Figure 5.1 How will climate change affect transportation decisions?

Climate Changes and Variability

- Temperature change
- · Precipitation change
- Accelerated sea level rise
- Increased storm surge and intensity

Transportation Decision-Making

- System planning and investment
- Project development
- Operations
- Maintenance
- System assessment

Transportation Impacts

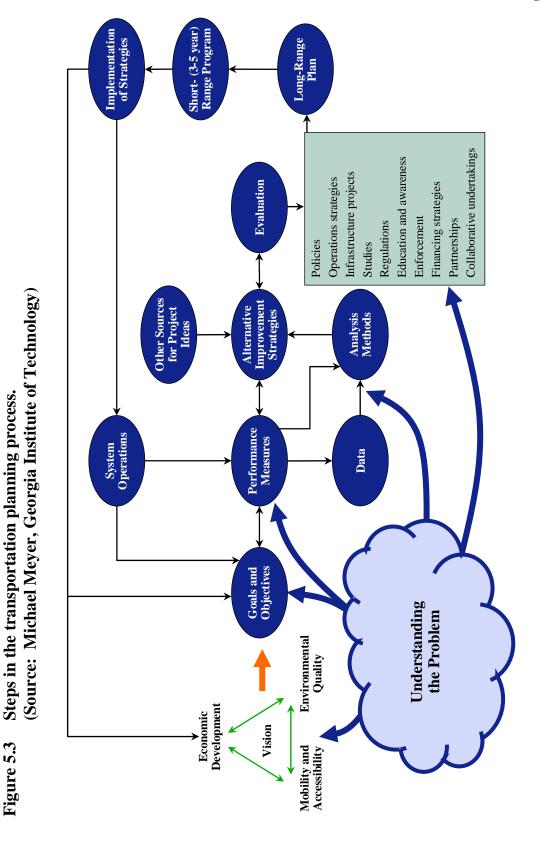
- Location
- System design
- · Design specifications
- Materials
- Safety
- Emergency management/ evacuation
- Replacement/ repair schedules
- Investment levels

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Figure 5.2 SAFETEA-LU planning factors. Eight planning factors that should guide the development of plans, programs, and projects are identified in SAFETEA-LU. (Source: U.S. Department of Transportation)



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Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study, Phase I Chapter 5: How Can Transportation Professionals Incorporate Climate Change in Transportation Decisions?: Figures Draft 10/5/07

Figure 5.4 Relationship of transportation planning timeframe and infrastructure service life to increasing climate change impacts

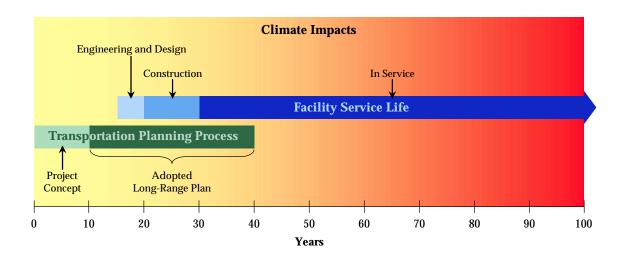
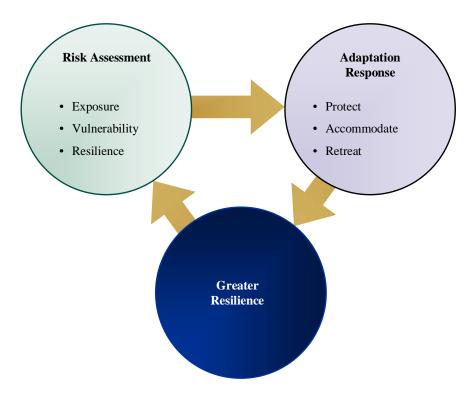
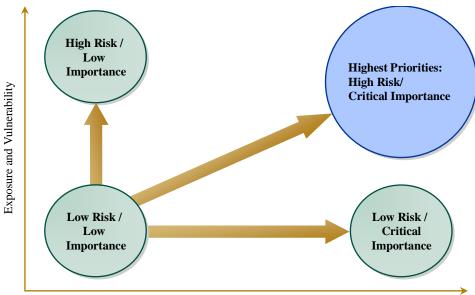


Figure 5.5 A risk assessment approach to transportation decisions.



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Figure 5.6 Degree of risk and value of performance inform level of adaptation investment.



Importance of System/Facility Performance

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