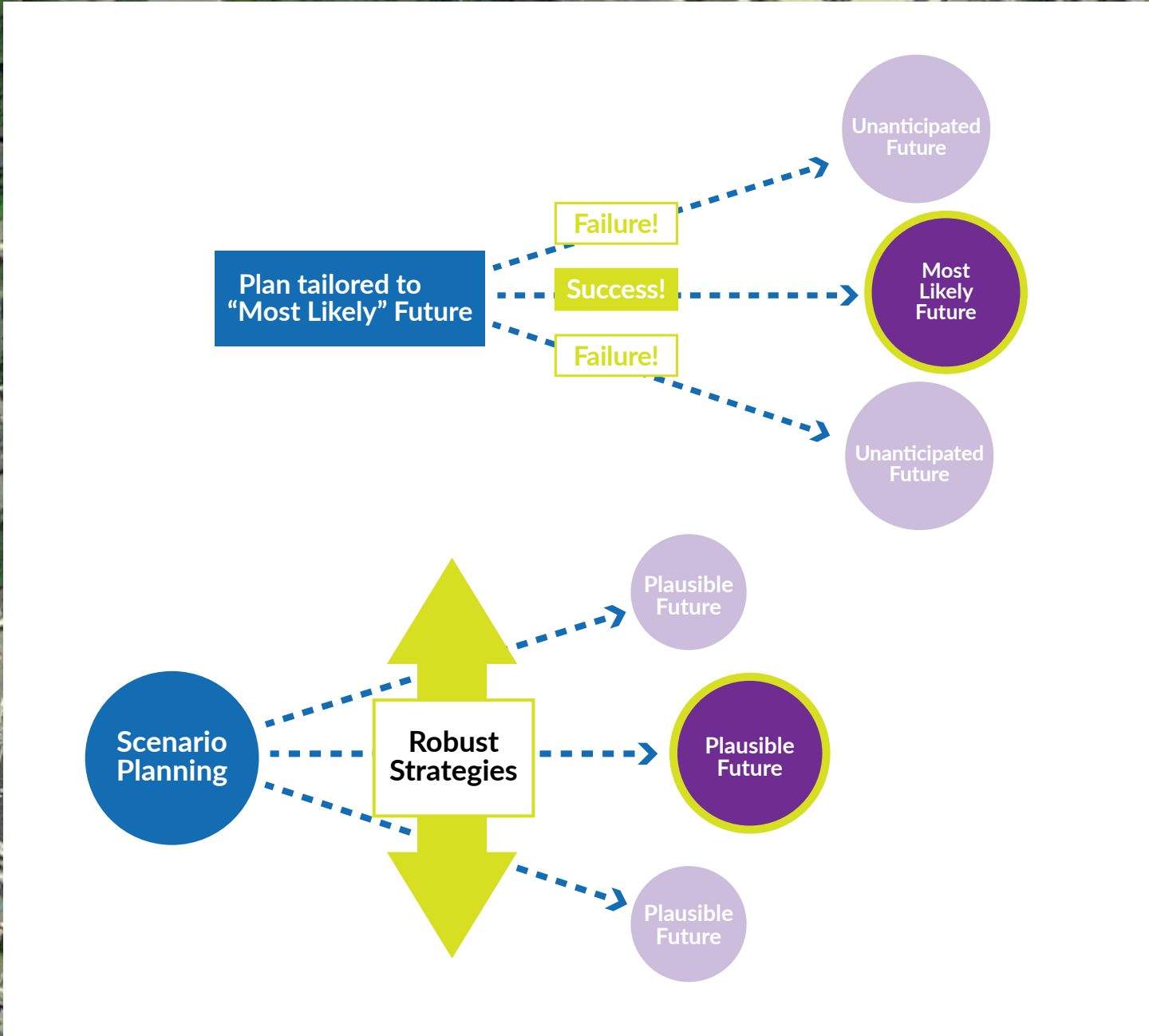


Figure 1
FOCUS40 SCENARIO PLANNING FRAMEWORK



FUTURE TRENDS & SCENARIOS

The MBTA is developing an investment strategy to meet not only today’s challenges, but also the needs of the Boston region of 2040. Even though we don’t know exactly what the future will hold, we still need to invest in our transit system to meet the needs of the region several decades from now. The expensive and durable nature of transit investments makes it very important to have confidence that the investments will be relevant – and help to achieve our goals – over a long period of time.

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. However, models are limited by nature and many factors outside of the model influence what types of transportation investments may be important. If the model is wrong, resources will not be maximized.

To plan in the face of uncertainty, Focus40 undertook a new approach to transportation planning called scenario planning to look at a range of possible futures in order to develop an investment strategy that can be successful regardless of how current trends evolve (See **Figure 1**).

Using this scenario planning process allowed the Focus40 team to identify those investments and initiatives that would be critical in any potential future and therefore should be prioritized under all circumstances. Such bedrock investments will improve the current MBTA system while also minimizing the risk of committing to a very costly project that may only offer benefits in a small number of futures. While the MBTA recognizes the ability of transit to help shape the course of future development – particularly when development and transit are pursued in partnership – the scenario planning exercise illuminates the inherent risk of expansion beyond the existing transit-friendly core and the wide-reaching importance of investing in the core system, no matter which scenario plays out.

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Figure 2
SUBJECT MATTER EXPERTS

Subject matter experts were interviewed based on their expertise in one or more of the following areas: climate, demographics, mobility trends, and technology.



DRIVERS SHAPING THE NEEDS OF THE REGION IN 2040

The Focus40 team worked with subject matter experts (see **Figure 2**) and reviewed a number of data sources and analyses, including the Transportation Research Board’s Foresight 750 Series, to inform the development of the different scenarios. Additionally, the Focus40 project team coordinated with the Baker/Polito Administration’s Commission on the Future of Transportation and MAPC’s regional planning process to ensure that Focus40 scenario planning process was synchronized with these other plans for the region’s future.

As part of this work, four major driving factors rose to the top for their potential to change the fundamental character of the region that the MBTA serves and increase the uncertainty around which direction the trends may take over the next several decades.

The driving factors identified include the rate of urbanization, the geographical distribution of wealth around the region, the pace of technological change, and how individual and collective actions may change to respond to the threat of climate change. These are the trends to which the MBTA must pay attention as it evaluates future capital investments. Other factors that will shape the need for future investment are assumed as part of this plan:

- The T has access to better data around usage, rider needs, and issues, supporting a more responsive system
- Climate change continues to cause inland flooding and increasingly severe weather
- The region’s population is aging, with more people choosing to age-in-place

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