

Investment mapping

THE GOTHENBURG REGION UP TO 2035





Summary

The Gothenburg region is growing. In 2035, the region may potentially be home to 1.3 million inhabitants, an increase of a quarter of a million compared with today. Many people choose to move to the Gothenburg region, both from the surrounding area and from other countries, new companies are being established and ever more tourists choose to visit the region. All in all, this growth leads to large investments – new districts arise, primarily in the cities and suburban municipalities, and accessibility in the region is improved through the expansion of transport infrastructure. In other words, the Gothenburg region is on the verge of – and has indeed already begun implementing – substantial investments in both infrastructure and urban development in the form of new housing, business premises and commercial properties.

Business Region Göteborg (BRG) works to create the conditions to attract new business establishments, investments and competence to the Gothenburg region. To support this work, BRG has assigned Sweco to produce a map of investment volumes planned for the region up to 2035, and to describe a number of the large investments planned and when these are projected to be executed. In addition, the assignment is intended to describe any bottleneck problems that may arise as a consequence of the investments. The mapping is concentrated on the following areas: housing, infrastructure/logistics, retail, business, and public investments within healthcare and education. Sweco has gathered information from a large number of actors, both public and private, and has analysed this data to make estimates and assessments regarding investment volumes up to 2035. To support the analysis, we have also produced a population forecast for the entire Gothenburg region.

Our overall assessment is that the total investment volume in the Gothenburg region during the coming 20-year period will be in the range of **SEK 800 – 1,000 billion**, translating to an annual value of **SEK 40 – 50 billion**. The largest volume is seen in the construction of housing, followed by infrastructure/logistics and industrial investments.

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Background

The Gothenburg region is growing. Many people choose to move to the Gothenburg region, both from the surrounding area and from other countries, new companies are being established and ever more tourists choose to visit the region. All in all, this growth leads to large investments – new districts arise, primarily in the cities and suburban municipalities, and accessibility in the region is improved through the expansion of transport infrastructure. In other words, the Gothenburg region is on the verge of – and has indeed already begun implementing – substantial investments in both infrastructure and urban development in the form of new housing, business premises and commercial properties.

Business Region Göteborg (BRG) works to create the conditions to attract new business establishments, investments and competence to the Gothenburg region. We do this by working pre-emptively with the processes that facilitate establishment and investment, and by working proactively to market and attract new establishments to the region within selected fields.

To support this work, BRG has assigned Sweco to produce a map of investment volumes planned for the region up to 2035, and to describe a number of the large investments planned and when these are projected to be executed.

The mapping is concentrated on the following areas: Housing, infrastructure/logistics, trade, business, and public investments within healthcare and education.

Sweco's assessment based on the mapping

After summarising our mapping (Table 1), we can state that the total investment volume here amounts to in the scope of **SEK 780 billion**. This summary does not include minor projects which it has not been possible to map in this study, nor public investments in, for example, schools. As our mapping is extensive but cannot, by the nature of forecasts, be utterly comprehensive, we believe that an overall assessment of SEK 800 – 1,000 billion represents as accurate an indication as possible of investment volumes. Our appraisal is that the outcome is more likely to fall in the upper range of the interval, potentially even in an amount of over SEK 1,000 billion.

Table 1 Sum total of mapped investments

Type	SEK billion (rounded off)
Housing (new builds and conversions/renovations)	400 - 410 (Sweco's estimate)
Infrastructure/logistics	125 - 130
Industry	120 - 130
Retail	11 - 14
Business	50 - 58
Healthcare/education	38
Total	SEK 744 - 780 billion

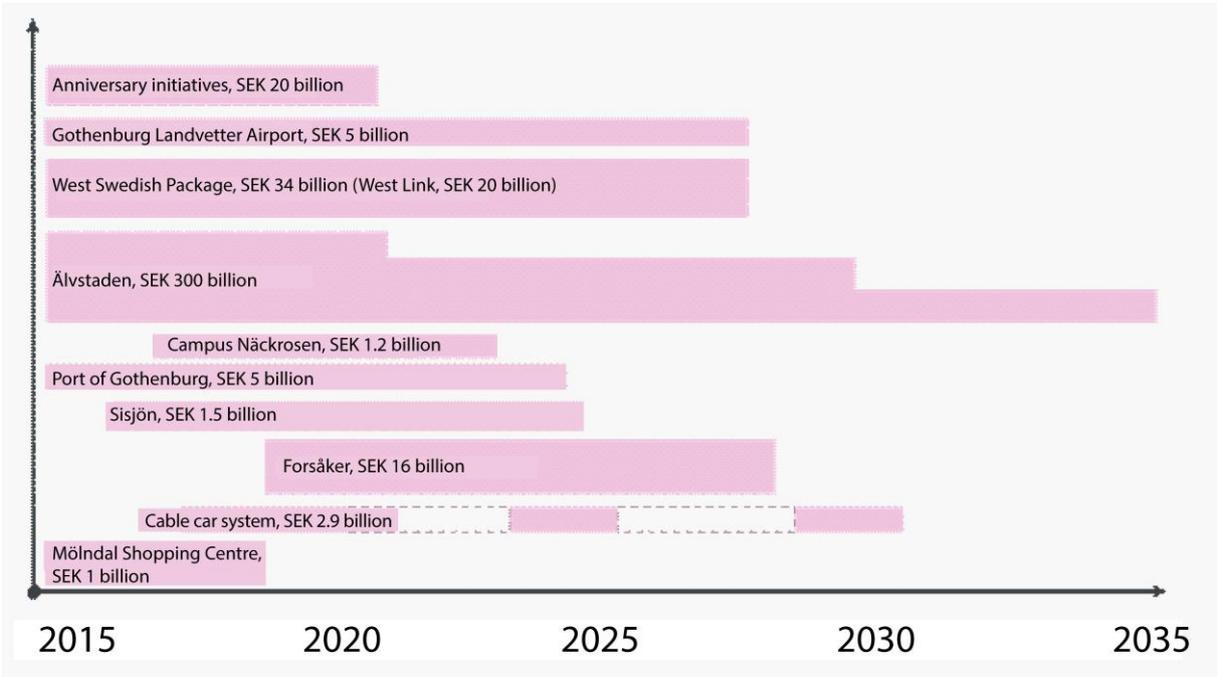
Note: 2015 price levels applied unless stated otherwise

Substantial investments in numerous areas

This section describes major investments within the areas of housing, infrastructure and logistics, retail and business, as well as public investments within healthcare and education.

The table below indicates the construction periods for a handful of large projects. The table shows, in line with this study in general, that a very large volume of investments will be made up to the year 2021, and that many of the projects will continue thereafter.

Figure 1 Construction periods for a number of large projects in the Gothenburg region



Note: West Swedish Package, SEK 34 billion at 2009 price level

HOUSING

A large number of housing ventures are planned across the region in various projects. Gothenburg is the region's hub and is also the site of the major portion of new builds. In addition to new build housing, investments are also planned in conversions and renovations of existing housing stock. The investments are presented below categorised as new builds and investments in conversions and renovations of existing housing stock.

Population development and housing construction in the Gothenburg region

Sweco's population forecast indicates an expansion of 250,000 inhabitants in the Gothenburg region between 2015 and 2035, resulting in a total population of approximately 1.3 million by the year 2035 for the entire region. The City of Gothenburg is expected to experience population growth of equivalent to 150,000 new inhabitants, representing approximately two thirds of the total increase for the region. The growth rate in the Gothenburg region will decrease somewhat around about the year 2018, with a corresponding decrease for the City of Gothenburg seen slightly later. This is due to the fact that many newcomers move to the City of Gothenburg from a municipality in the surrounding area after a few years. In 2028, the growth rate will again start to rise, both for the City of Gothenburg and for the region as a whole.

A long-term, low level of housing construction, combined with high population growth, has entailed that the Gothenburg region, similarly to the other major urban regions in Sweden, currently suffers from a shortage of housing. New housing must be constructed in order to cover the existing shortage and to meet the expected influx of inhabitants in the coming years. The need for new housing in the Gothenburg region and in the City of Gothenburg presented in this report refers to the number of new housing units required to satisfy the population growth. The number of new housing units also required to meet the current shortage is thus not included in the calculations.

Investment volume in new build housing

Sweco estimates that approximately the construction of 6,000 new housing units per year up to 2035 will be required in the Gothenburg region to keep up with population growth. This will entail, in our assessment, a total investment volume in new build housing in the entire Gothenburg region up to 2035 amounting to approximately **SEK 400 billion**. This figure includes investments in individual houses and apartment buildings. The investment amount refers to gross production costs for new build apartment buildings and tract housing. Standard figures for the production costs of new builds have been obtained from Statistics Sweden's statistics database. The production cost consists of the developer's or property owner's total cost from concept to completed building and includes therefore both the cost of the land and the construction cost. These standards have been applied to forecast housing construction to calculate the total investment volume up to 2035.

It is important to emphasise that this forecast and the assessment of the number of housing units is not based on established construction plans. The total is to be interpreted as the number of new housing units required to meet the demand resulting from the population growth in the region. As the execution of a construction project is affected by a number of factors, it is probable that projects can potentially either be delayed or that the ambition level in a project can be reduced. Appeals against zoning plans, a lack of suitable land, insufficient purchasing power, lack of capacity among clients, developers, consultants, etc., are examples of factors that may lead to a reduction in the expansion rate. Seen in relation to the historical construction of housing in the Gothenburg region, it will be a challenge to achieve the necessary numbers in the future, as the rate would have to be increased to significantly higher levels.

Several separate, large housing development projects are planned for the Gothenburg region during the time frame under analysis. Within the Älvstaden development area, up to 30,000 housing units are planned up to 2035, the Gothenburg "Anniversary initiatives" will contribute 7,000 new housing units by 2021 and 300,000 square metres of new housing space is planned to stand complete by 2028 as part of the Forsåker project in Mölndal.

Table 2 Examples of large housing development projects during the period

SELECTED PROJECTS	NUMBER SQ M*	INVESTMENT VOLUME, SEK MILLION
ÄLVSTADEN	3,000,000	127,400
ANNIVERSARY INITIATIVES	560,000	21,000
FORSÅKER	300,000	12,700
MÖLNLYCKE	259,200	9,800
LANDVETTER SÖDRA	248,000	9,400
NYA HOVÅS	130,000	5,500
		SEK 185 billion

*The number of square metres for Älvstaden is calculated using a standard amount of 100 sq m per housing unit, while for other projects and standard of 80 sq m per housing unit is applied. Estimated investment volume is based on a standard amount of SEK 42,475 per housing unit.

Note: The Anniversary initiatives consist of numerous small-scale projects which will together create a total of 7,000 housing units by the year 2021.

Conversion and renovation of existing housing stock

In addition to new build housing, considerable sums are also being invested in the conversion of existing housing structures, including in replacements of wastewater, water and electricity lines, heating systems, framework reinforcements, installation of lifts and replacements of kitchen and hygiene apparatus. In other words, actions which extend the economic lifetime of the housing units and which are therefore classed as investments, not as ongoing maintenance.

The Gothenburg region had a total of 218,500 apartments in its housing stock in 2014. Of these, approximately 100,000 apartments were built under the Swedish "Million Programme" public housing programme, and thus comprise housing stock in need of, or soon to be in need of, significant renovation requirements. According to SABO, the Swedish Association of Public Housing Companies, it could take up to 30 years to renovate this entire housing stock, but the majority should be completed within the time frame covered by this report – up to the year 2035. The cost to renovate the Million Programme apartments has been appraised and estimated by a number of different actors and the resulting assessments vary significantly. SABO has calculated what it would cost to renovate the 300,000 apartments built during the period 1961-1975, and which have seen only minor renovations since then. If only the most immediate defects are rectified, the investments will nonetheless amount to a minimum of SEK 50 billion. For more large-scale renovations, the cost could be up to SEK 275 billion or more. In its mapping, Sweco has made the decision to base its evaluation on the amount of SEK 50 billion, even though there is a risk that this proves to be too low. For the portion of the Million Programme apartments located in the region (approx. 100,000 apartments), this would thus entail renovations of approximately SEK 10 billion between the present and 2035, or SEK 0.5 billion per year.

Other portions of the remaining housing stock in the region will also require renovations at some point in time during the period. At the same time, there is a lack of regional data on the economic scope of the renovations – information is only available on how many housing units or how large a housing area is affected (in Stockholm County this amounts to only just over one percent of the housing stock per year during the 2000s) and the statistic is relatively old. Between the years 1993 and 2004, national investments in conversions amounted to an average of SEK 18.9 billion per year. Relative to the housing stock, this implies approximately SEK 4,400 per apartment per year (approx. SEK 5,000 at current monetary values). Given that this value is also representative for the Gothenburg labour market region, investments in conversions in the stock not built under the Million Programme can be estimated at approximately SEK 590 billion for the coming 20-year period, or approximately SEK 30 million per year for the period 2016–2035. This covers investments in conversions in apartment buildings, individual houses and other dwellings.

The overall assessment here is that the total investment volume for the renovation of the existing housing stock (Million Programme and other housing stock) in the Gothenburg region up to the year 2035 may amount to a sum total in the region of **SEK 11 billion**.

INFRASTRUCTURE AND LOGISTICS

A number of major investments are planned for the Gothenburg region's transport infrastructure during the coming decade (and beyond). The regional transport plans for Västra Götaland and Halland, respectively, and the national transport plans for the period 2014-2025 include a total of approximately **SEK 70 billion** referring to transport infrastructure investments in the Gothenburg region. A significant portion of this amount falls under the West Swedish Package, which covers numerous significant investments in public transport, the road and rail systems in the Gothenburg region. The largest investment objects include Västlänken ("West Link" 8 km two track commuter train tunnel under central Gothenburg), the Marieholm Tunnel (road tunnel linking the E20, E6, E45 and Lundbyleden roads), the Hising Bridge (new bridge just south of the Göta Älv Bridge), a new interchange in the Gamlestaden district (for train, bus and tram traffic) and improvements in public transport (longer train stations and 55 km of new bus lanes). For infrastructure in the longer term, after 2025, there are plans to continue the expansion of the Gothenburg – Borås railway line and, looking even further ahead, the Götalandsbanan (the Götaland line); a high-speed railway Gothenburg – Stockholm.

Within the City of Gothenburg itself, major investments in the transport infrastructure are also planned/required. Investments in the magnitude of **SEK 32 billion** are deemed to be required by the year 2025. These include investments in pedestrian and bicycle traffic, public transport, road traffic (traffic safety, noise pollution, etc.), the road-based freight system, KomFram¹, reinvestments/renovations and a large number of projects such as the Skeppsbron bridge, the Gamlestaden district, the Hising Bridge and the Kvilleleden road. It should be pointed out here that this is not presently an established investment level, but rather a summary of current requirements, and that, from experience, all requirements are not usually fulfilled for a variety of reasons.

The expansion of a new logistics park has commenced by the Port of Gothenburg, which is estimated to continue until 2025. The park will constitute approximately 500,000 square metres of warehouse space and logistics properties and is expected to generate over 2,000 jobs. The investment, undertaken by Göteborgs Hamn AB, NCC, Prologis, Ekländia and Bockasjö, is estimated to total approximately SEK 4.5-5 billion. In addition, Göteborgs Hamn AB plans to invest approximately SEK 3-3.5 billion up to 2025 in, among other things, new ports and terminal spaces.

At Gothenburg Landvetter Airport, there are plans for West Sweden's Airport City. An area of two million square metres will be home to businesses within logistics, retail and experiences, offices and hotel/conference. The investments are planned to commence in 2017, with the majority completed by 2025. The expansion of Logistics Park 2, is expected to extend beyond the year 2030. Total investments are expected to amount to approximately SEK 5-7 billion. There are also investments planned in the airport itself, in terminal buildings, for example.

¹ KomFram is a project aimed at minimising disruption to traffic during the construction phase and at coordinating all projects, those undertaken by both the Swedish Transport Administration and other actors.

Figure 2 Planned investments at Gothenburg Landvetter Airport



Source: Swedavia, processed by Sweco.

Figure 3 Summary of major actors' planned investments

MAJOR ACTORS IN THE MAPPING	INVESTMENT VOLUME, SEK MILLION (ROUNDED OFF) WITHIN THE GOTHENBURG REGION
SWEDISH TRANSPORT ADMINISTRATION, NATIONAL TRANSPORT PLAN 2014-2025 (NAMED OBJECTS IN GBG-REGION)	70,000
CITY OF GOTHENBURG, INVESTMENT REQUIREMENTS 2016-2019, 2020-2025	32,000
SWEDISH TRANSPORT ADMINISTRATION, GÖTEBORG-BORÅS RAILWAY AFTER 2025 (PLUS APPROX. SEK 6 BILLION IN PLAN 2014-25)	9,000
AIRPORT CITY GÖTEBORG	7,100
PORT OF GOTHENBURG LOGISTICS PARK	4,500
PORT OF GOTHENBURG INVESTMENTS (EXCLUDING LOGISTICS TO PREVENT DOUBLING)	3,200
REGIONAL TRANSPORT PLAN VGR 2014-2025	800
REGIONAL TRANSPORT PLAN HALLAND 2014-2025	300
GOTHENBURG LANDVETTER AIRPORT, INVESTMENTS AT THE AIRPORT	N/A
	SEK 127 billion

Source: Swedish Transport Administration, VGR, City of Gothenburg, Swedavia, Port of Gothenburg, Region Halland and numerous logistics actors. Written sources and interviews. For logistics investments, standard costs have been used in some cases to calculate the investment costs. Certain infrastructure routes that continue out of the Gothenburg region, e.g. Gothenburg-Borås, are reported here in their entirety. For the City of Gothenburg, the investment requirement is referred to. This level is yet to be confirmed.

INDUSTRY

The economic cycle of industry is currently experiencing an upswing, and the position has strengthened during autumn 2015. Production increased dramatically during the year, while employment increased somewhat and companies' profitability improved.

After a couple of years of relatively unchanged industrial investments in Västra Götaland, amounting to around SEK 7 billion, it seems as though a slight upturn can be recognised. Industrial companies in the Gothenburg region are experiencing the strongest economic position in the Västra Götaland region, and for these companies industrial investments have increased steadily since 2010 – although they remain at a significantly lower level (around half) than the boom years just prior to the financial crisis (refer to table below).

The forecasts from Statistics Sweden's investment survey show that these companies expected a slight increase in 2015, anticipating investments of SEK 6.4 billion for the full year 2015. If the investment forecasts prove to be accurate, Västra Götaland's share of total industrial investments in Sweden will increase from 14 percent in 2014 to 16 percent in 2015. Almost three quarters of these investments are within the Gothenburg region.

There are no forecasts regarding development up to 2035, according to this mapping. One means of gaining a rough estimate would be to review the period 2002-2014, which included a period of strong economic prosperity, a financial crisis and recovery. During this 13-year period, industry in the Gothenburg region invested an average of SEK 6.6 billion per year in buildings and machinery. Were this pace of investment to continue during the period 2016-2035, this could entail an investment volume in the magnitude of **SEK 120-130 billion** in the Gothenburg region. This figure should however be treated with caution – future structural transformations, economic booms and crises will almost certainly cause these calculations to require some updating.

Figure 4 Industrial investments in Västra Götaland and the Gothenburg region

INDUSTRIAL INVESTMENTS IN VÄSTRA GÖTALAND

Buildings and machinery. Amounts in SEK billions. 2008 prices.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	<i>forecast</i>													
Fyrbodalen	4,5	2,4	2,3	4,5	1,9	2,3	1,5	1,0	2,8	0,8	0,6	0,4	0,4	0,6
Gothenburg region	7,1	7,4	7,2	7,6	11,0	8,3	8,2	7,4	3,5	3,3	4,5	4,8	5,2	6,4
Sjuhärad	0,7	0,7	0,7	1,0	0,9	0,9	0,7	0,4	0,5	0,4	0,3	0,5	0,3	0,6
Skaraborg	2,2	1,7	2,0	2,8	2,3	2,5	1,8	1,0	1,3	1,4	1,4	1,3	1,1	1,2
Västra Götaland	14,6	12,2	12,3	15,8	16,1	14,0	12,2	9,8	8,0	6,0	6,9	6,9	7,1	8,8
% of national total	28,0	24,8	25,1	27,6	27,3	21,6	18,3	20,5	17,7	12,3	12,7	13,3	14,2	16,2

Source: Economic barometer for Västra Götaland Autumn 2015.

RETAIL

The Gothenburg region is a growth region and is expected to remain so for some time. This implies that the retail market can be expected to grow, due to both increased population and increased consumption per capita. Table 3 below presents a mapping of known investment plans up to 2025. These alone cover an area in the region of 450,000 sq m.

In an investigation performed by WSP (2015), growth up to 2035 in the City of Gothenburg alone is anticipated to provide up to 525,000 sq m of additional retail space, divided between perishables, durable goods and restaurants. The same investigation assesses that, for the Gothenburg region, the increased retail market will correspond to approximately 40,000-50,000 sq m of retail space per year, implying a maximum total expansion over a 20-year period of 800,000-1,000,000 sq m of retail space in the region. However, it is unreasonable to believe that this entire potential can be realised, as it builds on the assumption that all growth would take place in new premises. In reality, a portion of the growth will be attributable to existing businesses, meaning that investment volumes are unlikely to reach these levels. This being said, WSP nonetheless believes there to be a significant need for expansion of premises for shops and services in the region, and also believes that the high growth rate will prevail for at least the next few years.

The total investment volume up to 2035 is thus difficult to assess, as there are certain major question marks over if and when the plans will be implemented. The rate of building is strongly dependent on the maturity of the

market, as it is the retail actors which will be situated in the premises that "push the start button" for the investments. In the interviews carried out as part of Sweco's investigation, the general consensus gleaned from the experience of the interviewees is that around a quarter of planned projects do not come to fruition, as investments in retail are extremely contingent on the economic cycle, and plans made during economically prosperous periods are often cancelled when the economy sees a downturn. Large investments are currently planned in the Gothenburg region, prefacing a development phase similar to that experienced by Malmö a few years ago. One of the interviewees in Sweco's investigation expressed their feelings thus: "Everybody is afraid of coming last so everybody is investing at the same time, which may be good for the consumer, but is not from a real estate perspective. Today there are a lot of vacant premises in Malmö because the development has not been balanced. It will take ten years for purchasing power to catch up."

The development of the retail trade is also strongly linked to interest rates. For each percentage point change in the interest rate, consumption is impacted, especially in the large urban areas where indebtedness is high. If the interest rates go up, retail becomes more driven by disposable income rather than borrowings, and for this reason the interviewees are of the collective opinion that retail development will not see corresponding development in square metres. In addition, each project takes an average of 24 months from ground-breaking to the opening of the retail space (the planning process is not included in this time). From experience, the interviewees believed that delays to construction projects entailing an extra 3-4 years could be expected.

With this in mind, Sweco makes the cautious assessment that the investment volume up to the year 2035 may be in the interval 400,000-500,000 sq m, meaning investments in the magnitude of **SEK 11-14 billion**. It is though important to point out that this is a preliminary assessment based on planned square metres, using a standard cost per sq m. The potential is much greater, but is, as mentioned previously, dependent on numerous external factors.

Table 3 Known plans for new retail up to 2025 in the Gothenburg region

Project	Schedule	Area, sq m
Allum		15,000
Amhults Centrum		10,000
Angered Centrum		10,000
Avenyn	Complete by 2021	
Backaplan		40,000
Borgås Centre of Commerce		
Bäckebo		20,000
Centrumhuset	Complete by 2018	
Flygplatsen (Airport)		70,000
Freeport		6,500
Frihamnen	Time horizon 2021	20,000
Frölunda Torg	Most likely well into the future, potentially 2022	20,000
Handelskvarteret Kulan, Gamlestads torg		40,000
Inköpet		5,700
Kungsmässan		11,500
Kålleröd		25,000
Lindholmen		10,000
Mölnadal Galleria	2015-2018	
Region City	Complete approx. 2025 in various stages	50,000
Sisjön	Three stages, 20,000-30,000 sq m per stage	75,000
Kompassen		1,000
NK Building	Construction to commence 2016	5,000
Total area		434,700

Source: WSP retail investigation*

OFFICE-BASED BUSINESSES

Both population density and jobs are ever more concentrated in the large urban areas in Sweden. In Västra Götaland's constituent regions, a structural change is also under way in parallel to the general trend, whereby employment in the production of goods is decreasing while increasing in the production of services. A higher number of jobs in office-intensive sectors is behind a growing demand for office premises. This means that the attractiveness of locations has increased in significance for attracting both labour and new company establishments. The service sector does not generally need large premises, but does however have different requirements regarding an area's local amenities when localising. Density, diversity and variation are key factors attracting both companies and people within the service sector.

Premises for different types of businesses are planned in numerous areas with the Gothenburg region. For example, plans are in place for over 12,000 sq m of space for businesses in Sisjön, facilitating new company establishments. The aim is to attract new types of business while retaining actors already established in the region by strengthening Sisjön's urban qualities. In Forsåker, an entirely new district is planned, which will provide both housing, thousands of jobs and premises for education and culture. The aim is to create a vibrant, mixed district to complement and expand central Mölndal. The aim for Älvstaden up to 2035 is approximately 60,000 new jobs to be integrated with housing and services in a modern, mixed district. What the majority of the projects including businesses have in common is a focus on creating mixed districts, where housing, businesses and retail are integrated. This is in line with the ongoing structural change under way in the region and with the new demands of trade and industry. How well the Gothenburg region manages to create attractive environments for new company establishments will be a decisive factor in strengthening the region's future competitiveness.

Table 4 below displays a summary of mapped, large investments in office-based business in the region. Älvstaden is easily the largest, followed by the Swedish Exhibition and Congress Centre. The total mapped investment amount is in the range of SEK 36-52 billion, depending on which key ratios are used for office space per employee and SEK per square metre. Sweco's assessment is that the total investment volume should fall within this range.

*Comprehensive retail investigation for the City of Gothenburg. 30/10/2015 WSP.

Table 4 Summary of large, planned investments within office-based business

Selection of projects with business premises		
	Area, sq m	Investment volume, SEK million
Älvstaden	1,250,000-1,875,000 *	31,300 – 46,800
Swedish Exhibition and Congress Centre	N/A	3,000-4,000 **
Almedal factories	28,000	950
Nya Hovås (business section)	12,500	300
Sisjön	12,000	300
Forsåker	2,750	70
Total (rounded off):	1,300,000-1,900,000	36,000-52,000

Source: Sweco's interviews, Svenskamässan.se, Byggtjänst.se and material from respective actors' websites.

*Square metres for Älvstaden calculated from a standard measure of 30 sq m office space per employee. However, experience shows that offices today are often dimensioned to 20 sq m per employee (or even slightly less). Using this standard measure, office investment in Älvstaden would amount to approximately SEK 31 billion. For cost per square metre, the standard figure of SEK 25,000 per sq m is applied in the above table.

** Investments in the Swedish Exhibition and Congress Centre refer to expansion, work spaces, public premises and housing. All are reported here as it is not possible to separate them based on the information provided in the supporting material.

For an assessment of the total volume of office-based business up to 2035, Evidens' report can serve as supporting material. This report forecasts that the number of office-based employees in the Gothenburg region will increase from just over 150,000 today to just over 250,000 by 2035, an increase of 100,000 people. Assuming 20-23 sq m of office space per employee and SEK 25,000/sq m, this would imply a total investment volume in the magnitude of **SEK 50-58 billion** up to 2035.

HEALTHCARE AND EDUCATION

Healthcare

Large investments are planned in healthcare operations in the Gothenburg region up to 2030. Investments in the total magnitude of **SEK 30 billion** up to 2030 are planned, corresponding to approximately 300,000 sq m of hospital space. This is a lot, and the planned investments are significantly above the rate of investment reported in recent decades. The reason for this is that a large portion of the region's hospitals were built in the 60s and 70s and now require renovation, while at the same time, healthcare is experiencing a generational shift, both technologically and organisationally. The buildings are quite simply not always suited to current healthcare conditions and care requirements.

Major investments are also planned in the development of the region's regional hospitals and specialist hospitals (närsjukhus). Gothenburg was first in Sweden to develop such a specialist hospital. The hospital has emergency care facilities but is adapted to its premises and is, above all, a socially sustainable initiative. The first out was Angereds närsjukhus, which is complete and operational. The population of Angered has a life expectancy eight years below average and speaks many different languages, while there are certain major cultural differences in the area and, to a certain extent, a varying illness history than is traditionally seen in Sweden. The specialist hospital features a great degree of adaptation to function smoothly under these new conditions. Angereds närsjukhus has been a success, and plans are in place (although are yet to be politically ratified) for a further two specialist hospitals, one in Frihamnen and one in Högsbo. It is likely that there will be a shift in prioritisation from Sahlgrenska to investments in new hospitals.

The planned investments entail an investment boom that will reach its peak in the period 2020-2025, levelling out thereafter. The plans in place do not specify any significant activity in this area after 2035. The majority is planned to be complete by 2030, but there is already talk that this is more likely to be 2040 due to a lack of capacity. This would also mean that the investment peak would be postponed and would perhaps be more likely to be seen in 2028-2030.

Table 5 Mapped investments in healthcare

Client	Area	Project	Area, sq m	Investment, SEK million	Year	
Väst-fastigheter	Uddevalla hospital	New OP building	10,000	400	2016-2020	
	Närsjukhus Frihamnen	City	15,000	500	?	
	Närsjukhus Högsbo	City	15,000	500	?	
	Sahlgrenska	Per Dubbsgatan (private investment but within healthcare)	70,000	3,500	?	
	Östra sjukhuset		Extension of children's hospital	30,000	1,700	-2016
			New women's clinic	40,000	2,000	-2017
			New central clinic OP	35,000	2,000	2016-2020
			New support building	10,000	800	2016-2020
			New culvert		900	-2018
	Möndal hospital		New day surgery centre	12,000	1,200	2020-2025
			R building	6,000	300	-2016
			Z building	2,000	200	-2018
	Borås		New psychiatry	?		
			New laboratory building	?		
	KSS Skövde		Emergency and psychiatric	20,000	1,200	-2018
			New OP building	12,000	1,200	2016-2020
			Conversion of reception		1,000	2018-2022
	Kungälv hospital		New care wards	25,000	2,000	-2017
			New X-ray	?		
	Alingsås hospital		Conversion and extension of OP	12,000	500	-2018
	Regional administration building	City Gothenburg	18,000	600	-2017	
	Existing hospital buildings	Conversions		5,000	2020-2025	
The region	Energy efficiency	Halved energy consumption in existing premises owned by the region		4,000	-2030	
			Strategic initiatives	Solar power	200	-2030
Total			332,000 sq m	SEK 29,700 million		

Education/university

The University of Gothenburg is also planning a range of investments in the coming years. In addition to planned, large projects, Akademiska Hus is making minor investments in the administration of the university's buildings. These may refer to, for example, the renovation of entrances or replacement of windows, etc. In total, Akademiska Hus is investing approximately SEK 100 per sq m and year, implying that SEK 1 billion will be invested in minor interventions up to 2035.

The projects in the table below comprise the currently known investments. The projects have reached various stages of the planning phase. In all likelihood, the investments will be completed, although knowledge of what will be built and when varies.

Table 6 Mapped investments in education/university

Project	SEK million	Sq m	Schedule
Administration, SEK 50 million in maintenance and renovations (SEK 100/sq m and year)	1,000	500,000	2016-2035
Medicinareberget	3,750	150,000	Start earliest 2018, approx. 4 years' construction
Gibraltarvallen, Chalmers	2,400	95,000	2018-2021
Campus Näckrosen (extension of Humanisten)	600	14,000	start within next 5 years, 3 years' construction
Campus Näckrosen (new build)	500	20,000	2020s
Handels Hörna School of Economics	250	10,000	complete 2021-2023
Total	8,500*	789,000	

The largest project is Medicinareberget, where it is planned that Linnéstaden will be joined with Guldheden through the construction of housing, together with several new faculty buildings and a new area focused on Life Science. Vitartis is planning the construction of 75,000 sq m and Akademiska Hus is planning to construct an equivalent amount in the area, with approximately 75,000 sq m of business premises and 400 student housing units.

Several of the projects aim to build business premises for businesses associated with the university. This includes, not least, Gibraltarvallen at Chalmers, where the Johannesburg Science Park will be constructed, housing 10,000 sq m of office space. Construction is set to commence when the coverage ratio reaches 65 percent. Furthermore, work is under way on a zoning plan for Gibraltarvallen and the surrounding area encompassing 75,000 business area.

*Investment volume included in 2015 price level.

Population forecast

A forecast for population growth has been produced with the assistance of RAPS (Regionalt prognos- och analysystem - Regional Forecast and Analysis System), developed by the Swedish Agency for Growth Policy Analysis. The forecast tool is based on five sub-models that link together population, the labour market, the regional economy, the housing market and a municipal follow up model. The RAPS system's economic parameters are calibrated according to long-term investigative scenarios addressing the industries' development and the demographic parameters are checked against Statistics Sweden's national assessments on the development of fertility and mortality and immigration/emigration.

RAPS initially calculates the population growth, which then forms the basis for calculations of how the number of households is expected to change. If the number of households increases, the model generates housing construction that corresponds to the increase. For the City of Gothenburg, the city's own calculations for housing construction have been used up to 2024. The City of Gothenburg's construction forecasts only cover the period up to 2024. For 2025 and onwards, RAPS' model calculations for housing construction have been used as the basis for investment calculations. For other municipalities in the Gothenburg region, RAPS' model calculations for housing construction have been used as the basis for investment calculations for all years covered by forecasts.

POPULATION INCREASE IN THE GOTHENBURG REGION (LABOUR MARKET REGION) RAPS FORECAST

YEAR	Population	Population increase
2015	1,084,901	15,527
2016	1,100,655	15,754
2017	1,116,638	15,983
2018	1,132,522	15,884
2019	1,148,339	15,817
2020	1,163,599	15,260
2021	1,177,372	13,773
2022	1,189,188	11,816
2023	1,200,006	10,818
2024	1,210,333	10,327
2025	1,220,489	10,155
2026	1,230,545	10,056
2027	1,240,444	9,899
2028	1,250,378	9,933
2029	1,260,315	9,937
2030	1,270,267	9,952
2031	1,280,284	10,017
2032	1,290,328	10,044
2033	1,300,413	10,086
2034	1,310,534	10,120
2035	1,320,678	10,145