EXECUTIVE SUMMARY

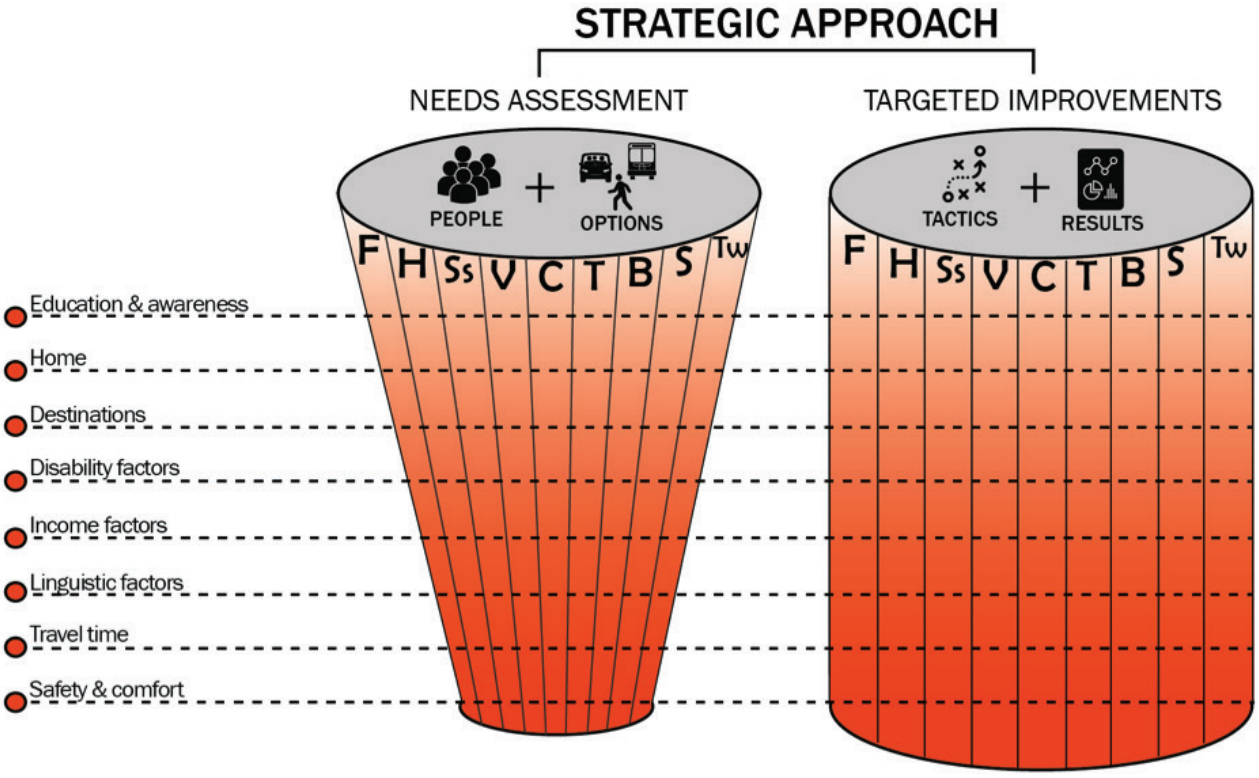
The plan provides solutions to the challenge of addressing regional Human Services Transportation (HST) issues:

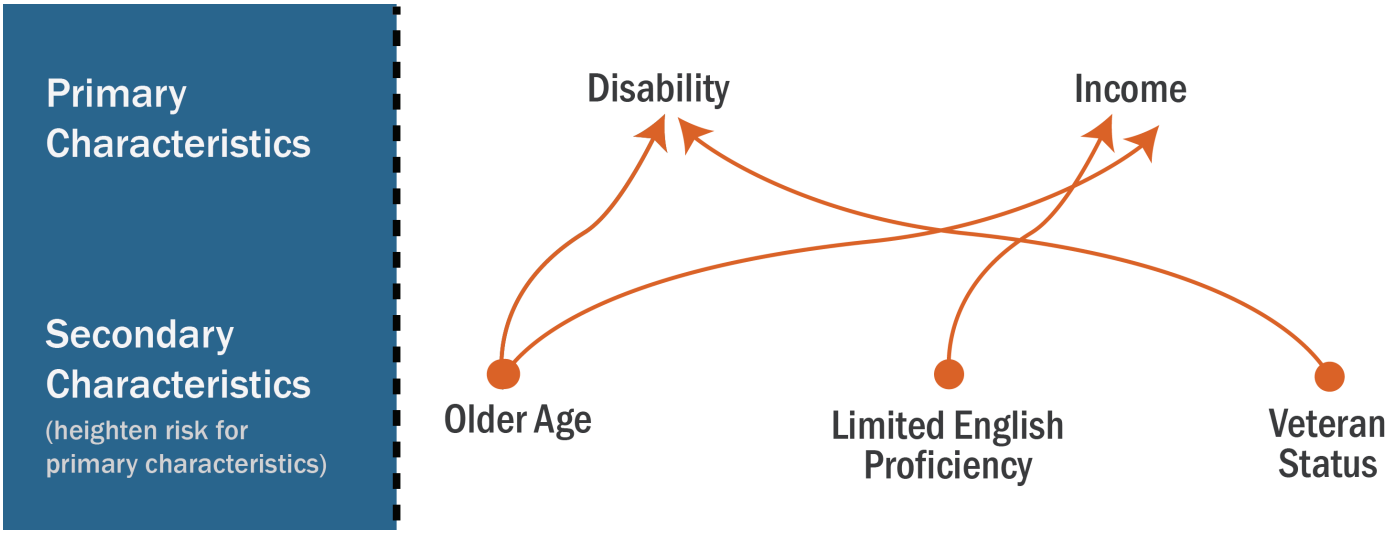
1. **Strategic approach for local-level action** – The Plan is broken down into two parts: 1) needs assessment comprised of people and transportation option functions and 2) targeted improvements comprised of tactics and results.

2. **Framework based on personal decision-making processes** – The public outreach completed for the Plan development revealed insights into how HST populations move through the process of selecting the transportation option that works best for them. This process takes shape as a funnel. At the beginning of the process, HST populations have access to any and all options. But as barriers related to disability and income are revealed, their options are reduced more than other population groups. Viable options become whittled out, and they are left with a few remaining options. Therefore, the strategic approach is simple – instead of enabling the funnel, the region must work towards a cylinder shape, which means that HST populations have just as many options available to them as the regional population overall. The options presented to HST populations at the beginning of the process should remain available until the end of the process.

3. **Education and training** – The strategic approach not only drives ARC's understanding of how HST can improve but also forms an educational framework for those working on the local level who directly influence how HST is implemented. These influencers are diverse, ranging from transportation professionals and supporting consultants to elected officials and local residents who influence direction of priorities and funding on the local level. The framework includes data that can be transferred to the local professionals to complete the needs assessment and a "choose your own adventure" approach to selecting locally appropriate HST targets and measuring the results. Atlanta Regional Commission's (ARC) Community Planning Academy (CPA) provides an accessible way to set up training programs. Attendees will receive certificates of attendance to demonstrate that they have taken part.

4. **Integration with local-level funding mechanisms** – Counties in the Atlanta region prioritize transportation projects through their own Comprehensive Transportation Plans (CTP). This connects 5 year budgets with specific projects to implement. Without a clear way to integrate HST into this process, it is not often made a priority. This is not necessarily because people don't want to, but because they either don't know how or simply don't have the time to create their own methodology.





The Plan intends to not only provide them with the methodology (the strategic approach), but also provide them with the basic data needed and hands-on training to work through the process without incurring additional costs or requiring specialist staff/consultants.

5. **Connectivity between mobility management (MM) and human services transportation (HST)** – While these concepts are often used interchangeably, they are separate concepts that have the potential to intersect. HST is an approach to transportation services and planning that integrates personal needs arising from various characteristics (e.g., age, disability, limited English proficiency, low income, and veteran status) into the larger transportation system. MM is an approach to transportation services and planning that focuses on coordination, capturing efficiencies, integrating modal options, and in some cases, specific needs of Human Services Transportation (HST) populations.

HST is person-centric

Humans Services Transportation (HST) focuses on the transportation options available to, accessible to, and needed by frequently underserved populations, whose options are often reduced due to personal characteristics such as disability and low income. As referenced throughout the plan, three populations in the Atlanta region have a higher likelihood of having a disability and/or low income. These include older adults (65 years of age or older), individuals with limited English proficiency (LEP), and individuals with a veteran status. In addition, correlations between disability and income exist as explained below. More than one of these characteristics (i.e., disability, low income, veteran status) can affect a person, further limiting viable transportation options. Furthermore, these characteristics are subject to change throughout a person's life (due to age in particular), so individuals may experience year-to-year fluctuations in these characteristics. HST needs, then, are not static, but dynamic for both individuals and the population as a whole. A data-driven approach to explaining how HST populations overlap and intersect with each other has been provided to clarify these relationships.

HST is multi-modal

Disability and income greatly reduce the accessibility of generally available transportation options. Due to disability, some may not have the ability to independently drive a personal vehicle. Due to income restrictions, many with lower incomes are not able to afford a personal vehicle. Therefore, they often rely on non-SOV (single occupancy vehicle) options to get around the region. Non-single occupancy vehicle options include all travel options except driving a car by oneself. For the purposes of this plan, they include fixed route/guideway public transit (i.e., bus and train), cycling, walking, carpool/vanpool, taxis and transportation network companies (e.g., Lyft/Uber), "specialized services", hybrid demand-response/fixed transit, and telework/teleconnect. Each of these options is described in detail in the Plan and/or is included in the definition list.

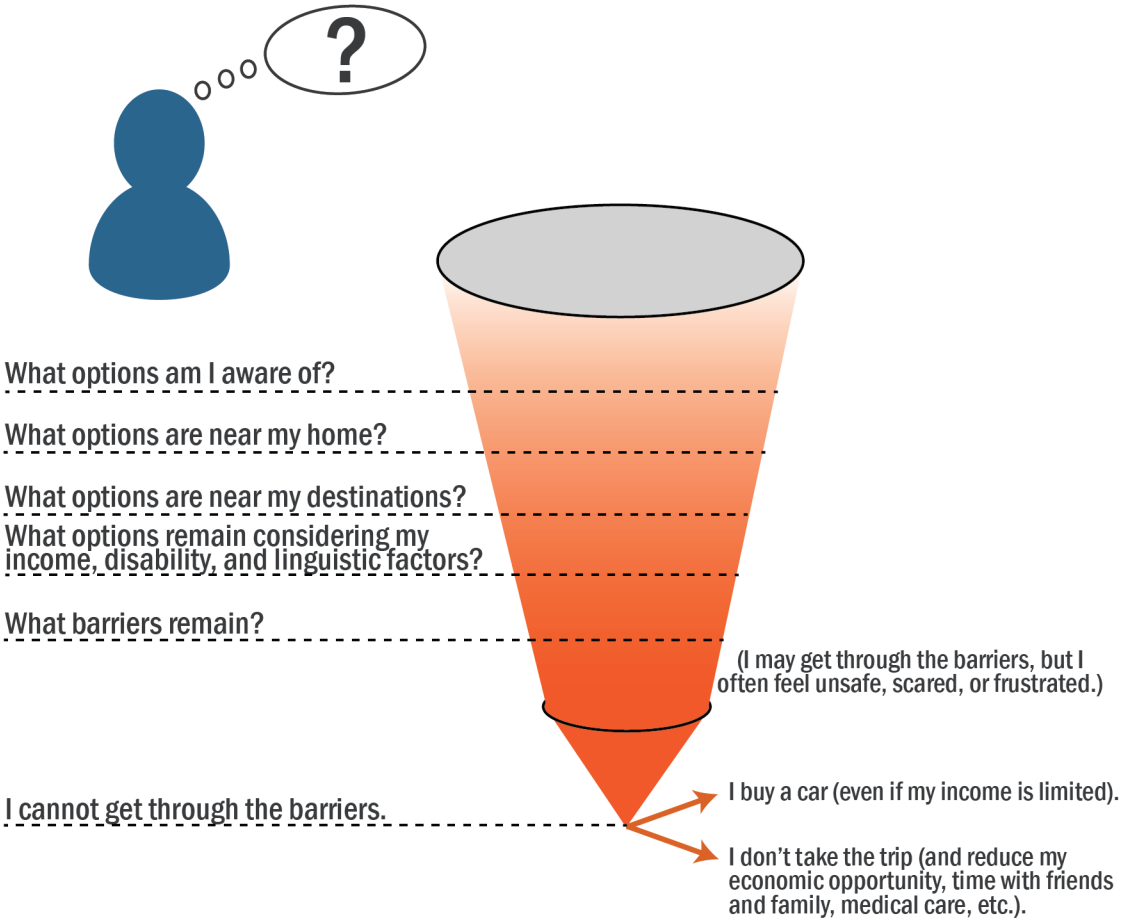
F = Fixed route/guideway transit
H = Hybrid demand-response/fixed transit
Ss = Specialized Services
V = Vanpool
C = Carpool
T = Taxi/TNC
B = Bicycling
S = Sidewalks
Tw = Telework

HST is local

Targeted improvements happen most often at the local level, and taken as a set, they form a large segment of the regional improvements. However, in order to for the local level to understand how to take HST action, a foundation is needed to inform their process. While the needs assessment part of the strategic approach is primarily analytical, the targeted improvements part is primarily action-based. A menu of tactics is provided, and they are broken down by transportation option/mode and along the personal-decision making process steps (referred to as "decision-making factors").

Local professionals would then go through a process of performing public outreach, needs assessment, clarifying which tactics they already do and which tactics make sense for next steps. In addition, they may classify the local area in terms of the rural/urban context. Some counties will have multiple contexts within one county, which means their tactics may change across the county to best meet what is contextually appropriate. The HST training will include menus of tactics broken down by rural/urban context based on which tactics tend to work such contexts.

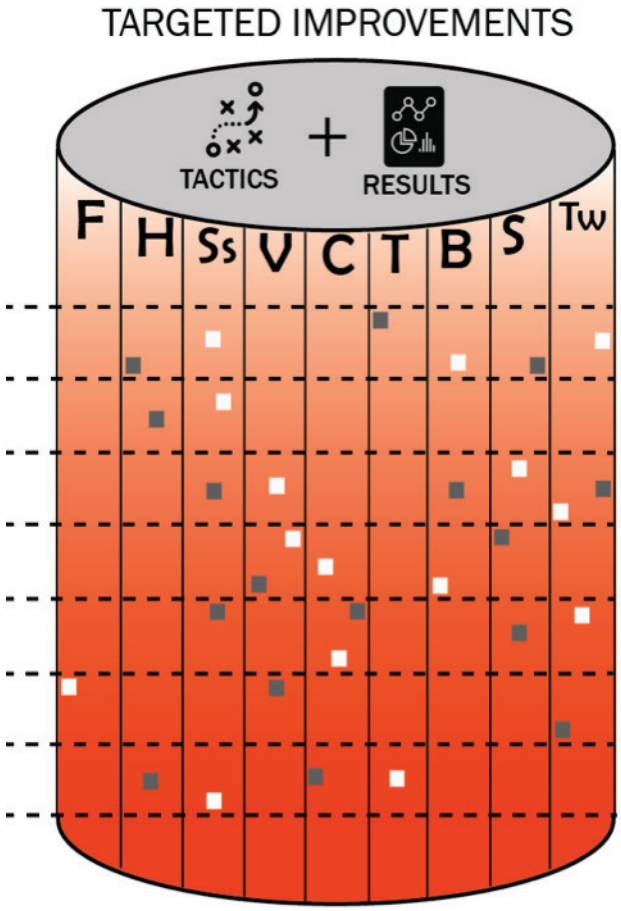
Once they have a draft list, they can compare what anticipated results the tactics would achieve as a set along with what results they have already achieved. In this way, tactics are tied to results to inform ongoing performance measurement. This will enable the local level to track progress and see when tactics are not aligning as planned with results, prompting a more promising shift in strategy.



This is critical, as when tactics (and anticipated results) interact with the urban environment with unpredictable factors such as human behavior, the results (the actual documented measurements) may not turn out as predicted. Continual data-driven feedback loops are needed to inform the process and prompt redirection when necessary.

HST is regional

Most regional HST improvement is a reflection of local improvements feeding up to the larger scale. When they are added up, they show the totality of local impact on the regional scale. However, there are some HST tactics that are primarily regional. Regional coordination efforts to improve services fall into this category.



KEY INSIGHTS

The regional "needs assessment" can be summarized within twenty key points.

1 Fixed route/guideway public transit is the most widely used non-SOV option.

Of the 9 non-SOV transportation options, fixed route/guideway public transit (i.e., bus and train) is the most widely used due geographic coverage , relative affordability, travel time, availability regardless of trip purpose (e.g., work, medical), and lack of restrictions on personal eligibility (e.g., disability, age, etc.).

Commuters Near Transit	Commuters
642,209	2,332,059
Commuters who live within a ½ mile of transit.	Total commuters.
Commuters by Mode	**Commuters by Mode**
Commute by Car, Truck, or Van: 86.35%	Commute by Car, Truck, or Van: 93.67%
Commute by Public Transportation: 8.55%	Commute by Public Transportation: 3.28%
Commute by Taxicab: 0.32%	Commute by Taxicab: 0.19%
Commute by Motorcycle: 0.14%	Commute by Motorcycle: 0.12%
Commute by Bicycle: 0.40%	Commute by Bicycle: 0.20%
Commute by Walking: 2.97%	Commute by Walking: 1.45%
Commute by Other Means: 1.27%	Commute by Other Means: 1.10%

Source: Center for Neighborhood Technology, All Transit

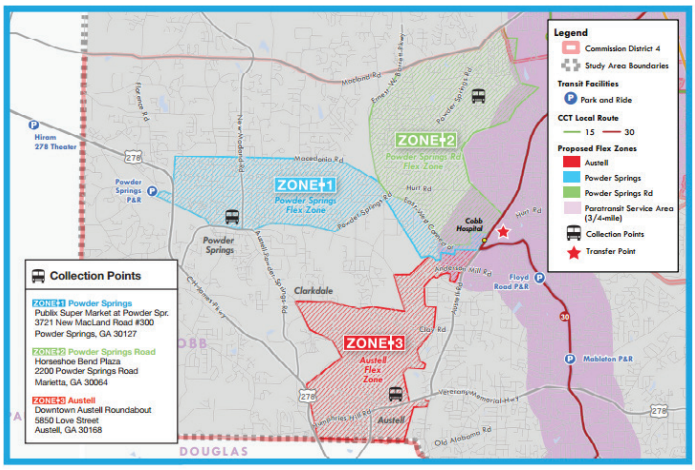
2 Carpool and vanpool are impactful modes in the region, though data are sometimes less available.

Approximately 5% of Atlanta region residents reported that carpooling or vanpooling is their primary transportation option to work. These options are often not counted in the census as a specific mode, and so regional surveys are used to better understand the impact of this option in the region.[1]

1 2014 Regional Commuter Survey Technical Report

3 Hybrid demand-response/fixed transit is a relatively new option in the Atlanta region.

This option combines elements of both fixed route/guideway public transit (i.e., bus and train) and demand-response transportation (DRT, defined above). Also known as deviated fixed route, this



Source: CobbLinc

option is characterized by having some components of fixed routes and points in the service while also providing the possibility to schedule a pick-up/drop-off at certain locations (e.g., home, various destinations). In the Atlanta region, the only example of this service called "Flex" is in Cobb County.[2]

4 Teleworking has been a key reason for shift from SOV to non-SOV.

In 2014, 25% of respondents used a non-drive alone commute as their primary commute mode as opposed to 19% in 2010.[3] This is a significant change from 2010 with the majority of the increase attributed to more respondents reporting teleworking.[4]

Percentage of Weekly Trips Made By Commute Mode

Commute Modes	2014 (n=4,814)	2010 (n=4,048)	2007 (n=4,000)
Drive Alone	75%	81%	84%
Telework	13%	8%	4%
Carpool	5%	5%	6%
Train	3%	3%	2%
Bus	2%	2%	2%
Compressed Work Schedule	1%	1%	1%
Bike/Walk	1%	<1%	1%
Vanpool	<1%	<1%	<1%

Source: 2014 Regional Commuter Survey Technical Report

2 "Cobb Community Transit FLEX."

3 2014 Regional Commuter Survey Technical Report

4 2014 Regional Commuter Survey Technical Report

Households with lower income

spend a disproportionately large percentage of their income on housing and transportation costs.

67% for "low to moderate income" households (less than $45,294) in the Atlanta region

54 % for "average"* households ($56,618) in the Atlanta region.

Source: American Community Survey, Center for Neighborhood Technology.
* The Regional Typical Household assumes a household income that is the median income for the region, the average household size for the region, and the average commuters per household for the region.

5 Households with lower income spend a disproportionately large percentage of their income on housing and transportation costs.

Households with "low to moderate income" (less than $45,294) spend 67% of income on housing and transportation as compared with 54% for the average household in the Atlanta region.[5]

6 Individuals who report having a disability are more likely to have a lower income than those who do not report having a disability.

The median income for those with a disability is $22,367 compared to a median income of $32,968 for

7 Individuals aged 65 or more are more likely to have a lower income and have a disability.

Of adults aged 65+, 35.20% have a disability compared to 8.50% of adults aged 18-64 in the Atlanta region.[7] Approximately 40% fall into the "low income" range (less than $28,309) compared to 23% of the total region's population inclusive of that age group.[8]

8 Having a veteran status increases the likelihood an individual will have a disability and be without a home.

Of veterans nationwide, 27.0% of report having a disability compared to 13.8% of non-veterans.[9] The National Center for Veterans Analysis and Statistics found that in 2010, veterans made up 16% of the sheltered homeless population, but only 10% of the general population.[10]

5 "H + T Index Data Download"
6 American Community Survey
7 American Community Survey
8 American Community Survey
9 American Community Survey
10 Profile of Sheltered Homeless Veterans for Fiscal Years 2009 and 2010

9 The foreign-born population, which represents the highest percentage of individuals with limited English proficiency, is more likely to have a lower income.

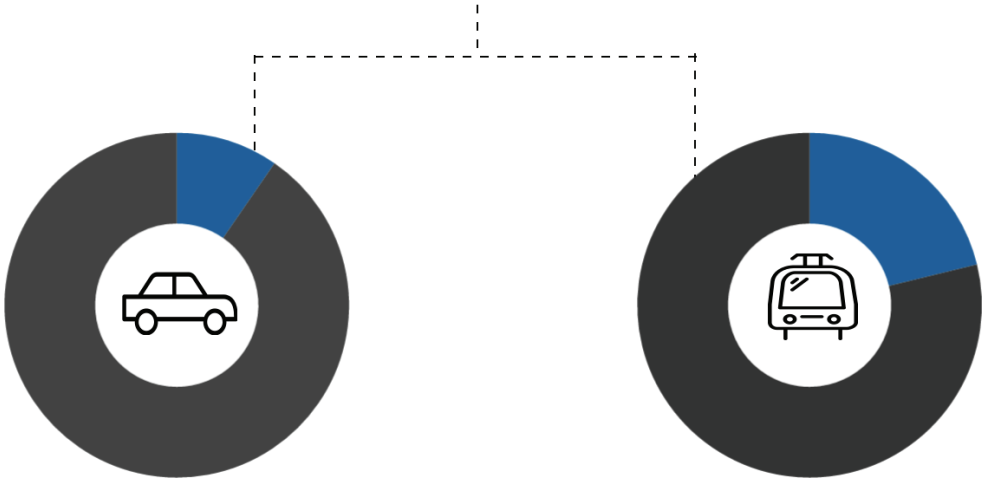
The median income for the Atlanta region's foreign-born individuals is $23,752, compared to the median individual income for the region as a whole of $28,753 (inclusive of this foreign born population).[11]

11 Having a low income does not equal a lack of car ownership.

In fact, while 23% of households in the Atlanta region have "low income" (less than $28,309), there are only 6% "zero car households" (households without a car) in the region.[14] Furthermore, households with "low to moderate income" (less than $45,294) own 2.0 cars on average compared with 1.82 overall. [15]

Public transit commuters in the Atlanta region

are significantly more likely to live in poverty than driving commuters.



While 9.6% of total commuters are in poverty...

...21.2% of public transit commuters are in poverty.

Source: American Community Survey, Governing

10 Public transit users in the Atlanta region are significantly more likely to live in poverty than driving commuters.

In the Atlanta region, while 9.6% of total commuters are in poverty, 21.2% of public transit commuters are in poverty.[12] This represents a percentage point difference of 11.6, indicating that public transit commuters are not representative of all commuters in Atlanta.[13]

12 The Atlanta region's transit system accesses only 47.9% of jobs, 29% of households, and 25.8% of workers in the region.

In order for transit to be a viable option, both home and destination (for work or otherwise) must be near to transit. In addition, the home and destination must be connected by a viable route or set of routes.

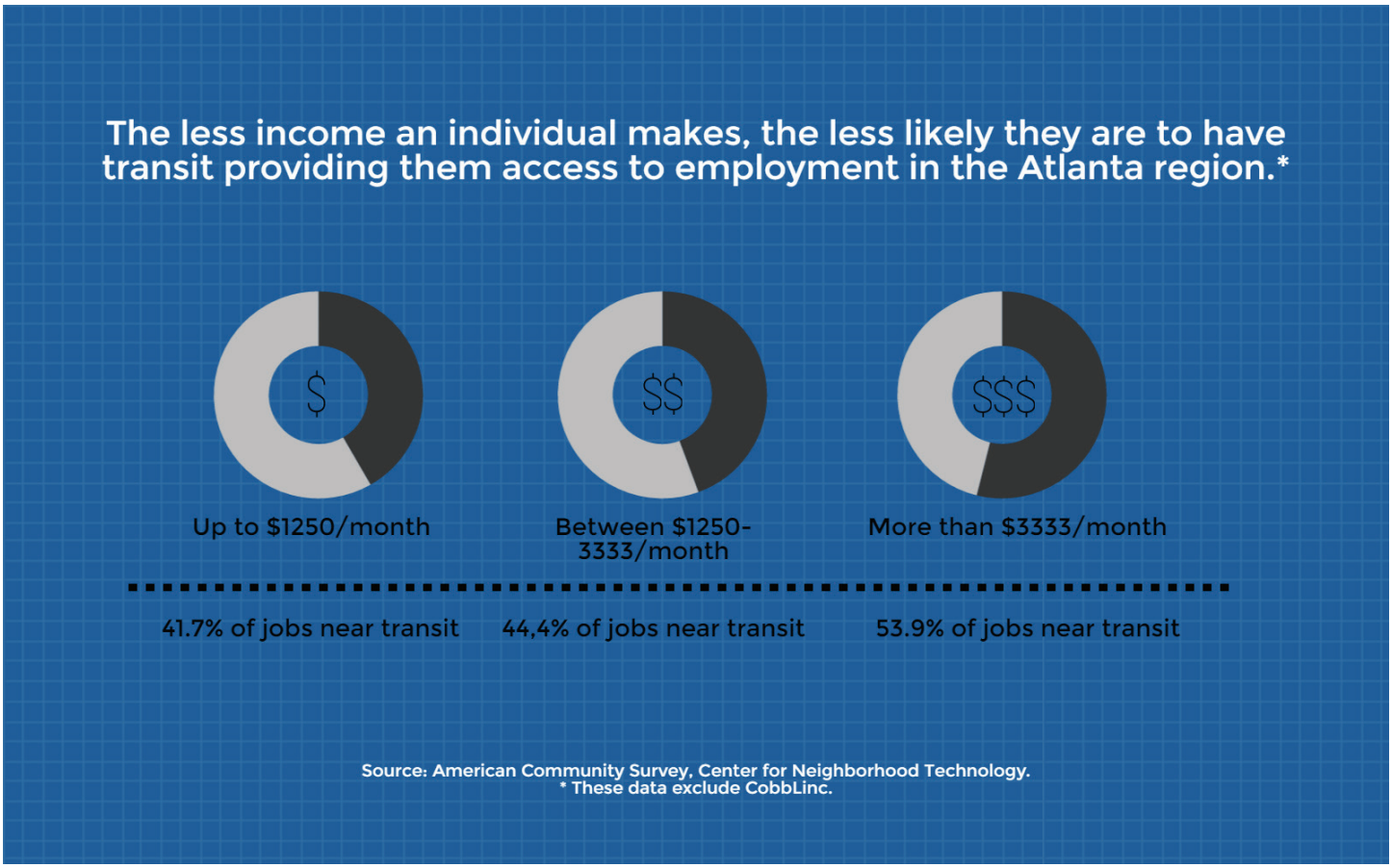
11 American Community Survey

12 Maciag

13 "Poverty" definitions and data are communicated by the Census Bureau. For more see: https://www.census.gov/topics/income-poverty/poverty.html .

14 American Community Survey.

15 "H + T Index Data Download"



13 The less income an individual makes, the less likely they are to have transit providing them access to employment.

Of the total amount of jobs held by workers making up to $1250/month or less (232,263), 41.7% of these jobs were within a half mile of transit.[16] Comparatively, of the total amount of jobs held by workers making $1250-3333/month (361,966), 44.4% of these jobs were within a half mile of transit.[17] And of the total amount of jobs held by workers making $3333/month or more (572,623), 53.9% of these jobs were within a half mile of transit.[18]

14 The Atlanta region has a "suburbanization of jobs" issue contributing to lack of job access.

Many job concentration areas in the Atlanta region have no fixed route/guideway public transit. In addition, counties that have transit may not connect directly with jobs along routes. This is why only 47.9% of jobs can be accessed by transit.[19]

16 "AllTransit Maps & Analysis".

17 "AllTransit Maps & Analysis".

18 "AllTransit Maps & Analysis"

19 "AllTransit Maps & Analysis"

15 The lack of access to jobs by transit hinders economic mobility and likely results in higher rates of car ownership in the Atlanta region.

A commuter using the Atlanta region's transit system is more likely to be living in poverty compared with a commuter who is driving to work. And yet, the transit system is not facilitating the type of connectivity to jobs that fosters full economic mobility for everyone in the Atlanta region. Ensuring wide access to job options may be a key reason why individuals with low income own cars, even if this over-stretches their finances.

16 Car ownership can be significantly more expensive than public transit depending on personal factors.

While the annual cost of a car is currently approximately $8,000 per year[20], the cost of public transit can be more cost effective depending on household size and potential for discounts and free rides for some members of the household. Furthermore, an individual does not necessarily need to have low income to be cost-conscious about transportation options.

20 "H + T Index Data Download"

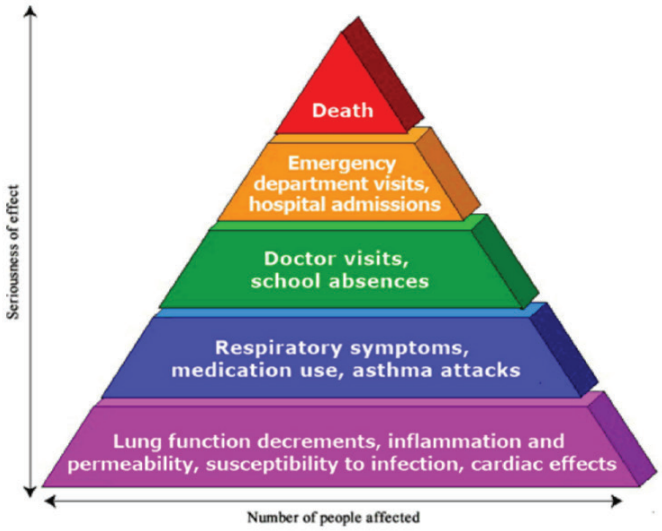
The Atlanta region is in "non-attainment" for

2 of 6

air pollutants tracked for federal clean air standards, which affects selection of transportation projects.

Pollutant 1 **ground level ozone** + Pollutant 2 **particulate matter**

EPA's " Pyramid of effects caused by ozone"



The Effects of Air Pollution on Health

Source: US Environmental Protection Agency, ARC

17 If the Atlanta region's transit system did facilitate higher access to jobs and other key destinations, rates of car ownership would likely go down.

Currently households that have low income, but do own at least one car, represent at least 17% of the total regional population. Seemingly small percentages - even 1% or 2% - of the Atlanta region's households becoming zero car households (or owning one car per household instead of two) could reap major rewards for the region.

18 If rates of car ownership and usage reduced, then improvements could be expected in traffic congestion, air quality, and related public health concerns for the entire Atlanta region.

Having less cars on the road in the Atlanta region would help reduce pollution and achieve related benefits in public health that are exacerbated by air pollutants. Fewer cars on the road would also help alleviate some portion of the Atlanta region's traffic congestion.

19 Reducing the percentage that individuals with low income spend on transportation, potentially though public transit improvements, could reduce the need for some public assistance.

Households with "low to moderate income" (less than $45,294) spend 67% of income on housing and transportation as compared with 54% for the average household in the Atlanta region.[21] This leaves $1,245/month, at the most, to cover all other expenses. Common expenses to households include food, medical/health, childcare, clothing/household items, recreation, and education related expenses. These expenses could easily require double the amount of the remaining monthly funds, resulting in the need for various types of public assistance.

20 Improving public transit, and other non-SOV options more broadly, could benefit not only HST populations, but the entire Atlanta region population.

Making sure the transit system steadily works towards raising rates of connectivity between jobs, homes, and workers is not a benefit only for those with lower incomes or a disability – it would benefit the entire Atlanta region in direct and indirect ways, more obvious and less obvious ways. There is a "cost" associated with the transit system and other non-SOV options not functioning in a way that facilitates higher levels of economic mobility for everyone, and these costs are shared among HST populations and non-HST populations alike.

21 "H + T Index Data Download"