

A thought study about the impact of changing movement patterns, as a result of the pandemic, may have on the cityscape.



With the outbreak of the coronavirus pandemic, the world stopped. National borders closed and domestic travel was dissuaded or forbidden. All travel, whether for work or pleasure, was dramatically reduced. At the time of writing, spring 2021, it is still unclear when travel will pick up again.

In this think piece we'll examine the impact that new forms of travel can have on cityscapes. New patterns of movement bring new demands and opportunities. Perhaps pressure for change, as a consequence of the pandemic, can lead to a more robust and adaptable society. This article will investigate what these potential needs and patterns of movement could be, with the focus on Stockholm.

Increased globalisation

In the last 100 years we've seen ever increasing globalisation. Globalisation refers to the social, economic and political process that ties all the corners of the world together and drives countries closer to each other. This process has been accelerated by rapid technological development that, in turn, has paved the way for easier spreading of information via the radio, telephone, television and, eventually, the Internet and smartphones.

With globalisation, the amount we travel has also increased, another result of new technologies. The travel revolution first brought about by the railways has been accelerated by low-cost flights that have normalised national and international travel alike. Data from a 2016 report shows that international travel by Swedish citizens increased by 130% between 1990 and 2014.



The urban society

Historically, Sweden was a peasant society. At the start of the 1800s, 90% of the country's population lived in the countryside, something that would change with industrialisation. According to *Statistics Sweden*, the demographic breakpoint came in the 1930s, when as many people lived in the cities as in the countryside. Cities continued to grow over the course of the century, contributed to by the Million Programme and relocation allowance of the '60s. Those who moved to the cities were quite simply given help to find accommodation near work.

Today, we've left the peasant society behind and instead find ourselves in an information and service society where the majority of professions are located in urban areas. This has not only contributed to further accelerating urbanisation but also consolidated the view of the city as the centre of work. It is in the cities that companies build their offices, and it is there that people move. This is also where the jobs are and where there is a greater offering of entertainment and culture. In fact, so many people have moved to the cities that the countryside has been depopulated and the cities are suffering from housing shortages. In other words, urbanisation has both advantages and disadvantages.



The year of the pandemic, 2020

On 11 March 2020 the *WHO* declared that *COVID-19* was to be considered a pandemic. A pandemic means that a disease will be or is already present in all parts of the world. At the time of writing, spring 2021, the pandemic has been ongoing for more than a year. It is a great tragedy for mankind, for those who have become seriously ill and those who have lost loved ones. The great sorrow that the coronavirus has caused cannot be overstated. Significant work will also be needed in its wake to alleviate the grief of survivors and with the aim of not having to repeat history.

The pandemic has brought many changes to our everyday lives, not least of which is that the home has come into focus. Those who are able to work from home have been encouraged to do so, office workers in particular, and efforts to control the infection have been set against the constant backdrop of the 'stay home' mantra. During the pandemic, the city's strengths, such as proximity, community, nightlife and great social mobility, have suddenly also proven to be its weaknesses. After all, it's through meetings between people that infections spread. One year into the pandemic and we see that people are, and need to be, adaptable and prepared to live in a changeable and dynamic environment.

Pandemics through history

The corona pandemic is not the first of the 2000s: swine flu broke out in 2009 and was classified as a pandemic on 11 June the same year. However, the numbers of affected and dead were significantly lower than those so far for the corona pandemic. Major pandemics throughout history include *the Justinianic Plague* (541–747), the Black Death (1347–1353), the three cholera pandemics of the 1800s, *Polio* (1881) and *the Spanish Flu* (1918–1920). Suffice to say, pandemics are hardly a new phenomenon. Scientists have also previously warned of future pandemics if we don't change to a more climate-smart, sustainable lifestyle.

Historically, pandemics have had far-reaching effects on our societies but also been shown to contribute to positive change. Östersund, Sweden, was badly affected by *the Spanish Flu* as a result of its fast railway connections and several army regiments, as well as an overcrowded and malnourished population. In the autumn of 1918, the city registered high death tolls and was made aware of its vulnerability; that led to it reaching agreement on questions of health, poverty and homelessness, with the goal of fighting the disease. Amongst other measures, it repurposed a school as a hospital, which until that point had been lacking in the city. Even sparsely populated areas were hit hard, for example Lapland in 1920, which could be attributed to a lack of modern health care.

These events can be seen as a starting shot for the Swedish welfare model, in which Östersund's focus on health and nearby health care later became a template for the rest of the country.

Despite the power of action shown in Östersund, the death toll in Jämtland County was 1,200, showing the shortcomings in crisis preparedness. History will reveal what we learn and change from the experience of the corona pandemic.

Changing conditions in the city

Every year, *the Riksbanken Jubileumsfond (RJ)* finances a large number of research projects; in 2020 these fell under the theme of The City. In the RJ annual Den framtida staden (The Future City), *Alexander Ståhle* describes the background to why our city looks the way it does today and how it's largely been adapted for motoring. However, the climate threat, increasing air pollution, more traffic accidents and a lack of space have forced urban planners to come up with new ideas. We no longer want to be dependent on the car. This insight, in combination with post-pandemic living conditions, could lay the groundwork for a completely new cityscape.

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The home office, flexible office and office buildings

The biggest subject of discussion about work *post Corona* will probably be the workplace. Many office workers have experienced greater comfort and productivity by being able to work from home. Even if many say that working from home full time is not desirable, there is some consensus that the possibility of working from home part time is here to stay. The government has also established that this may mean that offices and commercial premises will stand empty, and it has therefore set up an inquiry into the issue.

The part-time office will place new demands on employers and property managers alike. Where will office workers sit and how will they work and use office space? We don't know the answers to these questions today, but we do know that organisation and needs will, in all likelihood, look different.



Reduced travel

As mentioned above, the modern person travels like never before. The joy of discovery, social interaction and new surroundings have contributed to the uptake in travel, just as corporate globalisation has. Travelling can be divided into two categories: *pleasure* and *business*.

According to *the Stockholm Hotel Report 2020*, hotel guests who visit Stockholm city centre are holidaymakers and business travellers, in roughly equal numbers. This calculation was made in 2019, in other words pre-pandemic.

Thanks to *the Swedish Agency for Economic and Regional Growth* and *Statistics Sweden* we can compare hotel room occupancy in Sweden in 2019 and 2020. In April 2020, hotel room occupancy was just 26% of what it had been the previous year (ref. *Statistics Sweden* and *the Swedish Agency for Economic and Regional Growth*). For June and July, the corresponding figure was 39% and 64% respectively. In other words, we can see a slight upswing by the summer. Given the travel restrictions during that period, we can assume that the majority of those were domestic guests. Put simply, people will continue to do their utmost to find new ways of travelling. With that said, notwithstanding an expected future recovery, we can assume that the pandemic has accelerated changes in travel patterns (changes that for climate reasons may have become necessary anyway).

Goal 11: Sustainable Cities and Communities

To achieve our global goals, we need to invest in change at the local level. One of these goals, number 11, is to build *Sustainable Cities and Communities*, or "make cities inclusive, safe, resilient and sustainable".

The targets for goal 11 include inclusive and sustainable urbanisation and reduced deaths and numbers of people affected by catastrophes. In addition, the goals include integrated strategies and plans for inclusivity, resource efficiency, limiting and adapting to climate change, and resilience. These ambitious goals require a holistic approach for us to reach them. Not only has the corona pandemic shown that community planning demands new thinking, but it could also be the breakpoint we need to start focusing on what may be needed by the areas closest to us and contribute to increased global wellbeing in the future.

The adaptable city

The future cityscape is hardly starting from zero. It's been shown that about 70% of all the buildings that will exist in 2050 were built before the turn of

the millennium. The city of the future is therefore in a large part already built. So, instead of only focusing on how we can create smart new building projects, we also need to think about how we can create an urban community that is adaptable to constant change. In other words, it's just as

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important that we take care of what we have and create flexible infrastructure.

How will existing offices and hotels be used in the future? Many are asking themselves that question now that the office has suddenly been relocated into our homes. Repurposing existing buildings for functions other than those intended takes quite a bit of work, not least from a fire-safety perspective. Different activities simply have different levels of requirements. Moreover, economic, social and political incentives will be required. In 2020 there were 177 hotels in Stockholm Municipality. Say that each hotel is 15,000 m² (small hotels are about 10k, larger ones are over 20k). That would mean that there are several million square metres of hotels in Stockholm. As previously mentioned, we know that half of all travel to Stockholm is for business. What if these people don't return in the same numbers after the pandemic? This could mean hundreds of thousands of square metres of centrally located property standing empty. From both a climate and socio-economic perspective this would be a waste of attractive resources.



However, before we get ahead of ourselves, we ought to mention that in all likelihood business travel will return, even if it is in a different form and volume. With the example calculation above we only want to highlight that property managers, as well as the city of Stockholm, will need to think about how the city should be used in the future. Hotel and office building stocks are just a small part of this context, but we want to illustrate the potential that existing buildings have in relation to new buildings. The city also needs to be able to stand up to future crises, and here we've learnt that society is not ready. Who knows what pandemics, natural disasters or conflicts a city may need to endure? When the time comes, the city will need to be able to adjust quickly.

Example adaptations

Changing the purpose and use of buildings is not a new phenomenon; since the 2000s we've seen, amongst other things, an increasing trend of repurposing abandoned industrial premises as offices and accommodation. One example of this is the area of *Gasverket* in Hjorthagen and the area of *Slakthus*, both in Stockholm, and *Kockums Gjuteriet* in Malmö. Perhaps the office complex of today will one day be repurposed in the same way as the industrial areas of the 2000s? *Skatteskrapan* on Götgatan in Stockholm, where the former premises were rebuilt as student accommodation, is another clear example showing that adaptations are possible. There are also examples of quick and short-term adaptations. When museums closed in France as a reaction to the coronavirus, the buildings were used as blood donation centres instead of standing empty. In the spring, Teg Church in Umeå, Sweden, served as a vaccination centre.

Digital progress is the key to the future

We don't know what the future will look like, and we don't know how people will live in 5, 15, 50, or even less so 500 years. On the other hand, what we do know is that we need to build resilient and sustainable cities. One way of achieving resilience is by being flexible and dynamic and having secure infrastructure and accessible information. If we know what characteristics our cities have today, it will be easier to know what will be required to change for tomorrow.

There are already initiatives to create more dynamic cities. One example of this is Virtual Gothenburg, a digital twin to the city of Gothenburg. "We see that the challenges facing cities are growing at an ever-increasing rate with climate change, segregation and the complexities of society in general. We therefore need better methods to describe, understand, plan and manage the city. This is where the digital twin comes in", explains *Eric Jeansson*, geodata strategist at the City Planning Office . The digital twin makes information accessible and enables simulation of future functions and events in the city. This allows the city to identify points of weakness in the early stages of change or a crisis.

We want to inspire action through this. Reaching the UN's global goals requires a global revolution, a large-scale restart. We need to start from where we stand and be more agile as individuals and companies. People's digital maturity is continually increasing and Industry 4.0 is around the corner. The pandemic has acted as a catalyst for the already accelerating process of digitalisation. Smart technology and automation allow us to take a whole new approach to prevention work.

It is important that we all do our part to ensure that digitalisation doesn't become isolated or stop. If all parts of the public construction sector follow in this development, we'll be able to create completely new values, values that will eventually not only save lives but allow society to flourish. Now, let us cultivate our garden.

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