

The Uusimaa Road Region

75 years



FINNRA

1995

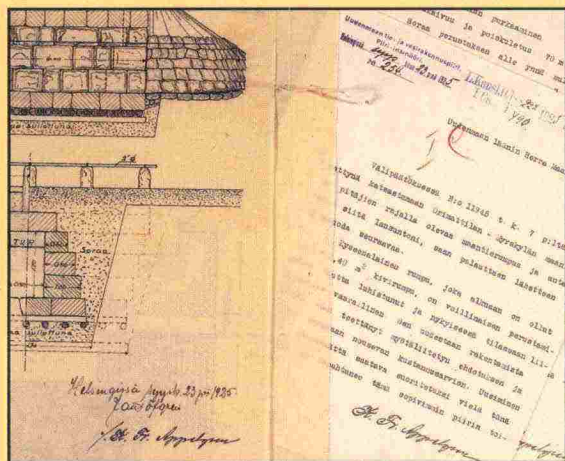
Where did it all start...

In the 16th century, Finland had some 4,000 kilometres of public roads. Road construction and maintenance was the responsibility of peasants. The governors of provinces, rural police chiefs and bridge bailiffs served as the local road authorities. The Kings of Sweden and their Councils issued road decrees, but centralized administration was not created until 1797. This administration, or the Royal Rapids Clearing Board, led by Field Marshal, Count Wilhelm Mauritz Klingsborg, was mainly responsible for the clearing of rapids and construction of mills for hydropower. Peasants were still required to maintain roads. When Finland was annexed to Russia after the war of 1808-1809, the Board continued its work under different names: the Board for Rapids Clearing and Canal Operations (1816-1840), the Board for Roads and Waterworks (1840-1860), and finally the Supreme Board for Roads and Waterways (1860-1925)

For the management and supervision of work, the country was divided into six regions: Oulu, Vaasa, Tampere (since 1869 Western Häme), Päijänne, Kuopio, and Saimaa. Each region was headed by a regional engineer. Most of Uusimaa



The 'real' Karl Fredrik Appelgren worked as the regional engineer in the Uusimaa Region, first temporarily from 1920 to 1925, and then on a permanent basis from 1925 to 1931.



Appelgren's cost estimates and plans for rebuilding a bridge and a culvert between Orimattila and Myrskylä in September 1925, when the regional engineer's post had already become permanent.

Province was originally included in the Päijänne Region, with the exception of some areas in western Uusimaa. In March 1920, a good two years after Finland became independent, the Ministry of Communications and Public Works ordered the Supreme Board for Roads and Waterways to make a proposal for the establishment of a temporary road department within the Supreme Board. This proposal also included the Uusimaa Region. The establishment of new regional offices took place rapidly, and the Supreme Board's proposal for a new regional division was ratified on 27 May 1920. The new regional division came into force provisionally in summer 1920. The Uusimaa Region also had a provisional status for nearly five years, until it was made permanent by a Decree issued on 26 February 1925.

The Council of State appointed Karl Fredrik Appelgren of the Kuopio Region as the first regional engineer of the Uusimaa Roads and Waterways Region on 25 June 1920. When Appelgren came to work in Uusimaa – first on a temporary basis – he could not even be provided with a proper office. Instead, an office room was furnished for Appelgren in his private home at 1 Viikonkatu street. Appelgren employed his wife as his secretary and, as of August, Mr. Ernst Nauckler as cashier. That's how it

Tales from the 1920s

In its letter of 30 April 1920, the Ministry of Communications and Public Works decreed that the State should be directly responsible for the roads and bridges that, owing to the importance, volume or weight of traffic or for some other reason, had been maintained by the Supreme Board for Roads and Waterways since 1918. The Uusimaa Province had five roads of this kind: the road from Pitäjänmäki to Vantaa, the road from Vanhakau-punki through Malmi to the church of Helsinki parish, the road from Tuusula village to Kerava railway station and to Hyrylä bar-racks, and the road from Järvenpää railway station to Kel-lokoski factory in Tuusula.

Maintenance work was thus initiated immediately once the Region had been established. Fairly soon it became clear that maintenance and construction had to be separated from each other. At the same time as the Uusimaa Region was granted a permanent status on 26 February 1925, the post of main-tenance supervisor was established within the Region. The



An awkward passing on a narrow road in Uusimaa in 1927. U-4188 is the numberplate of provincial maintenance supervisor Jarl Löfgren's official car.

man appointed to the post was Jarl Löfgren. When he came to work for the Region, Löfgren was a relatively young man, 29 years old, and he had received training from Appelgren himself. While working for the Supreme Board, Appelgren had also been a teacher at Helsinki Industrial School. The vehicle given to the new office-holder – who was also called the provincial maintenance supervisor – for his travels was a motorcycle with a sidecar. Because of its heavy use, the motorcycle tended to give trouble almost daily, and finally the provincial maintenance supervisor was provided with a real automobile, a Ford Runabout. The first road graders were acquired in 1926.

When the Uusimaa Region was established, there were about 2,500 motor vehicles in the whole of Finland. The number continued to rise year by year. The nation acquired gradually more wealth, and business, industry and

Grading and planing a gravel road in Uusimaa in 1927. Grader no. 17.

exports increased. And so did traffic volumes. To meet the demands of increased motor traffic in winter, snow ploughs were introduced onto the roads of Uusimaa at the same time as elsewhere in Finland, in 1927. The first roads that were cleared were those from Malmi to Mäntsälä and from Helsinki to the city limits of Vyborg. Experience gained over the following decades, and numerous improvements in design, transformed the mixed collection of snow-ploughing equipment into an effective tool for fighting slippery conditions, enabling traffic to keep moving throughout Finland even in the worst of winter weathers.

"Mr. Supervisor, has the Road Administration started to believe in God? Not to my knowledge, why? Well, it seems that the roads have been left in God's hands."

The Region is organized



Casting the ceiling of the main building for the Nummi station of Vihti maintenance area in 1937. There are as many men watching as there are working. Supervision is keen...

At the end of 1927, the Uusimaa Region was divided into four maintenance areas. In 1932, an order was given that the maintenance supervisors should reside in Tammissaari, Nurmijärvi, Porvoo and Orimattila.

The global Depression that had started with the Crash of 1929 also had repercussions for Finnish road maintenance. The Government of Finland gave the new regional engineer in Uusimaa, Otto Itkonen, the assignment of providing relief work for the unemployed. Government funds were low and workers were paid very little; for instance, the maintenance supervisors' wages were cut by 10 per cent. We can only imagine what would happen if such measures were taken today (in 1995)...

Despite the Depression, operations became more efficient. The first traffic count was taken, the horrendously dusty clay-gravel roads were treated with calcium chloride, and the offices of the maintenance supervisors were equipped with telephones and typewriters. In 1929, the Uusimaa Region employed 65 horsemen and 294 men on foot.

Towards the end of 1939, motor vehicles in Finland numbered some 52,000. More roads and bridges were needed. A short stretch of asphalt road between Helsinki and Espoo got its first 'traffic lines'. Already during the early years of Appelgren's career as regional engineer, the Region had hired a cartographer, Mr. P. Säilä, a master builder specialized in mapping, planning and drawing. Within the regional organization, Säilä was the initial cell which over the decades has grown into a planning sector giving work to dozens and dozens of people.

"For certain reasons, regional engineers are reminded that general maps for road plans must always be drawn so that north is upwards. 17 June 1932. National Board of Roads and Waterways. E.W. Skogström, K.J. Tolonen."

The 1930s and gravel roads

Before the outbreak of the war in 1939, the Uusimaa Region was directly responsible for the maintenance of 2,153 kilometres of road. At the same time, the National Road Administration listed 33,481 km of roads in its registers covering the whole country. Various paved and semi-paved roads had in fact been constructed constantly, but still the total length of paved roads in Finland at the end of the 1930s was no more than 319 kilometres, even when all wooden bridge decks were included in the figure. Uusimaa accounted for 52 kilometres of this. These figures do not include pavement laid by towns and cities.

A curiosity worth mentioning was a stretch of road covered with concrete slabs from the city limits of Hel-

sinki to Bemböle. It was probably fashioned after a German model. The road has been widened and covered with asphalt many times since, but one can still see the seams of the underlying concrete slabs, which tend to make the newer surface crack as a result of seasonal and temperature changes.

Roads had been improved by raising their load-bearing capacity, by straightening bends, by levelling steep hills, by increasing safety with railings, by building and reinforcing bridges, by installing traffic signs and by making both summer and winter maintenance more efficient. Construction standards had also become stricter. It is justified to call the 1930s the decade of gravel roads.



Nummi did not have a maintenance area of its own before the war. A substation in Saukkola was subordinate to the maintenance supervisor of Vihti. The work team of Nummi in 1937.

A loafer was watching the Region's workman digging hard with his shovel in a ditch. As he didn't find anything else to say, the loafer commanded: Throw farther!

War years, quiet on the home

Not a single construction or road improvement project was under way in Uusimaa during the war years. While a total of FIM 19 million was used for construction work in Finland, only 0.3 million of this trickled to areas outside the actual war zone.



Staff of the Uusimaa Region was evacuated in Saukkola during the Winter War. Seated at the front is regional engineer Otto Itkonen. People's faces reflect a "we'll be all right" spirit.

"It is not unimportant if a man working at a gravel pit holds a shovel that has only the handle and the socket left, or if a man hoeing the slope of the gravel pit uses his pick as if he were banging a cat's head against the wall..."



Some bridges and culverts were repaired in Uusimaa, but all operations were modest; only work that was impossible to put off was carried out. Municipal roads and village roads got no allowances at all; tiny sums of money were granted to northern Finland and to Vyborg Province.

In the 1930s, motor vehicle traffic wore down the surface of gravel roads supervised by rural police chiefs. People started to call the resulting ribbed pattern "the police chief's curls" because it resembled the then fashionable slightly wavy hairdo...

Waterways and bridges



A cantilever bridge of reinforced concrete in Elimäki in 1926. New and strong.

Culverts and lightweight bridges that had withstood the strains of horses and carriages without the slightest problem were subject to excessive stress from the early 1920s onwards. The numbers and speeds of motor vehicles increased and their weights rose. This was too much. Bridges collapsed from time to time, and had to be rebuilt. In western Uusimaa, 27 culverts were under construction simultaneously. At the same time, bigger bridges were being built in Tenhola, Inkoo, Degerby and Siuntio and in some of the northern parishes. Of course, bridge work continued in the eastern parts of the province, too.



During the early years of the National Road Administration, waterways accounted for a considerable portion of all operations. Waterways were more important transport routes than roads. There were not many waterway surveys in Uusimaa, but the construction of ports on the coast proceeded rapidly. The port of Hanko was expanded in 1924-29, and Degerö canal in the rural municipality of Helsinki and Jomalvik canal near Tammisaari were completed in the 1930s. A project to deepen the channel through the archipelago from Helsinki to Hanko started in the early 1940s.

Degerö canal in 1994.

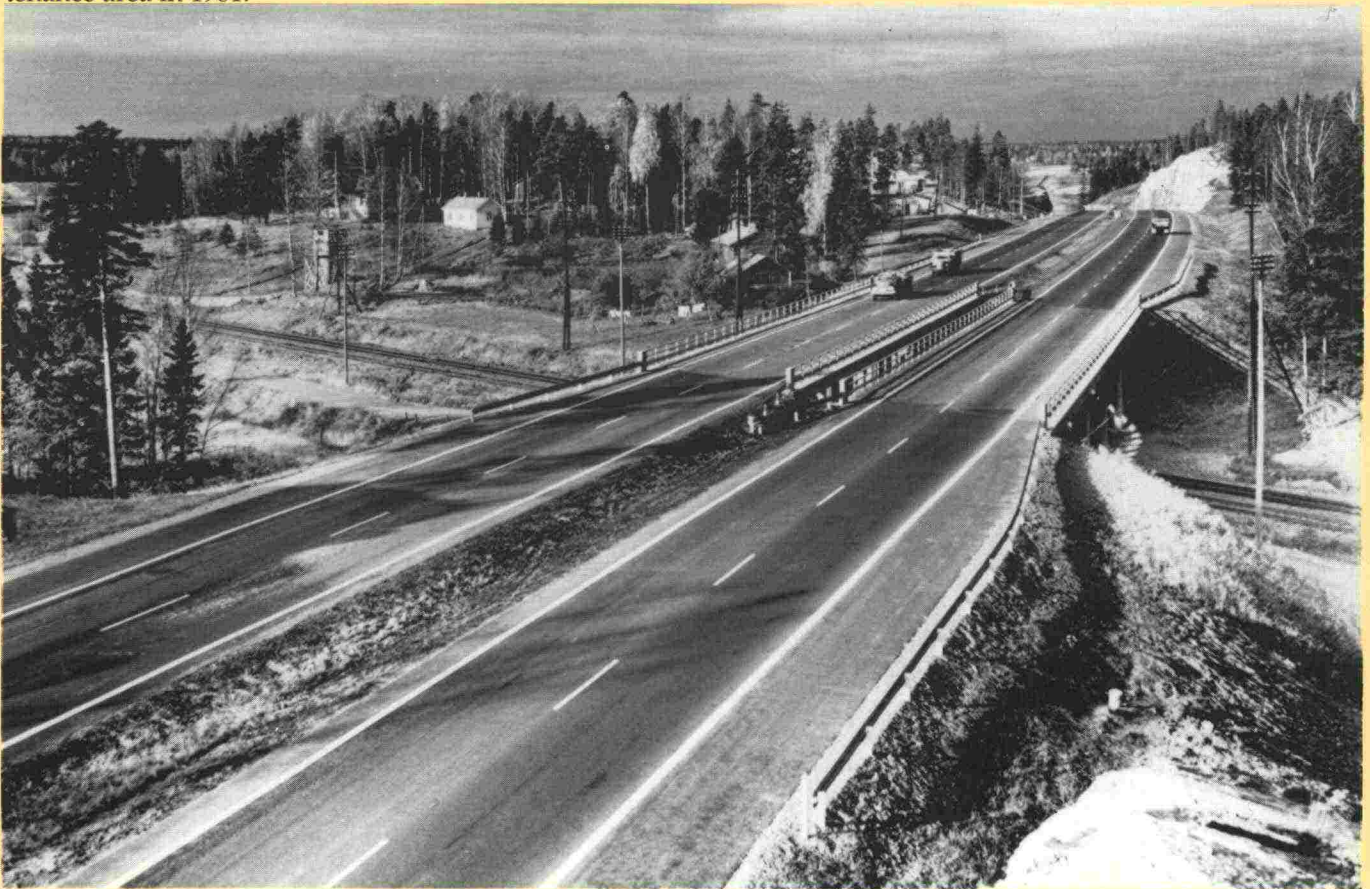


At the turn of the century, workdays were 10 hours long, with the exception of Saturdays and holiday eves when they were 9 hours long. Working time could be shortened during the dark season.

Peaceful times

After peace had been made, roadwork in all but the destroyed areas of Lapland started slowly. The war reparation industry began to gain impetus, people pulled together – at least most of the time – and life slowly returned to normal. Conditions at roadwork sites also improved. Snow ploughing techniques advanced. Road-sides were marked to facilitate snow ploughing, packed snow on roads was levelled and sanding became more efficient. Salt was first used for de-icing in 1955. Roads that had previously been maintained by provincial governments were given to the Board of Roads and Waterways for maintenance in 1948. At the same time, road maintenance areas were reorganized. Mäntsälä maintenance area was founded in 1948, Hyvinkää in 1950, Nummi in 1955, Kirkkonummi, Mustio, Myrskylä and Sipoo in 1957, and Helsinki – nowadays Vantaa – maintenance area in 1961.

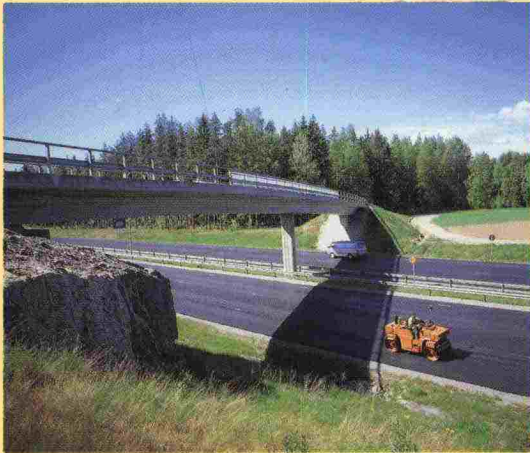
The 1950s and '60s were a period of major road projects in Uusimaa. A new road to Lahti was constructed in 1955-56. Besides planning and construction, the project also included a great amount of paving work. Many lessons were learned. When it was decided that a wide motorway should also be constructed from Helsinki towards Turku, and practical work on the project (known as Tarvontie) was started in 1957, the National Road Administration and the Uusimaa Region had already gathered abundant experience of such work. A motorway was naturally something totally new in Finland, and great amazement arose when the first stretch of Tarvontie was opened to the public in 1961. Since speed limits were not applied as widely as today, many drivers tested the ultimate speed of their cars on the newly completed section of Tarvontie.



Newly completed Tarvontie (now Main Road 1) about 2 km from Bemböle.

In 1916, a master builder or a canal employee hired by the Road Administration could receive free treatment at a Finnish spa, if his application addressed to the Board was supported by the regional engineer or the canal chief.

History and modern times



The new Tuusula motorway near Hyrylä in 1994.

Predictions made in the 1950s about the rise in the number of motor vehicles on Finnish roads were perfectly accurate. At the end of the '60s, there were over 800,000 cars and by 1979, well over a million. The 1960s were a period of road improvement and pavement. In 1967, Uusimaa had over 1,000 km of roads with asphalt-type pavement and 450 km of roads with oil gravel pavement. Major road construction projects also continued. A new section of the



Protecting groundwater against salt and other chemicals in Pernaja in 1994 (Main Road 7).

Lahti motorway, between Tattariharju and Järvenpää, was begun in 1971. The Jorvas road was completed and the road between Helsinki and Turku was renovated. Another major construction project, the 100-kilometre-long motorway between Helsinki and Hämeenlinna (Main Road 3) was completed in 1992.

The basic maintenance measures of snow ploughing and salting have developed immensely since the 'old days'. Use of a salt solution is so far the least harmful method for the environment and can be applied locally, rapidly and in advance to prevent skidding. The Uusimaa Region pays increasing attention to both road environment and traffic safety issues. Cooperation with other authorities and interest groups is extensive. At an early stage when new roads are being planned, the opinions of municipalities and local residents are heard in order to find a solution that satisfies all parties.



Noise barrier by the Tuusula motorway, as seen by residents in 1994.

Improvement of the Länsiväylä motorway and widening of Ring Road III into a motorway are the Uusimaa Region's biggest projects in the 1990s. And the road E-18 from Turku to St Petersburg will no doubt be under work at the turn of the century.

Whether new projects or improvement of existing structures, the environment – people and nature – are always considered. Various landscaping measures, such as planting of trees and shrubs, noise barriers and embankments, protection of groundwater from salt and other chemicals, and construction of bypasses around built-in areas, take people's safety and comfort as well as the conservation of nature into account, in the best possible way.

Eino Hiltunen, a man with a long working history in the Uusimaa Region, now retired:
*"No way, boys; the present generation doesn't know a thing about recession.
In my view, it's only a series of irregularities in accounting."*

The Uusimaa Region today and in the future

One out of four Finns live in Uusimaa, and one out of five in the Helsinki area. Four out of five kilometres of roads in Uusimaa have been paved, and all the main roads from Helsinki have four lanes for at least the first ten kilometres. All of Ring Road I and most of Ring Road III also have four lanes. Plans for Ring Road II have been completed for its western section.



responsible for steering the vehicle. Traffic will flow more smoothly and will be safer than today. Environmental damage will have been minimized and sustainable development will have been ensured.

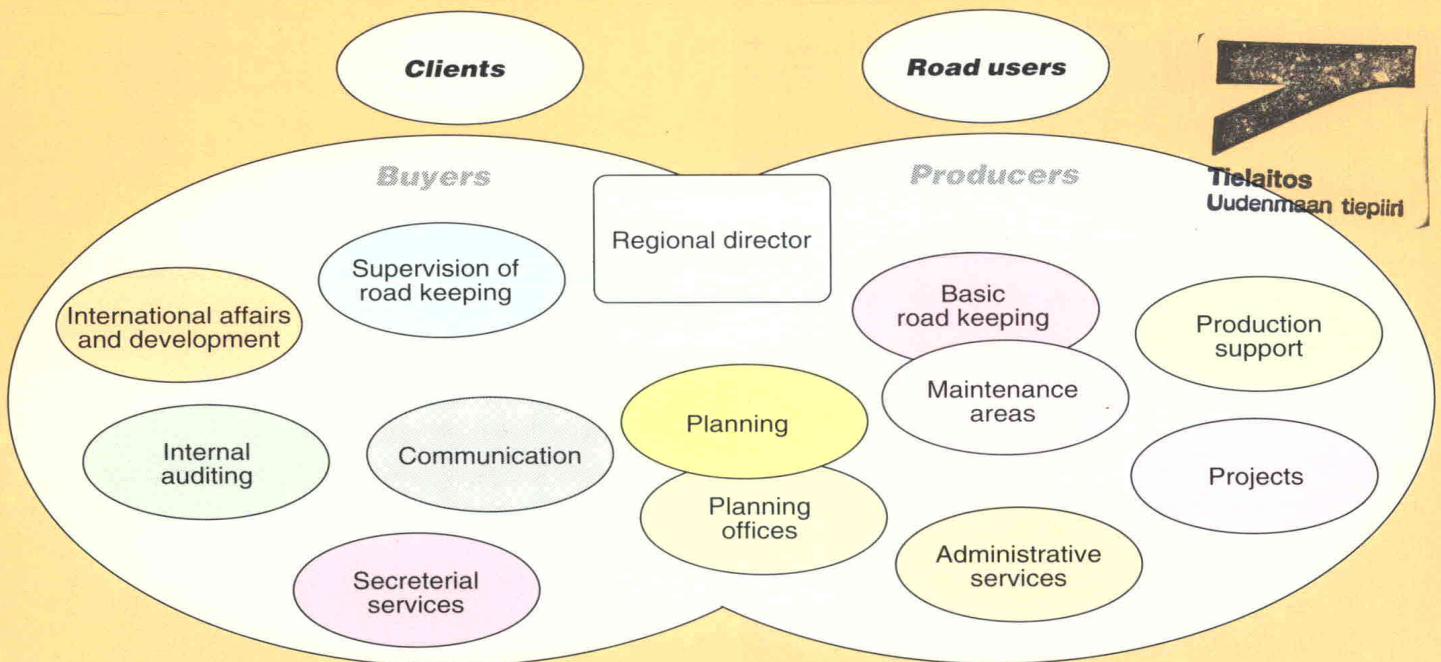
In 25 years, commuter traffic will utilize public transport more often than today. The metro and rail traffic will also be extended widely to Espoo and Vantaa.

During the next quarter of a century, more motorways will be built; this means that all the main roads will become motorways by the 100th anniversary of the Uusimaa Region. All roads will be paved. Traffic on the main roads will be controlled through automatic control systems; an automatic system may even be partly

As a body purchasing/commissioning services, the Region will operate efficiently on less resources. All physical work will be subject to competitive tendering. There will be no lack of new challenges.

Jouko Alen

Uusimaa Region 1995



An old farmer was stuck with his horse and carriage on an unsupervised railway crossing. The train was approaching and gave a shrill whistle. The farmer encouraged his horse: "No need to worry. It's the scared one that screams."



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