

USING SCENARIO PLANNING

Various trends have emerged over the last five to ten years that could have significant implications for the region and for the role the MBTA will need to play to achieve the goals laid out in this plan. While these trends may seem to be going in one direction, the trajectory of these trends is not necessarily fixed. The rate of urbanization has been accelerating, but where the majority of Millennials—the largest population cohort—choose to live when they start to raise families is still unclear. Housing prices have been increasing dramatically—particularly near transit—but housing construction has also started accelerating, which could help to stabilize prices. Technology is changing at a rapid pace—with autonomous vehicle technology having the potential to transform the mobility landscape. Already we are seeing impacts of rideshare, bike share, and other mobility options that did not exist five to ten years ago. Climate change will also play a role in determining the

needs of the region through 2040—but to what extent policies change to foster collective action remain to be seen.

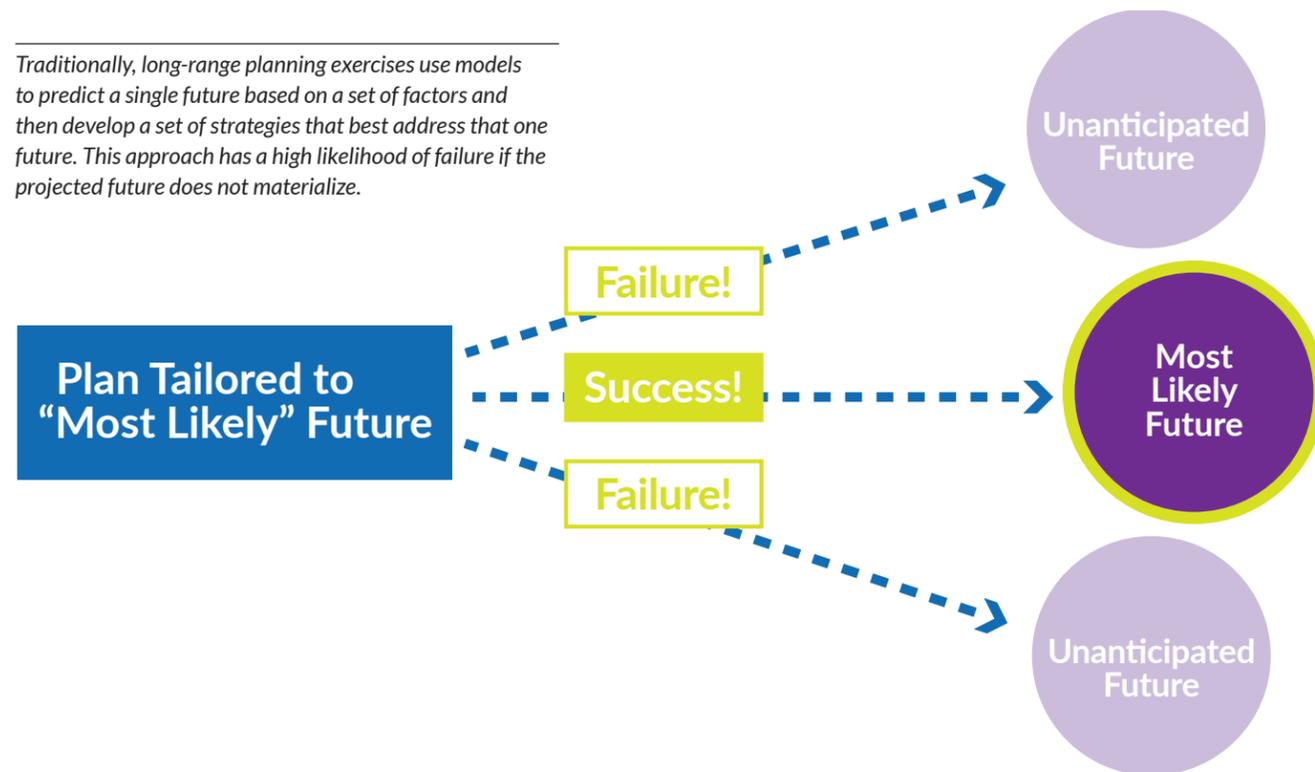
Traditionally, long-range planning exercises use models to predict a single future based on a set of factors and then develop a set of strategies that best address that one future. But if that single model is wrong, an entire plan may be ineffective and resources that may have been beneficial for that presumed future may now have only limited effect. To plan in the face of uncertainty, Focus40 looked at a range of possible futures in order to develop an investment strategy that can be successful regardless of how current trends evolve.

The Focus40 Team worked with a diverse group of stakeholders and subject matter experts to develop and refine four different potential futures for the Boston region

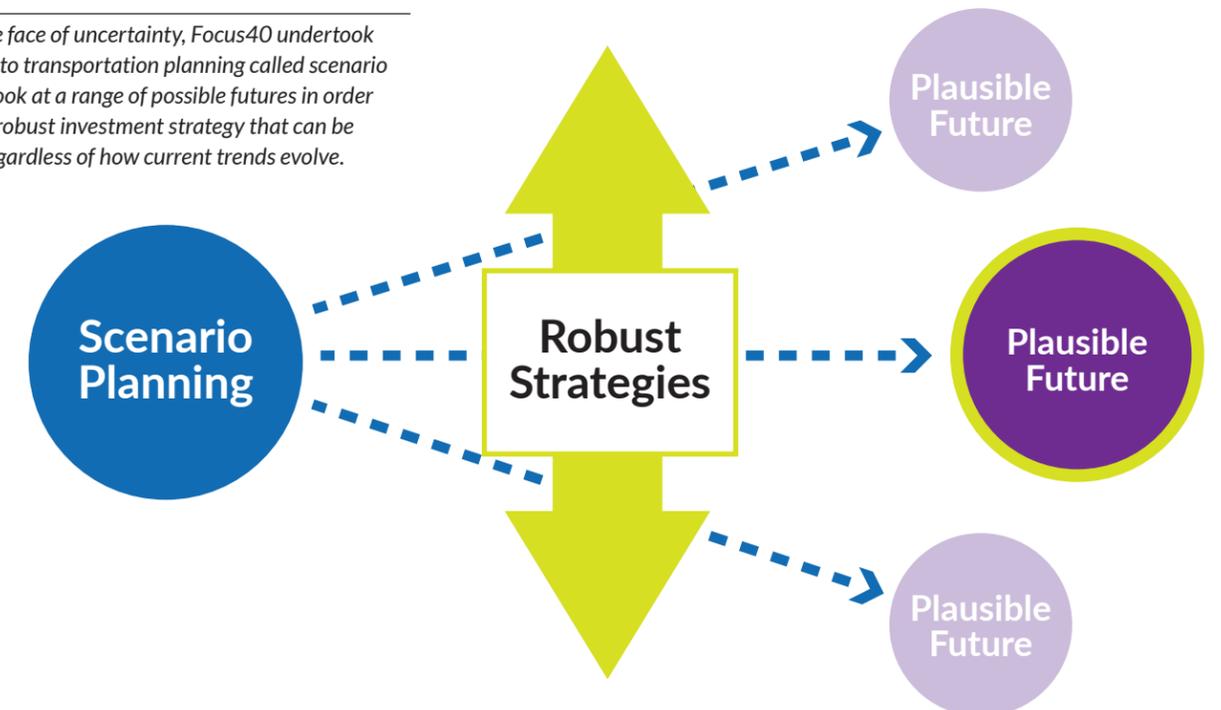
(‘planning scenarios’) based on the four trends that would have the largest impact on the MBTA’s investment strategy: the rate of urbanization; the locational decisions of low-income households; the rate of technology adoption; and the policies and behaviors around climate change. Each scenario is mapped against each of the four trends in order to develop a picture of what each of the futures could look like. The Focus40 Team worked with stakeholders to think about which investments make the most sense in which potential future. Please see page 12 for more details.

Understanding the needs of each scenario helped to underscore the importance in all potential futures of making the existing system more reliable, robust, and resilient.

Traditionally, long-range planning exercises use models to predict a single future based on a set of factors and then develop a set of strategies that best address that one future. This approach has a high likelihood of failure if the projected future does not materialize.



To plan in the face of uncertainty, Focus40 undertook an approach to transportation planning called scenario planning to look at a range of possible futures in order to develop a robust investment strategy that can be successful regardless of how current trends evolve.



Urbanization

Affordability

Technology

Climate Action

MetroFuture

Greater Boston's visioning document for compact, sustainable growth

Suburbanization

Low Affordability
Near Transit

Gradual Evolution

Low Collective Action



Urbanization

High Affordability
Near Transit

Disruptive Change

High Collective Action

Business as Usual

Low-and-moderate-income households are choosing to live in more affordable suburbs and Gateway Cities

Suburbanization

Low Affordability
Near Transit

Gradual Evolution

Low Collective Action



Urbanization

High Affordability
Near Transit

Disruptive Change

High Collective Action

Innovation Acceleration

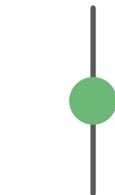
Technology changes are adopted quickly and radically change the transportation landscape

Suburbanization

Low Affordability
Near Transit

Gradual Evolution

Low Collective Action



Urbanization

High Affordability
Near Transit

Disruptive Change

High Collective Action

Climate Responsive

Enhanced commitment by the Commonwealth to invest in greenhouse gas reduction and resiliency measures

Suburbanization

Low Affordability
Near Transit

Gradual Evolution

Low Collective Action



Urbanization

High Affordability
Near Transit

Disruptive Change

High Collective Action