

Bus Rapid Transit ~~Feasibility~~ ~~Compromises~~ Successes

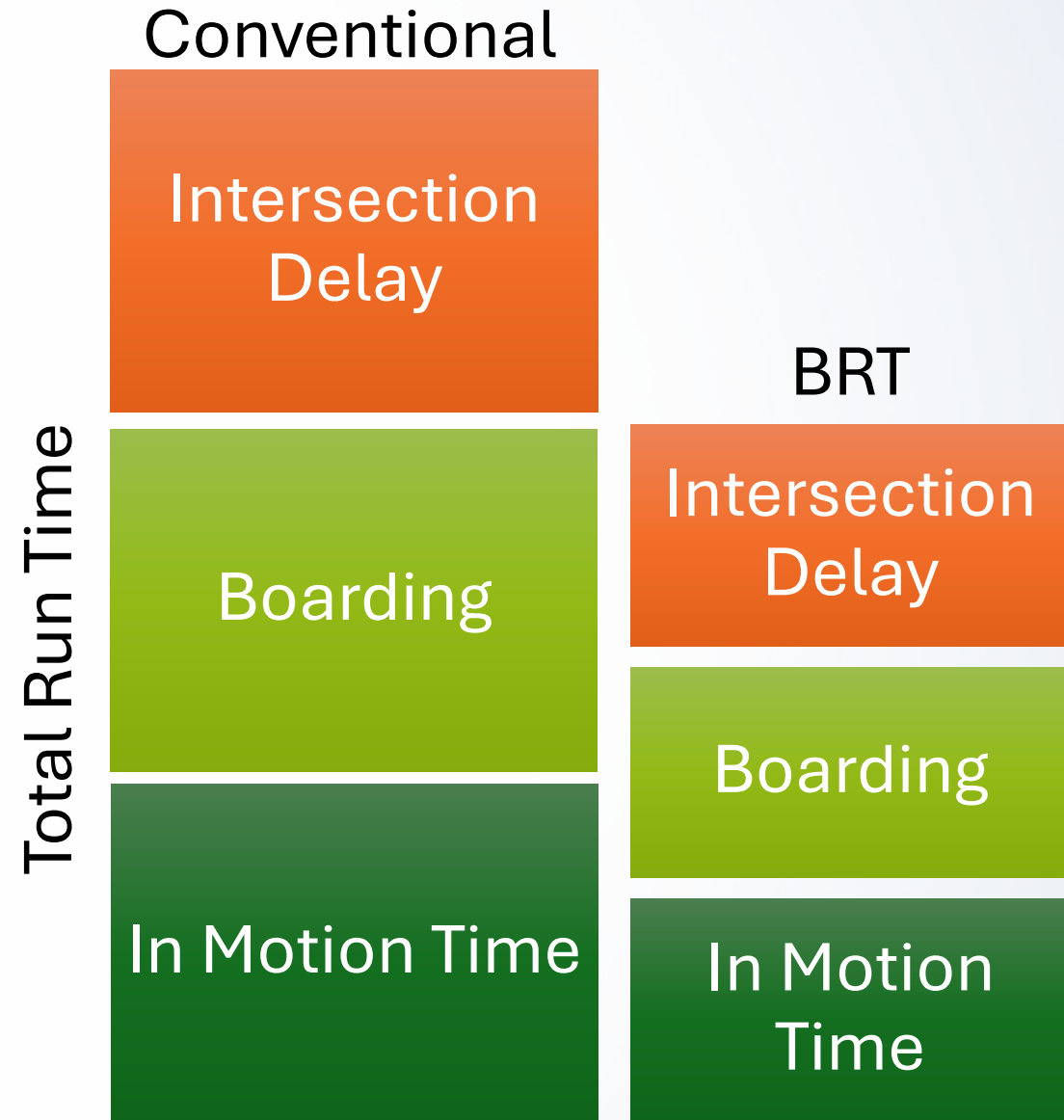


Agenda

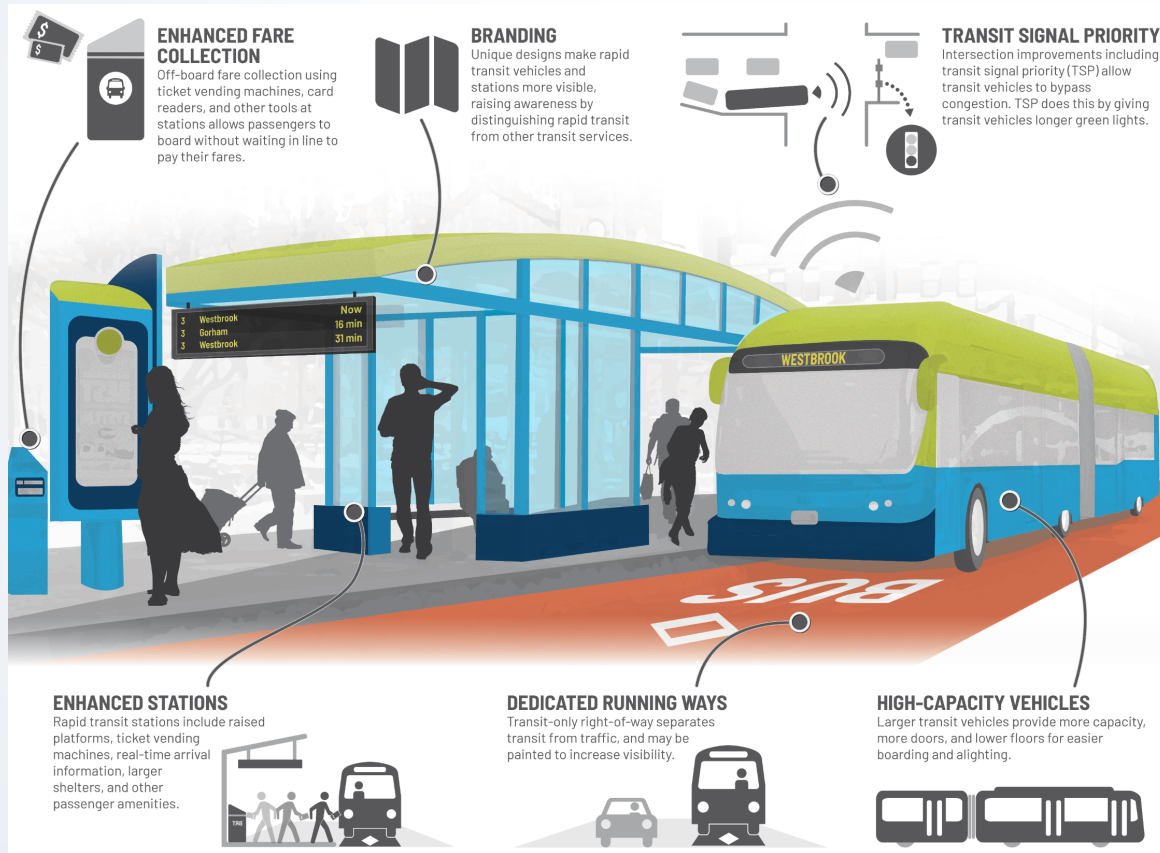
- The Bus Rapid Transit Concept and Purpose
- Bus Rapid Transit Elements
- Perspectives
- Types of Feasibility
- Challenges
- What Practitioners Can Do

Bus Rapid Transit Concept and Purpose

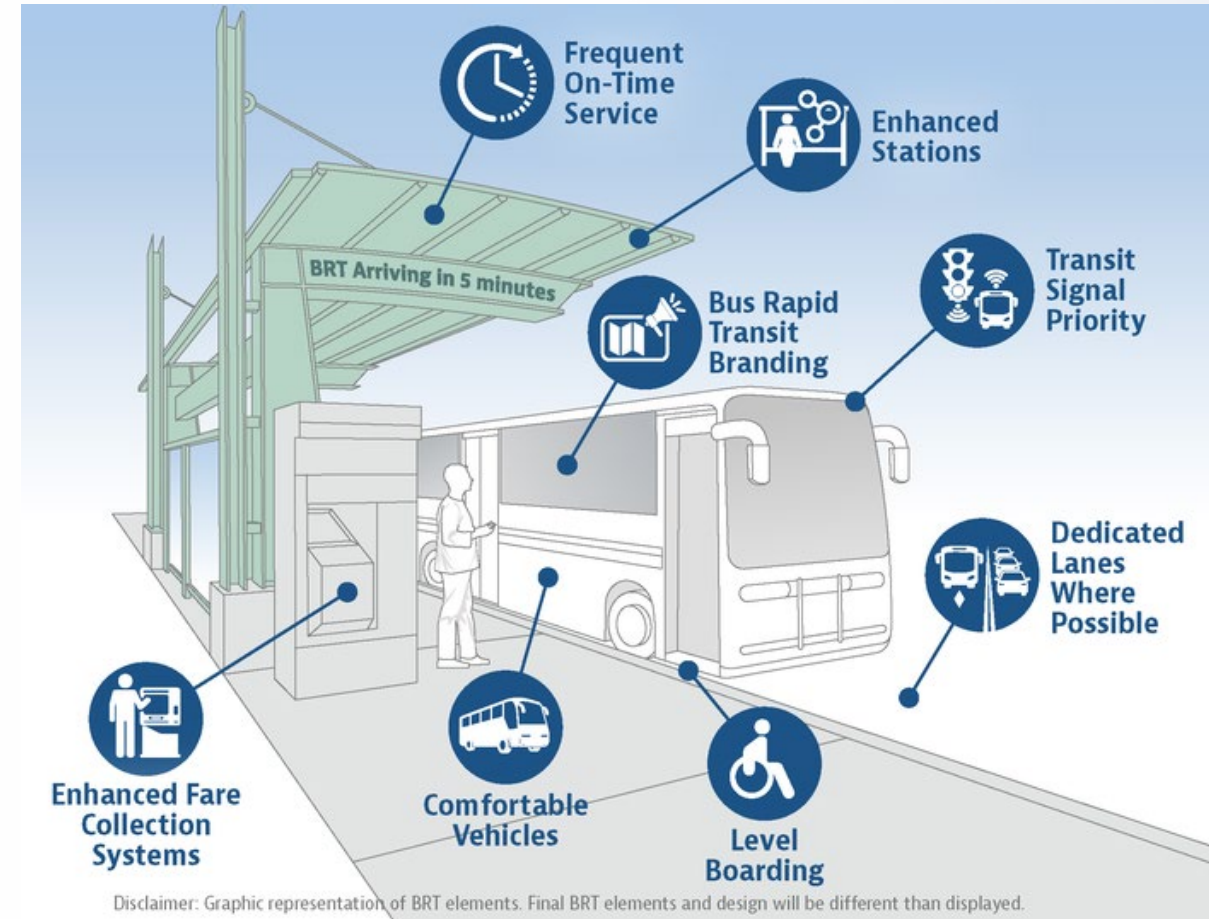
- Operational and infrastructure concepts to apply fixed guideway and rail strategies to bus route to improve service
- High-capacity, high-quality service at a lower price



Bus Rapid Transit Elements



Source: Greater Portland Metro

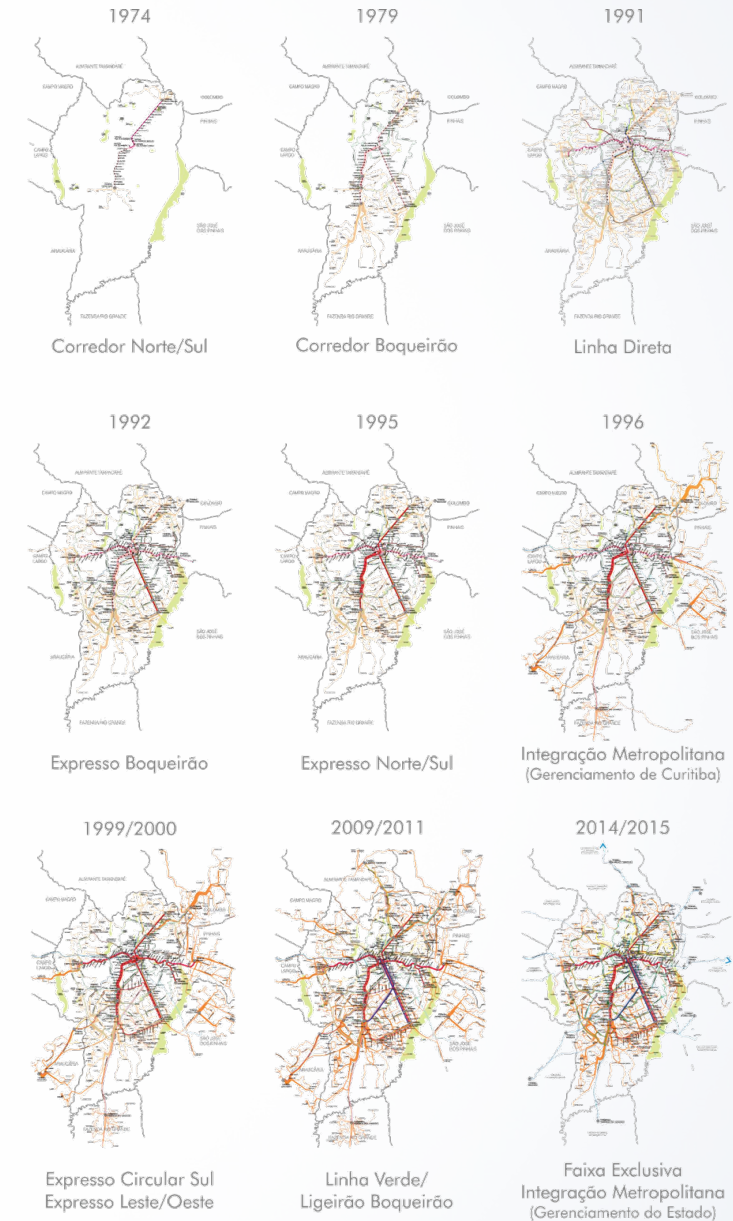


Source: Colorado Department of Transportation

Curitiba, Brazil

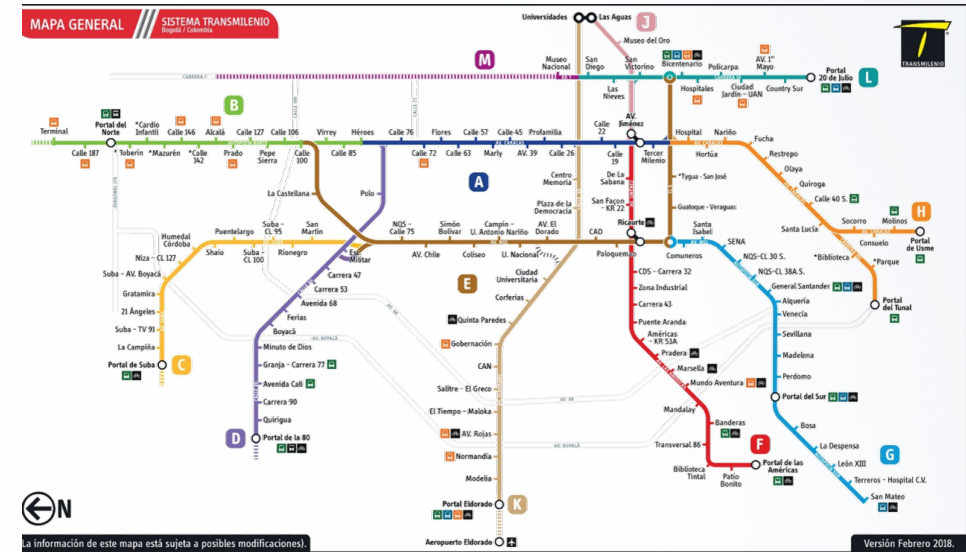
Rede Integrada de Transporte

- First line in 1974
- New “tube” stations in 1991



Bogota, Columbia TransMilenio BRT

- First Phase opened in 2000
- Consists of twelve interconnected lines
- Built instead of a subway system



Feasibility is an issue of perspective

As alternative to light rail



Source: University of Washington

Elements to improve bus service



Source: Wikimedia Commons

Know Perspectives

User



Operator

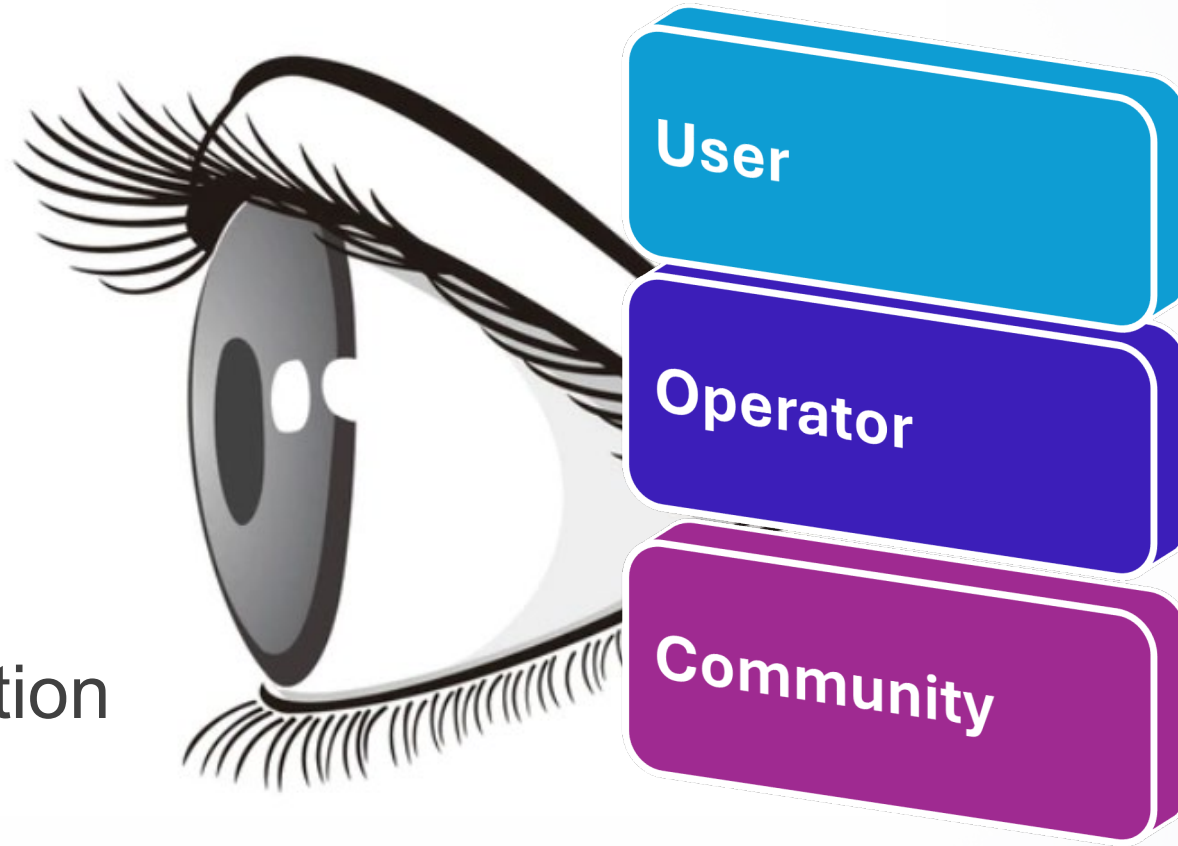


Community



Types of Feasibility

- Service
- Administrative
- Cost
- Space
- Community Integration



Types of Feasibility - Service

- Developing the Service
 - Business Model
 - Hours of Operation
 - Frequency
 - Notification
 - Stops
 - Lines

- A transit service is only feasible if customers think it is a good service

[illegible]

Types of Feasibility - Administrative

- Project Development Capacity
 - Labor
 - Vehicles
 - Maintenance
 - Operating Funds
 - Fare System
- Key point: For new service, where legacy infrastructure and methods can be used and where they cannot



Source: Community Transit

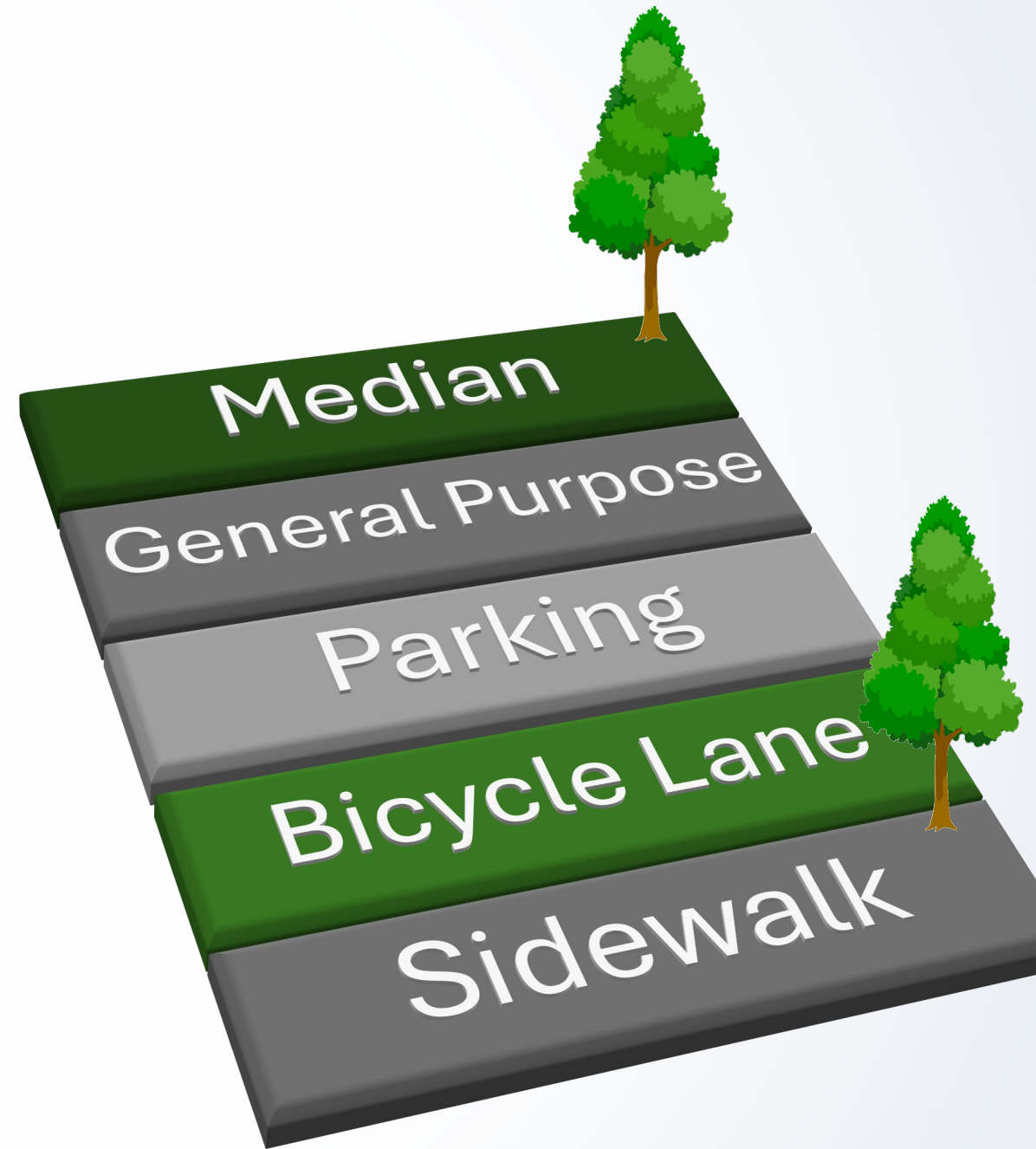
Types of Feasibility - Cost

- Starting up and sustaining
 - Capital Cost
 - Maintenance Cost
 - Operational Cost
 - Fare Cost
- Several success stories of system expansion



Types of Feasibility – Space

- Where does space come from?
 - Guideway
 - Stations
- Who owns/makes decisions about the right-of-way?
- Strengthening multimodal corridors



Types of Feasibility – Community Integration

- Guideway
- Station access
- Waiting areas
- Destinations

● ● ● Transit agencies do not own or operate the drivers of their ridership, therefore “ownership” should include everyone



Challenges and Strategies to Making Bus Rapid Transit Feasible



Coherent Vision

- Be realistic
- Build partnerships
- Be transportation forward



Fragmented jurisdictions needing buy-in and coordination

- Spread responsibilities
- Diverse perspectives



Land Use Development: Destinations

- Incentives: Parking reduction, density bonus, advertisement
- Integration: Station development



Ridership and Sustainable Revenue

- Post-COVID reality, ridership profiles, customer-focus
- The transportation system is incrementalism in practice – respond accordingly

What Do We Do As Professionals - Approach

- Holistic Technical Analysis
 - Person Trip / Capacity Analysis
 - Corridor Mode Split
- Focus on Connecting Destinations
- Community Engagement
 - Empower community in involvement
 - Visualize and describe future service from user perspective
- Ensure All Perspectives are Included
 - User
 - Operator
 - Community

Thank You



Sean Daly, Iteris

sdaly@iteris.com

337-534-5031