

## OUTLINE

### Transportation and communication networks: connecting people, places and ideas

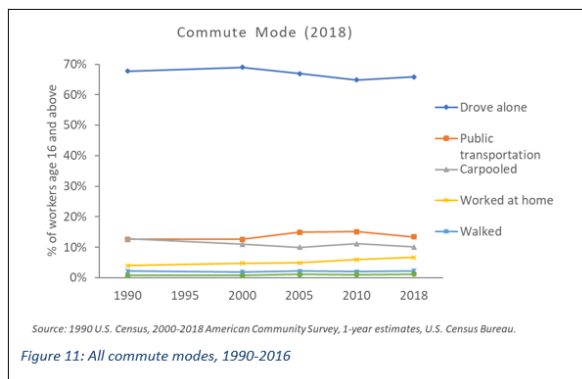
#### Part 1: What is the problem / existing conditions that fall short?

- The Wedges and Corridors plan recognized more than half a century ago that an over-reliance on cars to move people would be detrimental to the county's economy, will lower the quality of life of residents and degrade the natural and the built environment:

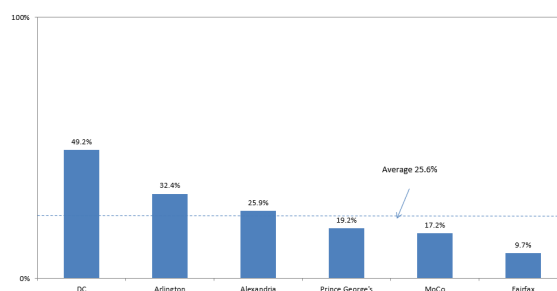
*“An efficient system of transportation must include rapid transit designed to meet a major part of the critical rush-hour need. Without rapid transit, highways and parking garages will consume the downtown areas; the advantages of central locations will decrease, the city will become fragmented and unworkable. The mental frustrations of congested highway travel will take its toll, not to mention the extra costs of second cars and soaring insurance rate. In Los Angeles where an automobile dominated transportation system reigns supreme, there is still a commuter problem even though approximately two-thirds of the downtown section is given over to streets and parking and loading facilities. There is no future in permitting the Regional District to drift into such a ‘solution.’”*

Despite this prescient warning, we remain heavily dependent on automobiles.

- More than two-thirds of workers in the county drive alone to and from work.
- Montgomery County has among the lowest percentages of commuters in the region who walk, bike or use transit.

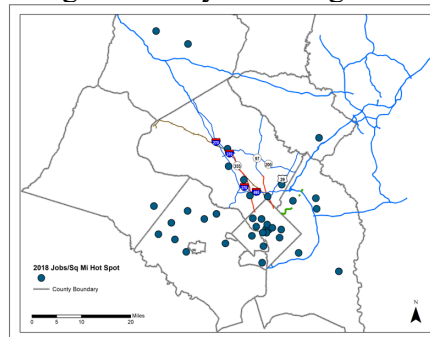


#### Non-Auto Share By Jurisdiction



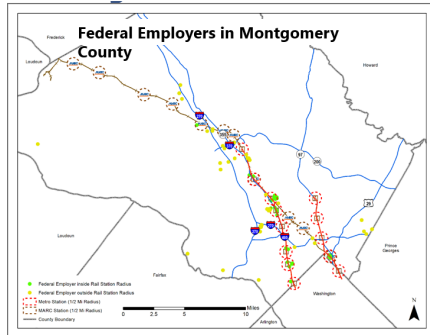
- Our dependence on driving is rooted in generations of efforts to facilitate the movement as many automobiles as quickly as possible while funneling traffic to a handful of north-south arterial roadways that tie otherwise disconnected subdivisions to job and retail centers.
  - Successive “improvements” have added more and more lanes for vehicles at the expense of space for pedestrians, bicycles, transit vehicles, street trees etc.
  - Makes alternatives to driving less practical and appealing, which leads to more driving and in turn generates demand for wider roads.

- Optimizing major arterials for cars makes them unattractive and unsafe, discouraging private investment and compact, transit-oriented development even where high-quality transit infrastructure exists.
- Overemphasis on accommodating automobile traffic has several damaging consequences:
  - Pedestrians, bicyclists, and even drivers are often killed or seriously injured.
  - Automobile-oriented design degrades the vitality and appeal of neighborhoods and commercial districts.
    - Lack of safe, attractive streets discourages walking and biking for exercise, errands, going to work or school, or accessing transit.
    - Lack of such activity diminishes physical and mental health and limits social interaction needed to strengthen a sense of place and community.
  - More driving leads to more GHG's, polluting the environment and exacerbating effects of climate change.
- The radial pattern of automobile-centric corridors, limited infrastructure to support alternatives to driving, and the absence of street grid connections collectively make our transportation network less adaptable and resilient.
  - The hub and spoke model of arterial corridors was a logical way to link suburban enclaves to employment in and around the District of Columbia, but limits Montgomery county's access to economic, intellectual and cultural centers in Frederick, Prince George's, Howard and Baltimore as well as Arlington, Fairfax and Loudoun.
    - The lack of efficient transit connections to these regional centers prevents us from taking full advantage of our dynamic region.



- Within Montgomery County, our legacy road network has serious shortcomings and reinforces inequitable access to opportunities.
  - Increasing proportion of residents and workers need, and prefer transit and other alternatives to driving alone, but most jobs in the county are not located near high quality public transportation.
  - Many of our neighborhoods are missing basic bike and pedestrian infrastructure like sidewalks and safe road crossings.
  - Combined with the absence of efficient east-west connections, especially for transit riders, this pattern limits access to jobs and opportunity for many residents.
- Our central business districts and suburban activity centers generally lack the grid of blocks suitable for walking and biking for shorter trips.

- Lack of a street grid limits access points and options for routes for pedestrians, cyclists, automobiles and buses.
- Lack of connectivity in suburban areas increases driving and associated pollution, as well as demands higher speed limits needed to reach destinations in a reasonable time.



- Approximately 40% of federal jobs at government agencies are within ½ mile of a MARC or Metro station
- Approximately 30% of jobs at private employers are within ½ mile of a MARC or Metro station

Source: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Q2 2018; MCP Division of Research and Special Projects, Federal Facilities Survey, 2018-2019

- Lack of robust alternatives to driving, in combination with low rates of housing construction close to jobs, leaves more commuters stuck in traffic and pushes jobs and people to other jurisdictions.
  - As a result, the county loses residents, jobs and tax revenue while increasing traffic congestion from people driving through the county on the way to jobs and homes in other places.

## **PART 2: Therefore, Thrive Montgomery 2050 proposes the following policies and actions.**

The county will base its efforts to improve connectivity on the following policies and actions:

- Adopt performance standards for transportation infrastructure and services that assess the adequacy of transit by reference to its competitiveness with driving.
- Prioritize the provision of sidewalks, bikeways, safe crossings of roadways, and other improvements to support walking, biking, and transit usage in capital budgets, development review, and the mandatory referral process.
- Manage available right-of-way to maximize person-throughput (as opposed to vehicle throughput) while optimizing the safety and convenience of all users and modes.
- Ensure that transportation infrastructure decisions – particularly the construction or widening of roads – are consistent with relevant land use and urban design strategies.
- Extend transit networks to increase the speed and efficiency of connections to centers of economic activity and social and educational opportunity across the county and region.
- Support the construction of high-speed fiber optic networks and other advanced telecommunications infrastructure to improve accessibility of information and ideas and supplement transportation links with improved virtual connections.

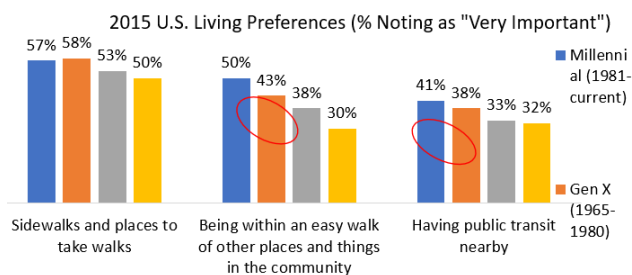
- Focus investment in transportation and telecommunications infrastructure on connecting people and parts of the county that lack convenient access to high opportunity areas.
- Employ pricing mechanisms and other economic incentives, such as congestion pricing, the reduction or elimination of parking minimums, and the collection and allocation of tolls to encourage alternatives to driving.

### **PART 3: The rationale for how these policies and actions will further the key objectives of Thrive Montgomery 2050.**

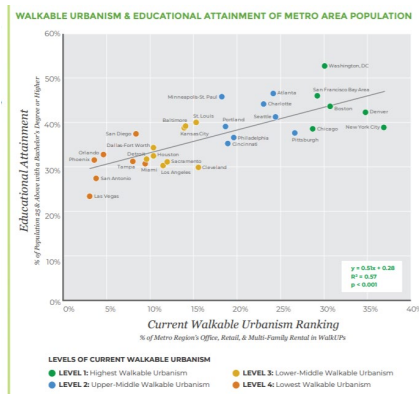
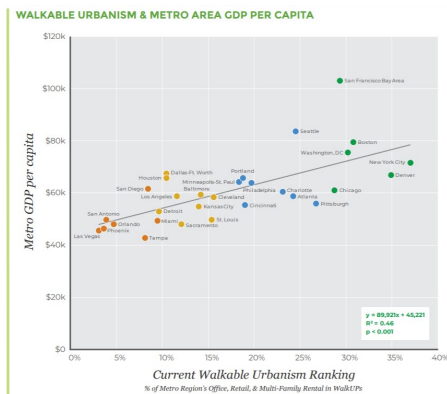
A complimentary multimodal transportation infrastructure that supports compact land use policies is fundamental to achieving Thrive Montgomery's key objectives.

- First, enhancing physical and virtual connections to job centers in the county and the region will make the county a more attractive choice for workers and employers.
  - Jobs within a 30-minute commute is a common measure for an area's ability to attract investment. With driving times and pass-through automobile traffic predicted to continually grow within the region, investing in transit can significantly increase an area's commute shed, making it more attractive for development over the long term.
  - Transit inherently requires a compact growth pattern to maximize the benefits of the substantial public investment involved and encourages mixed use places, which are also increasingly favored by businesses, workers and residents.
  - Creating more walkable places around transit attracts more productive workers across the pay scale.
  - The ongoing COVID-19 has initiated the largest teleworking experiment in human history. Even though its long-term impacts on work are unclear, continued investment in the county's digital infrastructure will better connect residents to online job opportunities, encourage continued teleworking to reduce commuting trips, dilute rush-hour traffic, and attract employers seeking high-quality digital connectivity.
  - Complimenting a multimodal transportation system with strong digital infrastructure will enhance worker productivity and improve quality of life, increasing the county's overall economic competitiveness.

#### **- because living preferences are shifting towards walkable, transit rich neighborhoods**



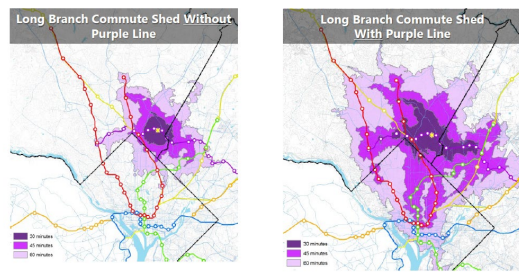
Source: 2015 Community and Transportation Preferences Survey, National Association of Realtors



- Second, replacing auto-centric transportation planning with a transit-focused approach that also facilitates walking and biking will expand choice and serve our residents more equitably.
  - Enhanced access to jobs via transit will help mitigate inequities within communities of color and low wage earners who are limited in their access to such opportunities, often do not own a car and are disproportionately burdened by monthly transportation costs.
  - Expansion of transit service can serve as an affordable and attainable housing tool by connecting areas with less expensive housing to jobs, without subjecting residents to higher transportation expenses or impractically longer commutes.



### Transit expands economic opportunities for people in lower income communities



- A focus away from funneling cars through our communities will facilitate the application of Vision Zero principles to meet the county's goal of eliminating all traffic related fatalities and severe injuries by 2030, equitably protecting communities of color.
- Increasing safety for all road users will make our streets feel more attractive for walking and biking, enhancing interaction between people from different backgrounds and stages of life and build social capital.
- Creating walkable and bikeable centers for rural, suburban and urban communities will strengthen a sense of place and provide common ground for higher levels of civic participation among various groups.

- Third, transforming auto-dominated corridors into multimodal streets and expanding grid connectivity through comprehensive transportation and land use policies will concentrate the projected growth in compact development, reduce driving and make our transportation system more sustainable and resilient towards disruption.
  - Transit, walking and biking are spatially more efficient than cars at moving people while adding road capacity only relieves congestion temporarily but adds significant long-term maintenance costs.
  - Higher levels of active transportation in lieu of driving reduce GHG's and lower the environmental impact of our transportation system.
    - Biking can mitigate short auto trips of less than 4 miles, which comprise more than half of all trips taken in the region.
  - An interconnected grid system will increase choice of modes, provide multiple routes for travel and be better equipped to handle disruptions from extreme weather and disruptive events.
  - Biking and walking improve our mental and physical health and increase our exposure to the outdoors, a practice proven to extend our lifespans.
  - Limited availability and high cost of undeveloped land and rights-of-ways make transit, walking and biking infrastructure not only more ecologically sustainable, but also fiscally more responsible in the long term.

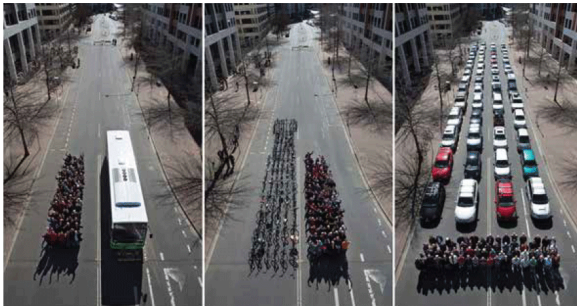
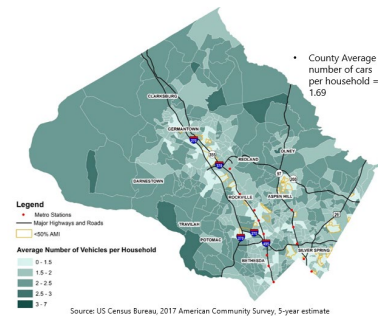


FIGURE 14: PRIVATE MOTOR VEHICLES TAKE UP MORE SPACE TO DRIVE AND PARK

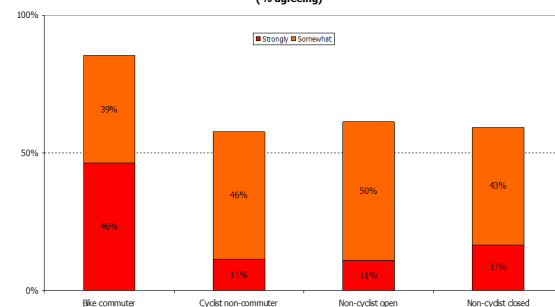
#### Metro accessible communities own fewer cars per household –



#### Bikes Can Mitigate Short Auto Trips

Mode	25%	Median	75%	90%
Auto	1.5	4.0	9.7	18.7
Transit	3.5	6.9	14.1	23.4
School bus	1.2	2.3	4.6	8.2
Walk	0.1	0.3	0.5	0.9
Bike	0.8	1.5	4.1	7.3

#### I enjoy my commute (% agreeing)



- Finally, minimizing land dedicated for parking and removing unfair emphasis towards auto travel through pricing mechanisms and regulatory incentives will make transit more competitive, provide more acreage for economically more productive uses, reduce

development costs and relieve the pressure on undeveloped land, enhancing the county's economic and environmental performance.

- Optimizing the use of all public and private parking enables sharing of parking resources between uses, promotes mixed use development and increases walkability and social interaction.
- Redevelopment of parking lots into higher and better uses increases their economic productivity and enhances their environmental performance through added tree cover, better stormwater management and provision of landscaped spaces.

#### **PART 4: How will we know we are making progress?**

In assessing proposals related to connectivity and measuring the success or failure of the approaches recommended in this plan, relevant measures may include:

- Vehicle Miles Travelled (VMT): Down
- Non-Auto Driver Mode Share (NADMS): Up
- Person Trip accessibility for walking and cycling: Up
- Number of traffic-related severe injuries and fatalities: Down
- Transportation + Housing Cost: Down
- Transportation system's GHG emissions: Down
- Transit Investment per capita: Up
- Miles of auto travel lanes per capita: Down
- Teleworking: Up
- Parking per capita: Down