



# Public Transit Policy Plan

October 1, 2019

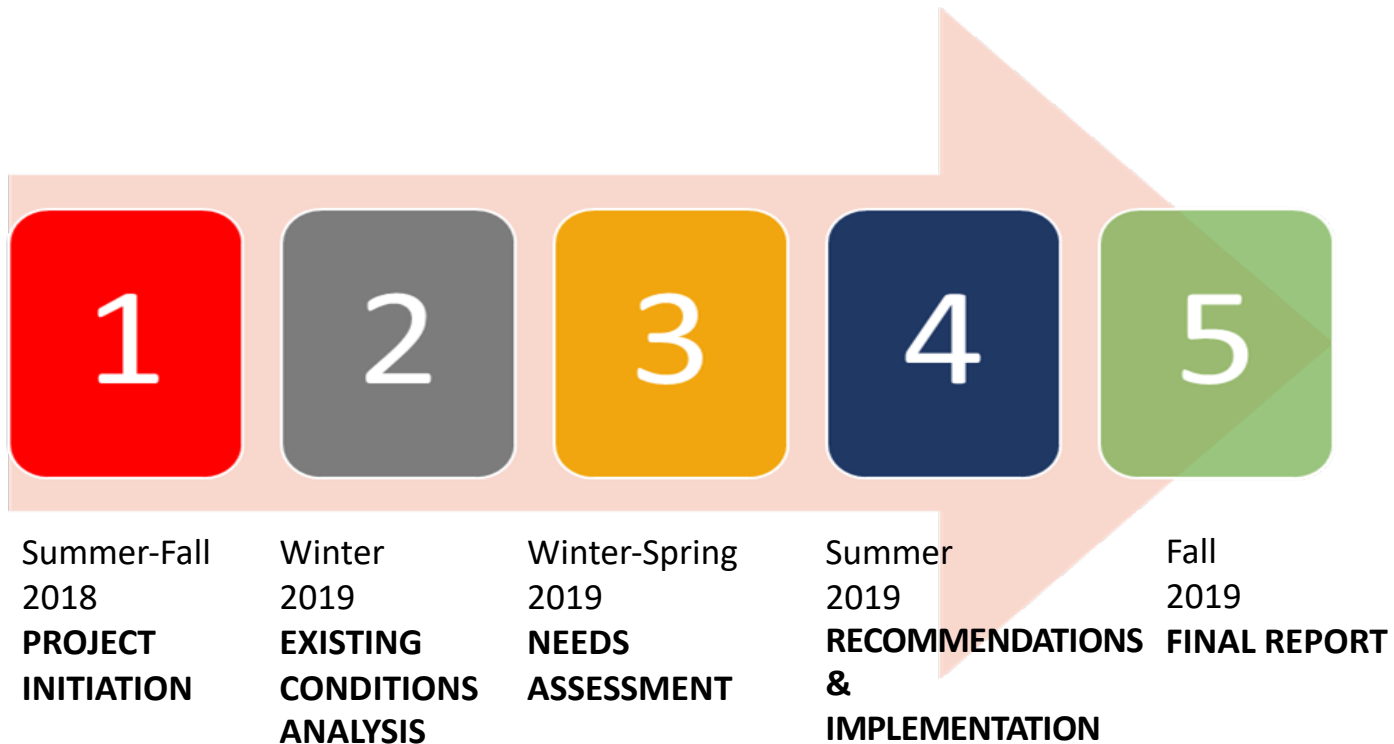
Study Advisory Committee Meeting #3



# Overview

- Project Status
- Needs and Resources
- Policy Proposal
- Recommendations
- Survey Results
- Timeline

# Project Tasks



**PUBLIC/STAKEHOLDER OUTREACH**



# Products Thus Far

- Interim Report
  - Existing Conditions
  - Prior Studies
  - Best Practices
  - Critical Themes and Challenges
    - Aging
    - Economic opportunity
    - Land Use Patterns
    - Technology
    - Awareness
- Survey Summary
- Presentations and Outreach



# Outreach Activities

- 11 Regional Forums (Fall 2018)
- MetroQuest survey Fall 2018 (needs) + Summer 2019 (solutions)
- 9 Stakeholder interviews (Winter 2019)
- 9 E&D Committee assessments (Spring 2019)
- 2 Study Advisory Committee meetings (Feb + May)
- Appearance on VPR's Vermont Edition (July 2019)
- TPI, PTAC, DAIL, VPTA presentations
- Project website (throughout)



# Needs Assessment Methodology

- Identify service gaps and unmet needs
  - Location of transit services, key destinations, population and target groups
  - Commuting patterns
  - Input from regional forums
  - Comments from interviewed stakeholders
  - MetroQuest survey responses
  - Comments from regional E&D committees
- Estimate transit market segments by age, disability, income, and likely auto access
- Estimate number of trips to address need and associated resources
- Estimate impacts of possible scenarios



# Primary Needs Identified

- ❑ Lack of transit access in rural areas
- ❑ Lack of resources to meet the needs of vulnerable populations both today and in the future
- ❑ Lack of transportation for access to jobs
- ❑ In areas that have bus routes, improved service levels and connections are needed



# Travel Market Analysis

- Divided population into seven demographic slices
  - Non-disabled under 18
  - Non-disabled 18-24
  - Non-disabled 25-64, above poverty line \*
  - Non-disabled 25-64, below poverty line
  - Non-disabled 65-79 \*
  - Disabled, under 80
  - All 80 or over
  
- All but two (\*) have documented need for public transit





# Trip Rates

- Used 2017 National Household Travel Survey data to determine trip rates for each demographic category
  - Split the rates between urban (Chittenden County) and rural (rest of Vermont) residents
- Built in assumptions about likelihood of using an automobile for the trip and whether the trip would be made independently (to discount young children)
- Subtracted trips likely to be made by non-motorized modes (mostly walking and biking)



# Potential Markets

- For public transit to provide a full level of mobility to people likely to need or want to use it instead of driving, total number of transit trips would need to rise by a factor of 5: from about 4.3 million to about 22 million
- For public transit to provide a basic level of mobility—defined as 12 round-trips per month—to all people who may need or want to use it, total number of transit trips would need to rise by a factor of 2.5: from about 4.2 million to about 11 million
- Total estimated annual person trips in VT: 741 million



# Current Riders and Costs

- ❑ Current ridership (FY18)
  - ❑ Urban: 2.3 million [Urban and Express Commuter]
  - ❑ Rural: 1.5 million [Small Town, Rural, DR, Rural Commuter]
  
- ❑ Current cost per passenger (net of fare revenue)
  - ❑ Urban: \$4.64
  - ❑ Rural: \$10.11
  
- ❑ Exclusions
  - ❑ Intercity and Tourism routes
  - ❑ Demand response does not include Medicaid or volunteer driver trips



# New Riders and Costs

Area	"Full" Riders	"Full" Cost	"Basic" Riders	"Basic" Cost
Urban	4.2 million	\$19.6 m	743,000	\$3.4 m
Rural	13.5 million	\$136 m	5.7 million	\$60.0 m
TOTAL	17.7 million	\$156 m	6.5 million	\$63.4 m

- ▣ Assumes cost per rider the same as current
- ▣ Current total transit spending in VT: about \$40 million



# Scenario Exercise

- ❑ Increased fuel prices (assume a doubling)
  - ❑ Easier to attract riders to existing services
  - ❑ Reduces cost per rider
  
- ❑ Low fuel prices (assume \$2 per gallon)
  - ❑ Harder to attract riders
  - ❑ Increases cost per rider
  
- ❑ Changed transportation landscape due to technology
  - ❑ Autonomous vehicles
  - ❑ Software to aggregate trips more efficiently
  - ❑ Better information available to everyone
  - ❑ Reduces cost per rider



# Increased Fuel Prices – Urban

- Expected increase of 220,000 to 1.1 million new riders
  - Lower bound based on cross-price elasticity
  - Upper bound based on change in market share in Chittenden County last time there was a price spike (2006-8)
- Fuel cost relatively small part of operating cost: ~8%
  - Assuming doubling of fuel prices, share of cost would rise to about 15%
- Cost per trip would drop from \$4.64 to \$4.59 at lower bound or to \$3.47 at upper bound



# Increased Fuel Prices – Rural

- Expected increase of 154,000 to 300,000 new riders
  - Lower bound based on cross-price elasticity
  - Upper bound more limited than urban because availability of bus routes much lower in rural areas
- Fuel cost relatively small part of operating cost: ~8%
  - Assuming doubling of fuel prices, share of cost would rise to about 15%
- Cost per trip would drop from \$8.84 to \$8.74 at lower bound or to \$7.95 at upper bound



# Low Fuel Prices

- Most riders on Vermont transit systems do not have other options
  - Surveys show only 15-30% of riders could have driven
  - Losses likely limited to 4% on local routes and 9% on commuters
  
- Urban impacts
  - 96,000 fewer riders overall
  - Cost per rider rises by 11 cents to \$4.75
  
- Rural impacts
  - 67,000 fewer riders overall
  - Cost per rider rises by 18 cents to \$9.02





# Changed Transportation Landscape

- ❑ Autonomous vehicles would reduce operator labor costs, currently accounting for about 50% of total operations
  - ❑ Assume labor cost could be cut by 10%
  - ❑ Human drivers still needed for a majority of operations
- ❑ Better software & information would increase productivity
  - ❑ Assume 5% increase in bus route ridership with real-time info
  - ❑ Assume 50% increase in demand response productivity (other than NEK where most service is volunteer driver)
- ❑ Reduced net costs per passenger
  - ❑ Urban from \$4.64 to \$4.37 (\$4.10 including avs)
  - ❑ Rural from \$8.84 to \$8.42
  - ❑ Demand response would drop from \$21 per trip to \$14



# Summary of Scenarios

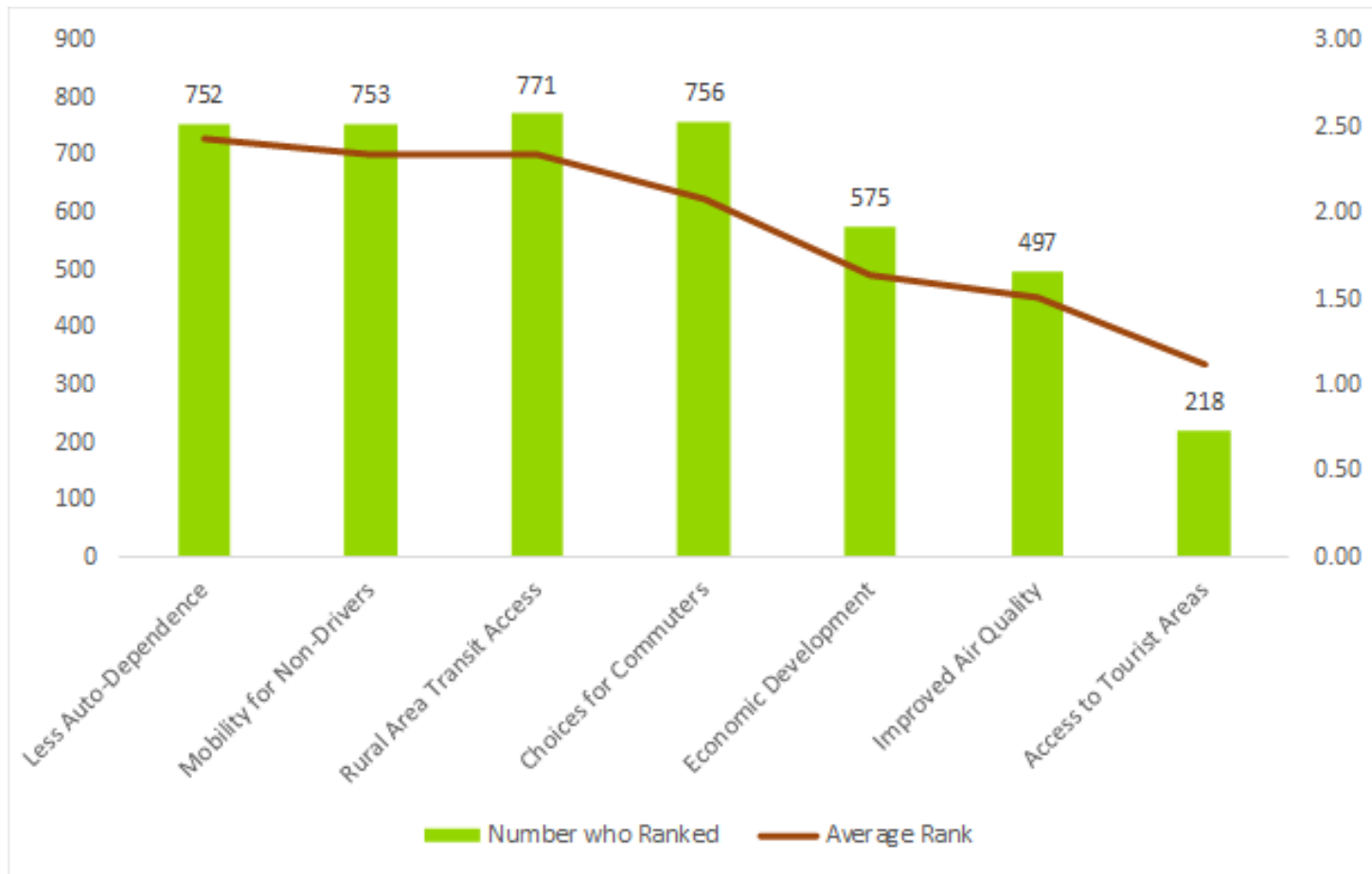
Scenario	Urban	Rural
Baseline net cost per rider	\$4.64	\$8.84
Baseline gross operating cost	\$12.8 million	\$12.7 million
1 – High fuel prices net cost per rider	\$3.47 to \$4.59	\$7.95 to \$8.74
1 – High prices gross operating cost	\$13.8 to \$15.2 m	\$14 million
2 – Low fuel prices net cost per rider	\$4.75	\$9.02
2 – Low prices gross operating cost	\$12.5 million	\$12.3 million
3 – Technology net cost per rider	\$4.10	\$8.42
3 – Technology gross operating cost	\$12.2 million	\$12.7 million



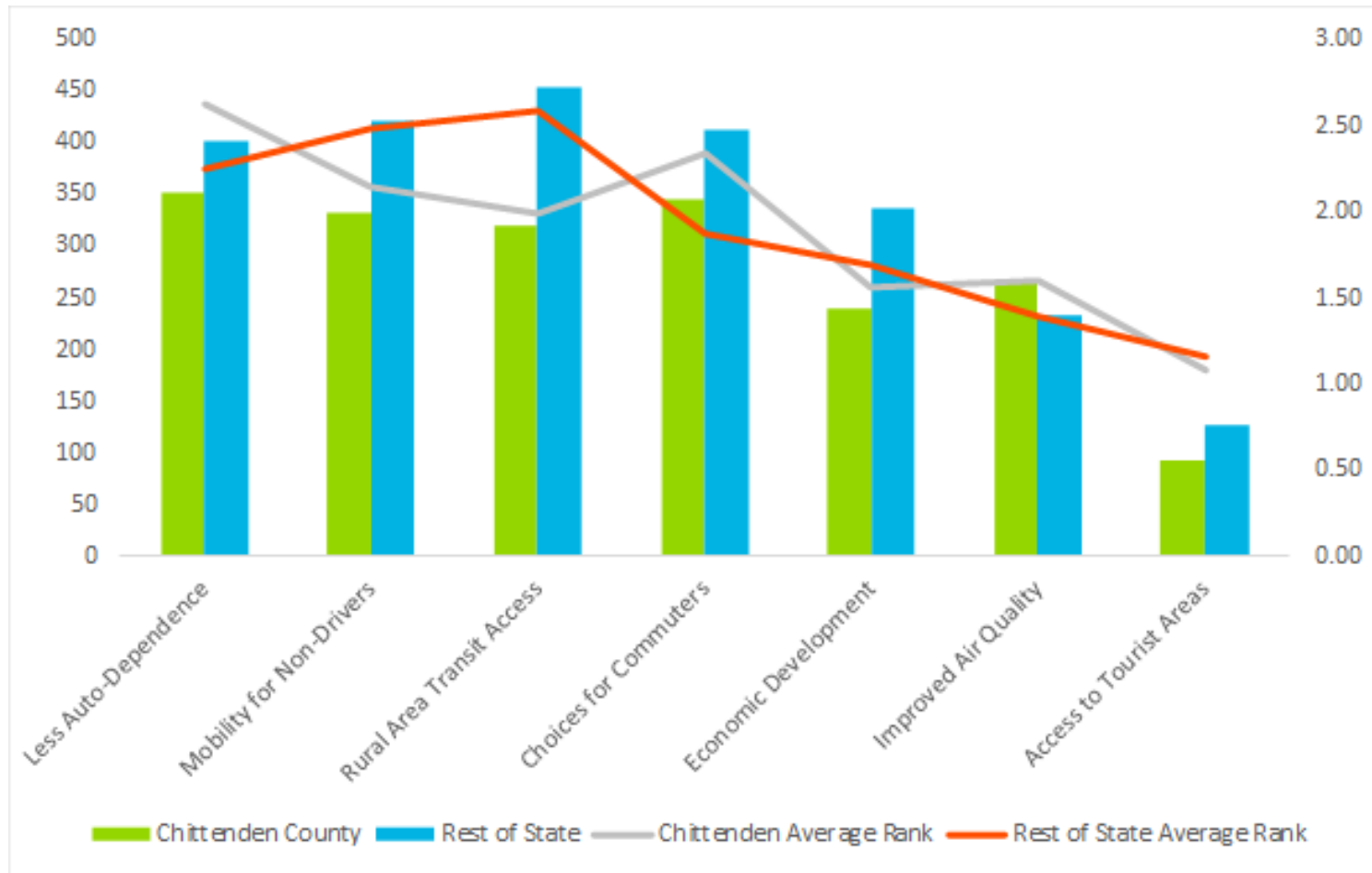
# Existing Goals: 24 V.S.A. §5083

- (1) Provision for basic mobility for transit-dependent persons, as defined in the current public transit policy plan, including meeting the performance standards for urban, suburban, and rural areas...
- (2) Expanding public transit service in rural areas and increasing ridership statewide. (NEW IN 2019)
- (3) Access to employment, including creation of demand-response service.
- (4) Congestion mitigation to preserve air quality, decrease greenhouse gas emissions\*, and sustain the highway network. (\*NEW IN 2019)
- (5) Advancement of economic development objectives, including services for workers and visitors that support the travel and tourism industry...

# Policy Ranking from MetroQuest



# Chittenden Cty. vs. Rest of State





# Proposed Goals

- (1) Providing basic mobility for people who are not able to drive or do not have access to private vehicles.
- (2) Providing access to employment both for people who are not able to drive themselves and for people who choose to use transit vehicles and other shared-ride services to avoid congestion and the cost of automobile commuting
- (3) Expanding public transit service in rural areas for all trip purposes, making use of the most cost-effective means of serving low-density areas.
- (4) Providing convenient mobility choices to reduce the dependence on private automobiles, thereby reducing traffic congestion, preserving air quality, decreasing greenhouse gas emissions and sustaining the viability of the highway network.
- (5) Supporting economic development in urban and rural areas, including services for workers and visitors that support the travel and tourism industry.



# Recommendation Themes

- Addressing aging Vermont
- Expansion of transit access
- Effective outreach and raising awareness
- Using technology to move to next generation of ride scheduling
- Land use planning and long-term investments



# Addressing Aging Vermont

- Create working committee with AHS to address mobility issues for vulnerable Vermonters
- More comprehensive planning for E&D program
  - Work with E&D Committees to establish annual work plans
  - Implement statewide E&D riders satisfaction survey
  - Pilot additional performance monitoring methods such as determining and tracking unmet needs
  - Set up annual statewide meeting
  - Share best practices: coordination, low-cost trips, volunteer management
- Establish Personal Mobility Accounts
  - Expand Ticket To Ride statewide
  - Allow for deposits, gifts and possibly ride credits





# Expansion of Transit Access

- Spur growth of volunteer driver programs
  - Check box on VT vehicle registration form to register
  - Streamline background check process
  - Non-monetary incentives
  - Increase marketing budget
  - Support additional recruitment/retention efforts
  
- Expand access to healthcare
  - Expand Rides to Wellness statewide
  - Encourage financial participation from healthcare providers
  
- Expand access to employment
  - Increase awareness of carpool/vanpool (Go Vermont)
  - Enlist support of employers in new JobRides program
  - Create “late bus” for shift workers
  - Support additional partnerships with TNCs, volunteer groups, etc. where available



# Expansion of Transit Access cont.

- Expand local connections (first mile/last mile access)
  - Bike share and e-scooters where and when appropriate
  - Microtransit where appropriate
  
- Expand funding pool overall – more service needed
  - Federal, state, local and private sector
  - To support improvements in
    - Geographic coverage
    - Span of service
    - More types (purposes) of trips



# Outreach and Raising Awareness

- Continue investment in Go Vermont
  - Expand capabilities
  - Increase marketing and awareness
  - Create interactive map of bus routes
  
- VTrans-sponsored project to document stories of the value of public transit
  - Video and audio interviews with beneficiaries
  - Develop promotional/educational packages to be utilized at Town Meetings and elsewhere
  
- Continue/expand partnerships and activities to raise awareness
  - Partners include AARP, State agencies, elected officials, Community Transportation Association of America (CTAA), Vermont Public Radio/Television



# Next Generation Ride Scheduling

- Work with microtransit companies to enhance software
  - Multi-program integration (Medicaid, E&D, client-pay, etc.)
  - Multi-resource integration (vans, taxis, volunteer drivers, bus routes, TNCs)
  
- Use expanded volunteer driver pool as a resource statewide
  
- Link to Personal Mobility Accounts

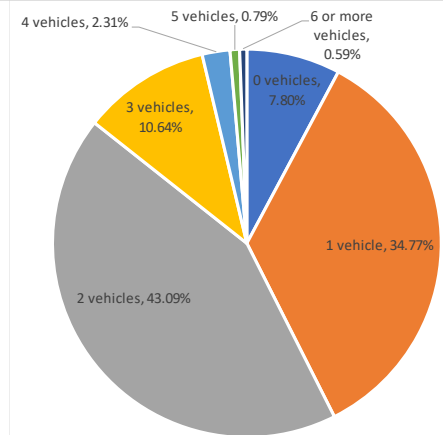
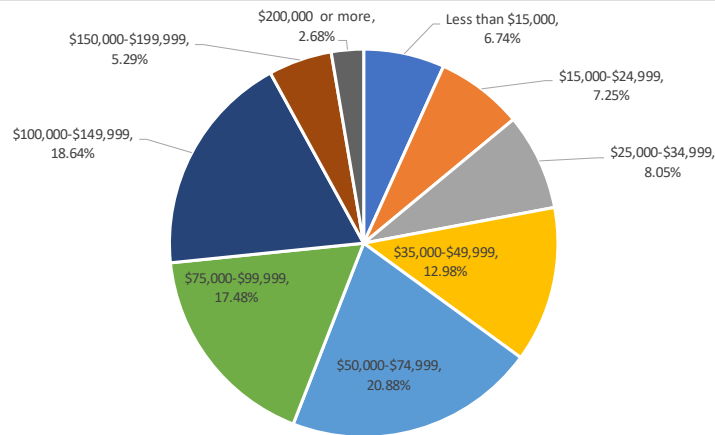
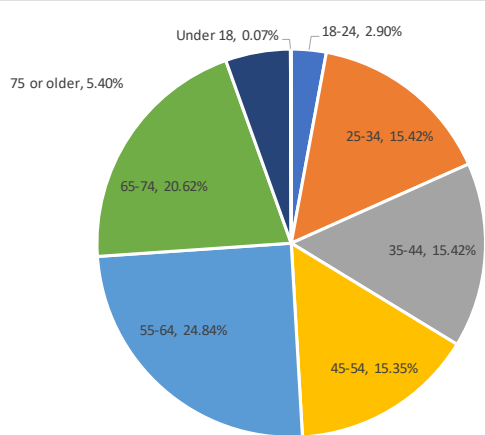


# Long-term Land Use Planning

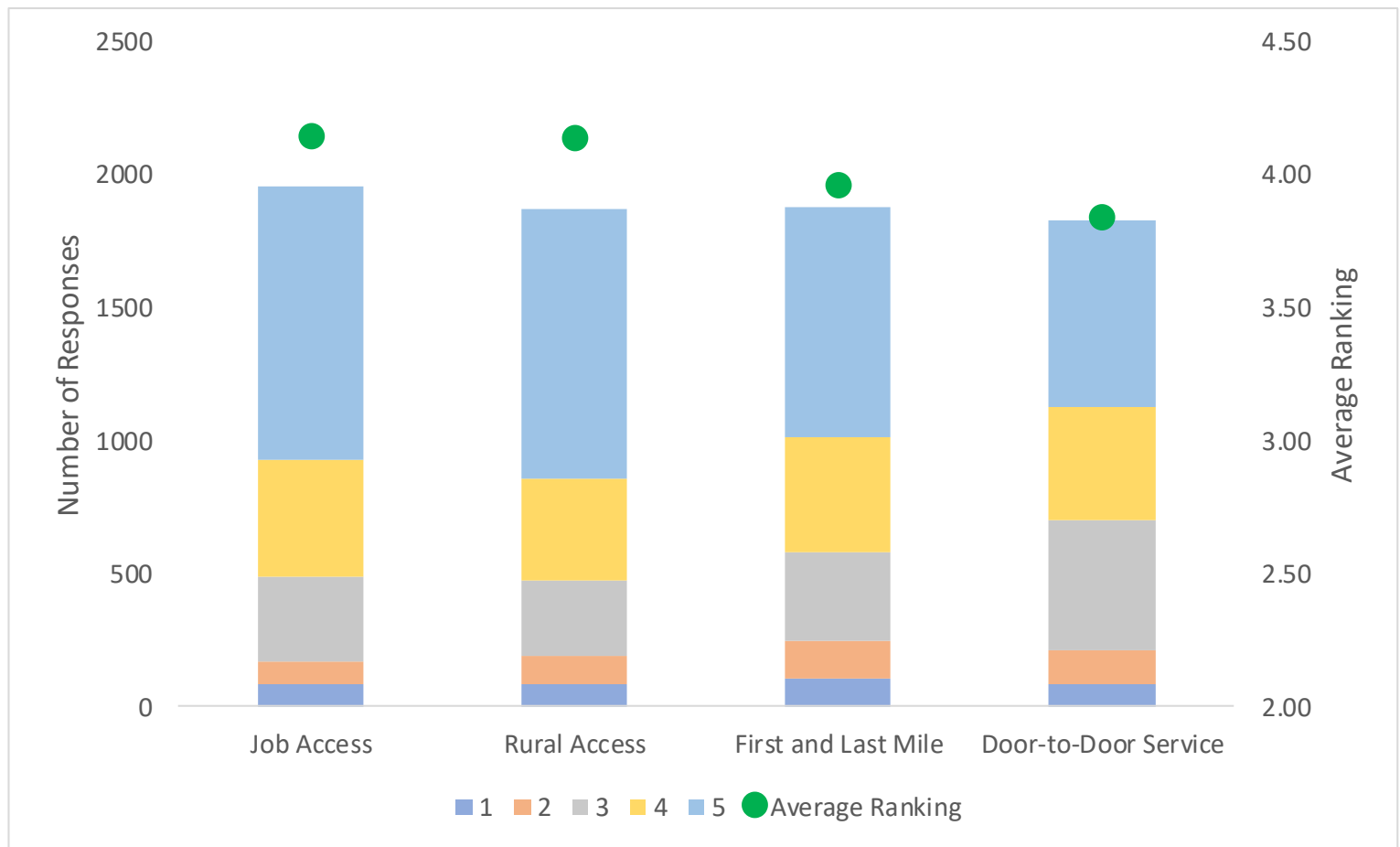
- Continue to work with state, regional and local agencies to integrate transit into land use planning
  - Density
  - Location
  - Accommodations
- Continue to promote objectives from LRTP
  - Maintain and strengthen the vitality of Vermont's villages and downtowns.
  - Make transportation investments that promote active transportation and reduce social isolation.
- Continue education and outreach efforts that support MPO/RPCs roles in facilitating transit and pedestrian considerations in Act 250 reviews

# MetroQuest Round 2 Results

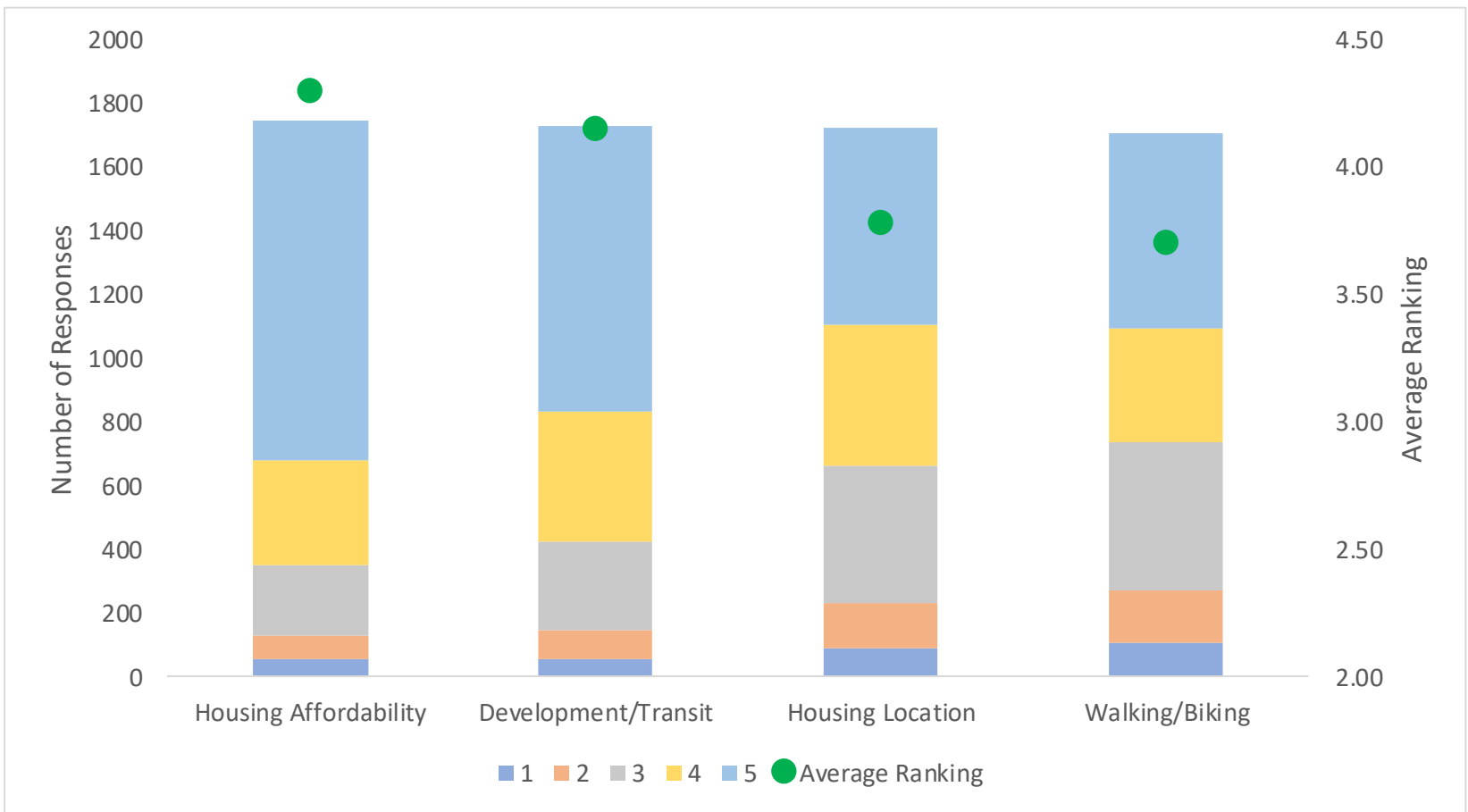
- Over 2,200 responses (July through September 2019)
- 28% Chittenden County (more representative than rd. 1)
- Broad cross-section overall (age, income, car ownership)



# Issue Importance: Service Type



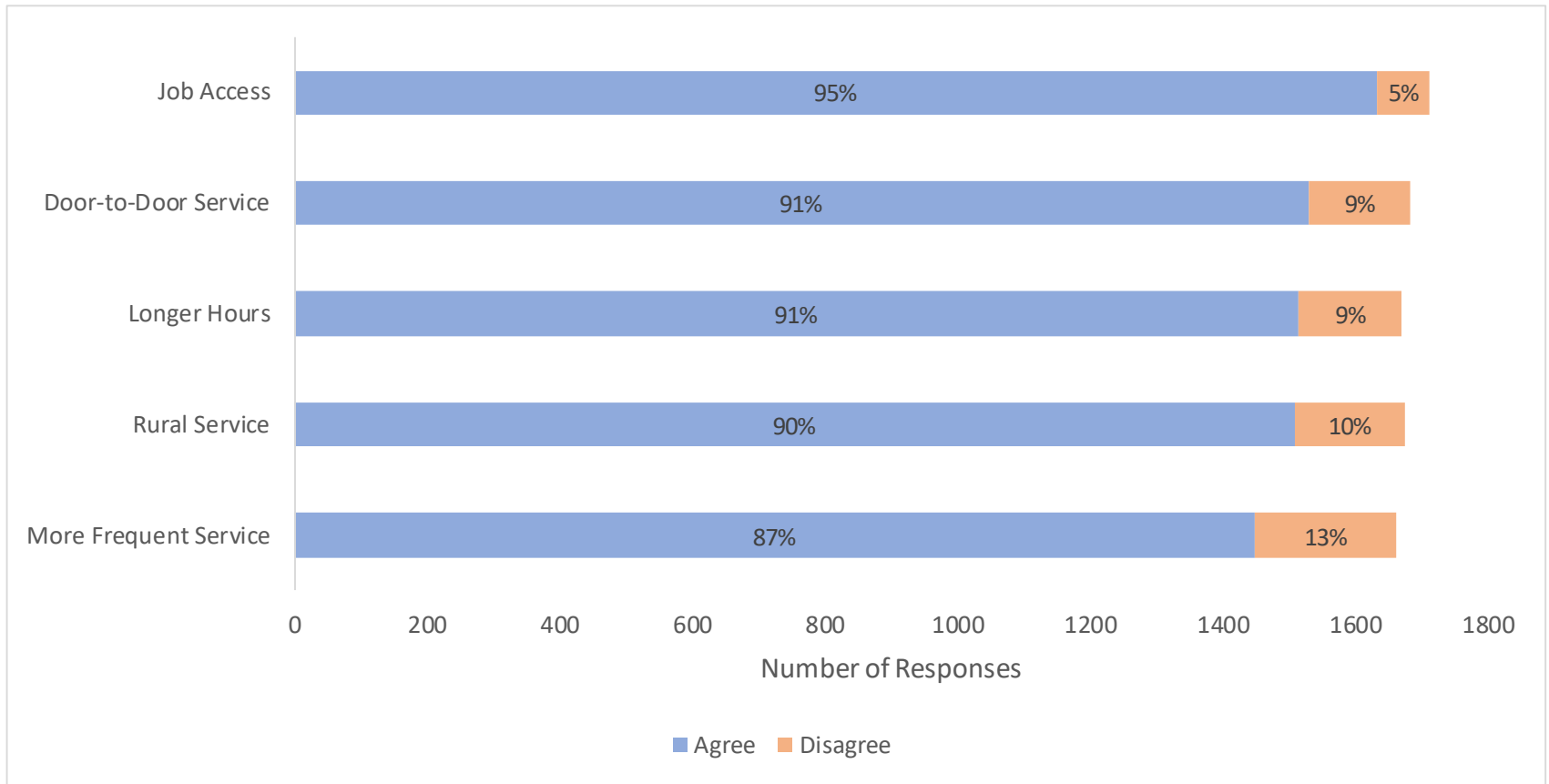
# Importance: Housing and Land Use





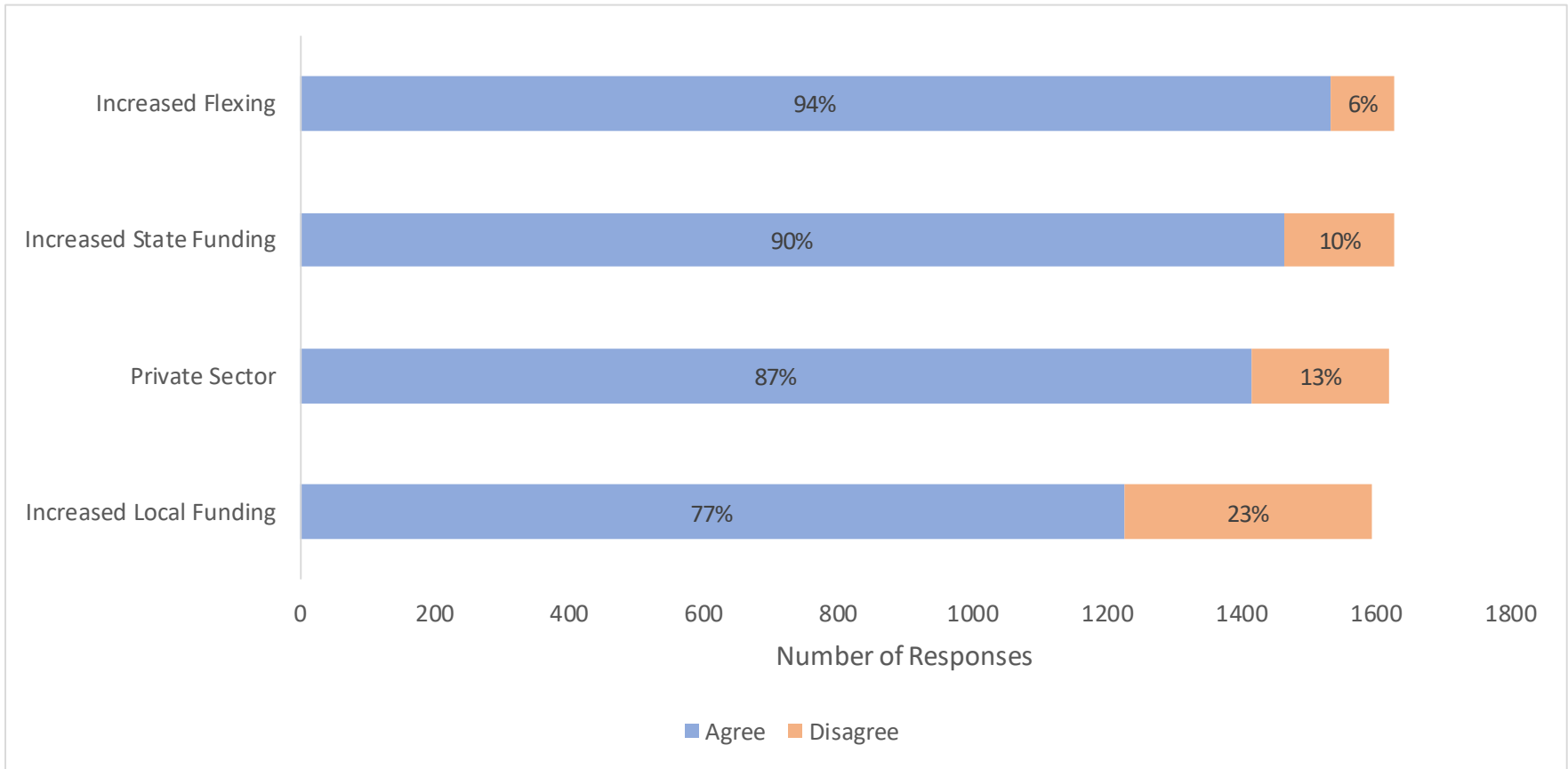


# Service Improvement Options





# Transit Funding Options



# Budgeting Activity





# Timeline

- ❑ SAC comments on drafts- due October 15<sup>th</sup>
- ❑ Implementation planning – October 2019
- ❑ Draft Final report – October 2019
- ❑ Statewide presentations- late October-December 2019
- ❑ Public Comment period- November- December 2019



# Thank you

Relevant reports, this presentation, and more, posted at:

[vtrans.vermont.gov/planning/PTPP](http://vtrans.vermont.gov/planning/PTPP)

Please forward comments and questions to Jackie Cassino by October 15<sup>th</sup>:

[jackie.cassino@Vermont.gov](mailto:jackie.cassino@Vermont.gov)