindrical display cases, each containing some 100 Matchbox model cars, travel along a monorail-like, computer-controlled conveying system. Visitors can use one of the touchscreens to select a display case for a close-up look at the models. This is possible thanks to a professional small-components conveying system as used in automobile production. A lift conveys the display case with the models to visitors' eye level. This spectacular miniature display store gives a broad public the opportunity to see a significant portion of one of Europe's largest and most complete collections of Matchbox models.

(Exhibition Partner: Montech AG)

Display workshop – showcasing the conservators

Thanks to the Swiss Museum of Transport, we can now follow the history of technical progress in a museum setting. Today, technological artefacts enjoy a status that is equal to that of other cultural assets. Our mission is to preserve the complex mobility-enabling machines and to restore them if and when required. Our motto in this context is "as much as necessary, as little as possible". The display workshop provides a close-up look at the work of the conservators.

(Presenting Partner: Motorex)

Arena / outdoor area

Road construction arena – build your own road

This unique play, learning and knowledge platform focuses on the various aspects of road construction. Using excavators and shovels, children can transport the various construction materials to their building site, repair roads or build paths. Spread over an area of 450 m², the road construction arena provides a look beneath the surface, and shows a range of road types in original size and as cross-sections.

Road construction means brainwork, too – students at the BFS technical school for traffic infrastructure engineering built the road construction arena under the supervision of specialists from Infra and its partners.

(Exhibition Partner: Infra, Fachverband der Schweizer Infrastrukturbauer)

Traffic garden – a playful approach to traffic rules

This is where children can get into a pedal cart, drive around a training track and have fun learning various traffic rules – the important road signs, the right-of-way rules and how to use a roundabout, for example – and that it pays to be a careful and considerate driver.

(Exhibition Partner: Touring Club Schweiz)

Cycle park – get on a bike and test it

Tandems, children's bicycles, electric, city, country and mountain bikes – the right Swiss cycle for every member of the family is ready for a test ride.

(Exhibition Partner: Rent a Bike AG)

Bus simulator – don't upset the passengers, though

Public buses are a comfortable way to get places. But a bus ride can be a jolting experience – it all depends on the driver. Heavy-footed accelerating and braking keeps passengers off balance and causes involuntary – and sometimes painful – physical contact. Standing passengers are well advised to keep a firm grip on a handhold. A former Zurich public transport bus has been converted into a simulator and now serves to demonstrate the hazards passengers should guard against when travelling in a bus.

(Exhibition Partner: Suva)

Visitors young and old will be delighted with the many other popular attractions on offer in the new outdoor arena, for example the new pool with model boats, the trucker game, the rotary disc and the micro scooters.

The fact that the Swiss Museum of Transport is able to offer visitors such a superb range of attractions can to no small extent be attributed to the generous support of the many private-sector partners, sponsors, donors and its many loyal members.

The Swiss Museum of Transport – an experience to be savoured in all its fascinating diversity!

Swiss Museum of Transport

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Train: S3 and Voralpen-Express: get off at "Luzern Verkehrshaus"
Boat: get off at "Verkehrshaus-Lido"

Open daily: Summer time: 10.00–18.00, winter time: 10.00–17.00

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