



A GUIDE TO USING SCENARIOS

Foresight for Resilient Cities
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INTRODUCTION

Our world was already rapidly changing before COVID-19. New technologies, advancements in artificial intelligence and machine learning, and big data were already having tremendous impacts on social, economic, and political spheres. We're also in a climate crisis threatening communities and ecosystems across the globe with wildfires, rising sea levels, flooding, and poor air quality. These amplify deeply entrenched and longstanding issues like racism and inequality, housing insecurity, homelessness, and socio-economic disparities. We are living through a period of intense uncertainty, and governments and organizations need tools and strategies to navigate this time.

One such tool is strategic foresight, and Future Cities Canada is using it to support our partner organizations and municipal governments across Canada. To build resilient communities and be effective in a complex and everchanging world, municipal staff, city builders and other decision-makers must look ahead to anticipate emerging trends, issues, opportunities, and threats. Strategic foresight is a field that enables them to do just that: strategic foresight enhances people's capacity to detect, respond to, and learn from patterns of change.

CONTEXT SETTING

What is strategic foresight?

Strategic foresight is a practice that uses a variety of methods to explore probable, plausible, possible, and at times, preferable futures. These explorations can be anywhere between 10 and 50 years into the future. By using strategic foresight methods, practitioners support long-term decision making by testing strategies, examining risks, and uniting around desirable outcomes and promising futures.

COVID-19 has made our collective futures incredibly uncertain, and as a result, many find themselves envisioning what a theoretical post-pandemic world might look like. There have been hundreds, if not thousands, of articles predicting how various facets of society may change – from the built environment to the ways in which scientists collaborate, from our family composition to our appetite for surveillance technology, from global supply chain disruptions to the continued feasibility of gig work. These predictions are developed with varying degrees of rigor, but those that hold the most promise have used a prominent strategic foresight tool called **scenario development**.

What is scenario development?

Scenario development is the process of using research and evidence to develop concrete stories with clear associated timelines. The building blocks of scenarios are **signals of change** - small or local innovations or disruptions that have the potential to grow in scale, geographic distribution, and influence¹. A signal of change could be as simple as the launch of a new product, the introduction of a new technology, the beginning of an obscure emergent cultural practice, the establishment of a new policy, or the announcement of a recently revealed social issue.

Signals are gathered in a process called **horizon scanning**. This is a search process that uncovers and validates signals of change and then groups them into **trends, drivers of change, and critical uncertainties** which reveal emerging patterns of change. Different scenarios are then developed by exploring the intersection of several of these on a given timeline, called a **time horizon**. The same signals of change and trends are used to produce multiple different futures. These scenarios provoke and stimulate new ways of thinking about the future, allowing people to explore corners of possibility that may not have been obvious to them.

What scenarios are not!

Scenarios are not the same as forecasting and are not meant to be taken as predictions of the future. Forecasting takes existing data and uses statistics, simulations, and modelling to approximate the future. In simpler terms, forecasting takes what we know and projects it out based on key assumptions, while scenarios purposely examine what we don't know. Though both scenarios and forecasting are based in evidence, scenarios purposely present contrasting alternatives that expand the conditions and factors for which we plan. Even if one of the alternatives in a scenario were to materialize, the rest of the story that was built around it would still be fiction. Individual scenarios should therefore not be used to unilaterally implement plans against. Instead, they should be used as a tool that allows us to develop collective visions, to identify weaknesses and opportunities against possible futures, and to future-proof plans, extending their relevance beyond our current circumstances.

Scenarios are not immediate to short-term business, economic, or community planning tools. Yes, the tools and methods used in foresight are used across domains, but what differentiates the methods and their application is the time horizon. Among foresight practitioners it is understood that time horizons shorter than 10 years typically use strategic/business planning approaches, while longer timelines use strategic foresight approaches.

An exception to the time horizon distinction emerges in times of intense uncertainty and unparalleled change like world wars, pandemics, and other disruptive global events. Strategic foresight approaches can be used on shorter timelines if they are likely to feature the same level and pace of change as a longer timeline.

What does a credible scenario look like?

Evidence-based

Useful scenarios are always evidence-based. Without evidence, scenarios are as useful as crystal balls in planning for the future. A 1-page scenario often includes hundreds of meticulously researched signals. Each signal was itself evaluated and included based on criteria such as relevance, scale, certainty and impact. Though each signal or trend is not necessarily itemized and cited in the final product, having confirmation that research underpinned the scenario is critical.

Work shown

Showing the process through which a scenario was developed and the thought that went into it is important and lends it more credibility. Often just as useful as the scenario itself is the process it took to get there. What went into shaping each scenario? Who informed the scenario's content? Why and how were key choices were made?

Organizations and people doing great strategic foresight work:

- [Policy Horizons Canada](#) uses foresight to help the federal government build stronger policies and programs in the face of an uncertain future.
- [Nesta](#) explores emerging technologies and groundbreaking ideas to tackle the challenges we will face in the future.
- [Institute for the Future](#) does forecasts, custom research, and foresight training to navigate complex change and develop world-ready strategies for businesses, governments, and social impact organizations.
- [KerrSmith Designs](#) uses foresight with businesses and organizations to reframe challenges, create strategies and integrate designed solutions of products or systems

HOW TO USE SCENARIOS

Who should use them?

The short answer is everyone. In any field of work where long-term planning is an asset, scenarios can be helpful. Based on your work, you might be more drawn to explore scenarios that feature more conservative or more radical change. As with any other tool, scenarios are only as effective as there is buy-in to using them. Rather than eliminating them from your roster, identify those that might resonate with peers and decision-makers within your organization or professional context.

When should you use them?

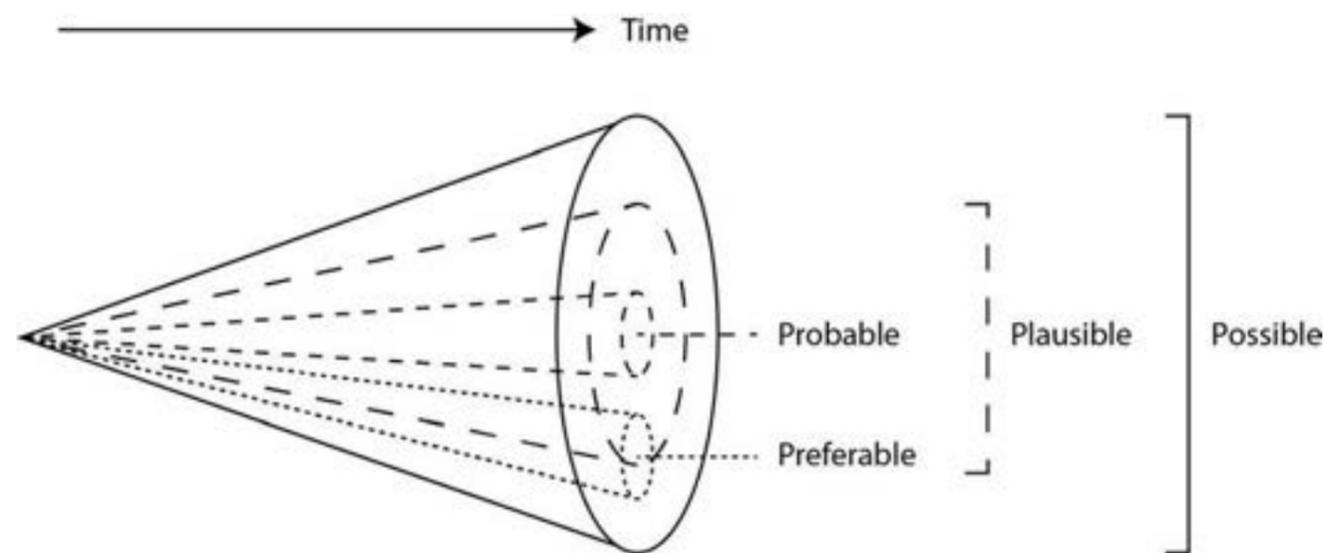
Scenarios are useful when they are a means to an end, and not an end in themselves. Use scenarios to stimulate new thinking about old problems, to make complexity actionable, to test emergent strategy and to future-proof long-term decision-making. Good scenarios provide a narrative, timeline and a logic that can help you detect plausible or probable future risks and opportunities and adjust your approaches accordingly. Here are some signs that scenarios might be the right tool for you:

- You are in a period of great uncertainty and need to act based on a clear understanding of a range of possible outcomes;
- You are undergoing a strategic planning and/or a decision-making process that has long-term implications;
- You work in a field very familiar to you and need to broaden your perspective to understand different contexts.

How to know if scenarios are relevant to you

Scenarios are published in sets. Whereas one scenario can provide some useful long-term perspective, a set provides far more depth and contrast to support new thinking. Of course, the best measure of the worth of a scenario set is how helpful it is in changing the way you think about or approach planning after having read it. If it has passed the credibility test above, here are some shortcuts to evaluating the quality of a scenario set:

- Its focus and setting are relevant to you;
- It provides contrasting and often opposing views of the future;
- It incorporates large predictable changes alongside volatile, weak or uncertain signals of change;
- It provokes discomfort at the plausibility of both its positive and negative narratives.



Voros, J. (2003), "A generic foresight process framework", *Foresight*, Vol. 5 No. 3, pp. 10-21. <https://doi.org/10.1108/14636680310698379>

The Futures Cone depicting broader possible futures with longer time horizons.

What do different time horizons mean?

Scenarios are based on trends and horizon scanning. Well-founded scenarios explore the collision and interaction of trends on a specific time horizon, normally anywhere from 10 to 50 years. For example, a scenario might showcase the interaction between inclusive design and ageing populations on a 10-year timeline, exploring how built environments have been shaped to meaningfully include seniors in urban life. The same trends on a 30-year timeline may interact very differently as ageing populations diminish and the next wave beyond inclusive design emerges. This is what makes the time horizon an important consideration.

Barring global incidents that destabilize the pace of change, shorter timelines increase the certainty and tangibility of the narrative, while longer timelines are more likely to expand and challenge our ways of thinking. Because scenarios are not predictions, and therefore increased certainty does not guarantee accuracy, both horizons provide beneficial input for planning. To support the development of sound plans, form initial strategy using shorter timelines and then test and adjust your strategies by considering longer ones.

Exploring risks and opportunities

Scenarios help to surface undetected risks and hidden opportunities, while testing long-term strategies. Interrogating scenarios with these two simple questions can lead to more resilient and thorough strategies and decision-making:

- How might this future impact our **direction** or **objectives** or **livelihood**?
- What steps can we take now to prepare?

Remember to include both positive and negative impacts in your analysis. Scenarios are as much about protecting opportunity as they are about mitigating risk.

Prioritizing action

Scenarios are only the beginning - they might put you onto a new way of thinking or unearth a weakness in your plan. From there, substantiate what you've detected. Identify what trends challenged or supported your decisions. Seek other sources that provide a deeper analysis on those trends. Then, adjust your strategy or decisions based on what you've learned. Scenarios alone are rarely enough to justify large changes in decisions; instead, they should be treated as early detection mechanisms. Our Selection of Scenarios

OUR SELECTION OF SCENARIOS

We are struggling to keep up with COVID-19 as it accelerates the pace of change in our communities. In times such as these, it is imperative that we adopt tools that support collective visioning and sound strategy development. Scenarios do just that. But scenarios can be costly and time-consuming to develop. Luckily, there is no shortage to the ongoing supply of scenarios that explore our probable, plausible, possible or preferable futures after COVID-19. Many of these are on a time horizon shorter than 10 years because we are in a period of intense uncertainty. The level and pace of change has been tremendous. These scenarios have been built from rapidly emerging signals of change – behavioural shifts, policy changes, new ways of engaging with the built environment, widespread recognition of structural inequities, and massive disruptions to daily life.

Here we outline some of our favourite scenarios that showcase a breadth of approaches and implications.

FOUR CORONAVIRUS FUTURES

By Ravi Gurumurthy, Chief Executive Officer, Nesta and Charles Leadbeater, Fellow, Nesta

TIMELINE: not defined

WHAT IT'S ABOUT: The authors offer four scenarios: The return to normal; Permanent emergency; The post-coronavirus settlement; The big brothers. Combining elements of continuity and discontinuity, realism and idealism, optimism and pessimism, they suggest an overlap among the perspectives of each narrative. For instance, in common, all the scenarios focus on a new normality, impacted by continuous crisis and democratic leadership in different or extreme degrees.

WHY WE LIKED IT: It brings four views on how the UK, in this case, can balance opposing forces: the search for the normal with the push for continuous crisis; the push for collaboration or for authoritarianism.

KEY TAKEAWAYS FOR PLANNING: Normality gained new definition and criteria. Even in less disruptive scenarios, a new degree of adaption and (re)design is needed. How can we prepare for a still undefined new normal?

THE WORLD REMADE BY COVID-19 - SCENARIOS FOR RESILIENT LEADERS

By Deloitte Consulting LLP and Salesforce

TIMELINE: three to five years

WHAT IT'S ABOUT: An exploration of three possibilities for what the world may look like once we recover from COVID-19, from some of the world's most famous and experienced scenario thinkers. It is an effort designed to help organizations prepare for the world after this crisis has passed.

WHY WE LIKED IT: It brings three contrasting views on recovery post-COVID. It provides a very concise and multi-factored analysis of recovery and couples scenarios with reflection questions designed to optimize the scenarios' utility.

KEY TAKEAWAYS FOR PLANNING: The scenarios explore the importance of global and national collaboration in the recovery from the pandemic. They differentiate the success and involvement of differently sized organizations. They frame businesses as important partners in the recovery process.

POST COVID-19 REORGANIZATION SCENARIOS

By Leah Zaidi, Futurist

TIMELINE: not defined

WHAT IT'S ABOUT: Zaidi offers a framework to understand the overall current state and create scenarios for what may emerge next. It adopts Panarchy (also known as the Adaptive Cycle or the Ecocycle), a model for the evolution of complex systems, combined with Jim Dator's Generic Images of the Future with Leah Zaidi's Seven Foundations model.

WHY WE LIKED IT: Like Curry's example, Zaidi's work exemplifies the use of robust foresight methodology to create scenarios, this time with a focus on Canada's specific context. The clear laid down scenarios table make easier to play how different aspects of each scenario might intertwine.

KEY TAKEAWAYS FOR PLANNING: Artificial interventions and strategies to avoid the collapse can prevent the system from release and reorganize, even when it's needed. For instance, bailouts maintain status-quo and prevent the release of capital that allows for reorganization.

THE WORLD THAT CORONAVIRUS MAKES, PART 1 AND PART 2

By Andrew Curry, Director of Futures at School of International Futures

TIMELINE: three to five years

WHAT IT'S ABOUT: Curry starts with McLuhan's [Laws of Media](#) as a framework to think about the wider effects of the pandemic within 4 dimensions: What does this future enlarge or enhance? What does it reverse? What does it erode? And finally, what does it retrieve that has been obsolesced?

He then looks at the potential economic implications by creating 3 scenarios for the UK's recovery. The scenarios combine the post-2008 crisis, new corporatism and de-carbonizing facts together with a concise sample of signals of change.

WHY WE LIKED IT: It underlies potential risks around the economic weakness of the UK (and developed countries in some extended). It is also a useful example of adopting scenarios and future thinking framework to develop effective mental models.

KEY TAKEAWAYS FOR PLANNING: Significant changes - or wild cards - produce both positive and negative effects, creates and destroys. What are the range of possibilities that can impact future plans?

2030: A POST COVID WORLD

By Jay Singh, Business Development and Product Partnerships at LinkedIn

TIMELINE: 2020

WHAT IT'S ABOUT: Singh imagines 2030 through the lens of a student in Tanzania. The scenario outlines a future where technological advancements have transformed the ways we connect to peers, gain an education, live in a globalized world, and work together.

WHY WE LIKED IT: It adopts a simple yet clear narrative that enables us to experience the possible future he created through a specific individual's journey.

KEY TAKEAWAYS FOR PLANNING: Consider the transformative impact of emerging technologies on different facets of life. For instance, how will video conferencing impact learning and the role of educators in the long-term?

THE WORLD AFTER CORONAVIRUS

By Yuval Noah Harari, author and professor

TIMELINE: not defined

WHAT IT'S ABOUT: Harari reflects on two essential topics emerging from the response to Covid-19: surveillance and isolation. He examines the past to illustrate how temporary measures become permanent long after emergencies are resolved. He then turns to the future by creating possible scenarios that warn us of the acute dangers we could face by empowering totalitarian leaders, giving up our rights to privacy, and provoking global disunity with our collective choices as citizens and governments.

WHY WE LIKED IT: It raises relevant concerns about short-term emergency measures leading to permanent solutions with rippling effects beyond the intended benefits under which they were proposed.

KEY TAKEAWAYS FOR PLANNING: Co-operation, transparency, and an engaged public produces better outcomes for resilience and recovery than their opposites. How can we empower these choices and ensure that emergency measures don't produce adverse effects? organizations. They frame businesses as important partners in the recovery process.

OTHER CROWD-SOURCED SPECULATIVE FUTURES

Resilient Cities, Post-COVID-19 series by Evergreen and Future Cities Canada



[1. Strengthening Communities](#)



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[Coronavirus Will Change the World Permanently. Here's How.](#)

Politico Magazine



[How Life in Our Cities Will Look After the Coronavirus Pandemic](#)

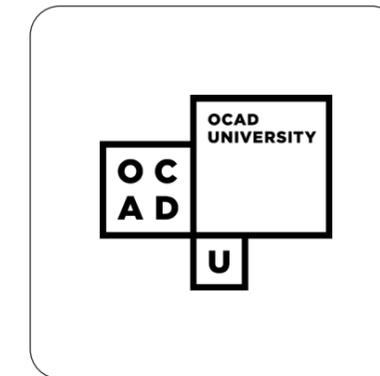
by Foreign Policy

FINAL THOUGHTS

Strategic foresight and scenario development are valuable resources for communities aiming to develop greater resilience and agility in addressing a multitude of complex challenges and potential risks in the coming decades and beyond. Using these and other foresight methods, helps decision-makers develop a holistic understanding of these challenges, collaborate within and across sectors, and develop new future-informed solutions. This is true during the best of times, and even more so in this period of great and unpredictable change.

We're in an era marked with substantial uncertainty, in the duration and intensity of COVID-19, in the ability of communities across the country to recover and adapt, and in the staying power of the structures, practices and traditions that have been shifted or threatened by the pandemic. Some are perceiving this moment as an opportunity to drive forward radical change that many have been waiting for, others are beginning efforts to restore our pre-pandemic state, while still others are waiting to see where we land. Regardless of goals, strategic foresight offers a powerful tool for exploring, adapting to, and future proofing strategic plans.

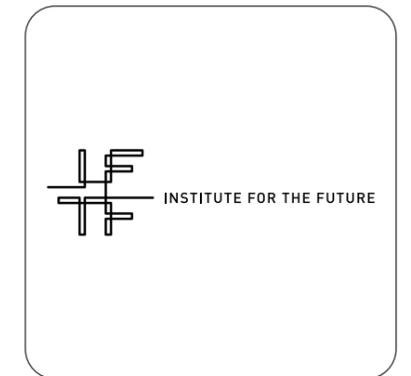
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GLOSSARY

Horizon scanning: a search process that uncovers and validates signals of change and then groups them into trends. [More on this →](#)

Time horizon: a fixed point of time between 10 and 50 years in the future that a scenario builds up to. [More on this →](#)

Signals of change: small or local innovations or disruptions that have the potential to grow in scale, geographic distribution, and influence. [More on this.](#)

Scenario development: a strategic foresight process that uses research and evidence to develop concrete stories with clear associated timelines. [More on this →](#)

Strategic foresight: a practice that uses a variety of methods to explore probable, plausible, possible, and at times, preferable futures on a 10- to 50-year time horizon. [More on this →](#)

Trend: Groupings of signals of change that reveal emerging patterns of change. [More on this.](#)
[More on this →](#)

Drivers of change: Influential trends which interact to collectively determine the scale and direction of change. [More on this →](#)

Critical Uncertainties: Trends whose directions are unclear or unstable, which are particularly useful in framing alternate and contrasting futures based on their possible outcomes and expressions. [More on this →](#)

Foresight for Resilient Cities is a new Future Cities Canada initiative that leverages strategic foresight tools to enable future-focused city building aligned to global resilience goals through network activation and capacity building.

For more information, contact Ayana Webb, Program Manager awebb@evergreen.ca

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