

Access to frequent bus service for Austinites living in poverty currently and with the proposed Connections 2025 service changes

John Laycock and Jay Blazek Crossley

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Economic freedom in the 21st Century – for the average American – will increasingly mean safe, efficient access to jobs, schools, and all the elements of the good life available in the American city.

A shift – accelerated by actions in Houston, of all places – is happening in how transit is understood and optimized. Houston Metro’s redesign focused on providing frequency rather than coverage. “Frequency equals freedom” is the mantra and the goal is actually improving the lives of as many people as possible.

This revolution in transit service contains many ironies and seeming contradictions.

Houston has proven people can have better transit service with the same budget. Frequency means efficiency in public spending. It is simply a matter of doing a better job with what is available to provide more people with more.

Planning a transit system that connects the entire city by prioritizing people – including low income people – gives them access to our most valuable asset: other people.

Cutting under-performing routes – eliminating the bus

that some people may have depended on their entire lives – can be the socially equitable thing to do.

The question is how many people – including our actual neighbors living in poverty – can we serve with great transit-service that really provides full access to all of the city?

We found Connections 2025 would provide many more households living in poverty better access to frequent transit than today, as shown in the numbers to the right.

The expansion is dramatic, giving 32,000 more households access to frequent transit, including almost doubling the amount of households living in poverty within walking distance of frequent transit stations.

There are other key questions for Connections 2025, especially whether changes in access to non-frequent bus stops have negative consequences to people living in poverty that outweigh the benefits of access to a frequent grid network.

Further questions to help optimize Connections 2025 and transit in Austin – which we would love to have the time and funding to study – are suggested at the end of the report.

Current

Frequent Stations
460

All households within a quarter mile of a frequent station
39,657

Households under the poverty line within a quarter mile of a frequent station
9,881

Proposed

Frequent Stations
1181

Households within a quarter mile of a frequent station
79,209

Households under the poverty line within a quarter mile of a frequent station
17,151

Percent

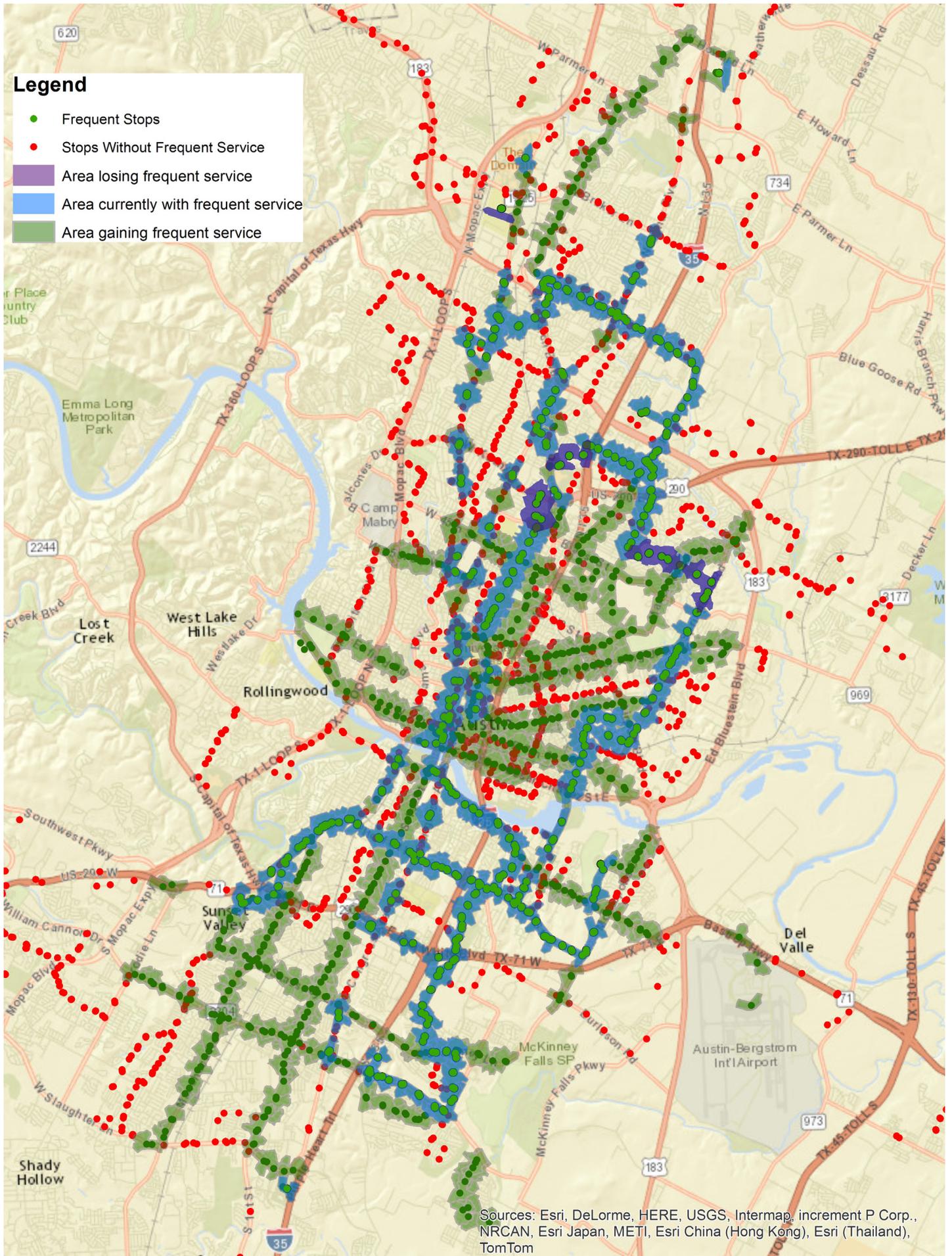
Current % -> Proposed %

All households within a quarter mile of a frequent station / All households in the Cap Metro service area
10% -> 21%

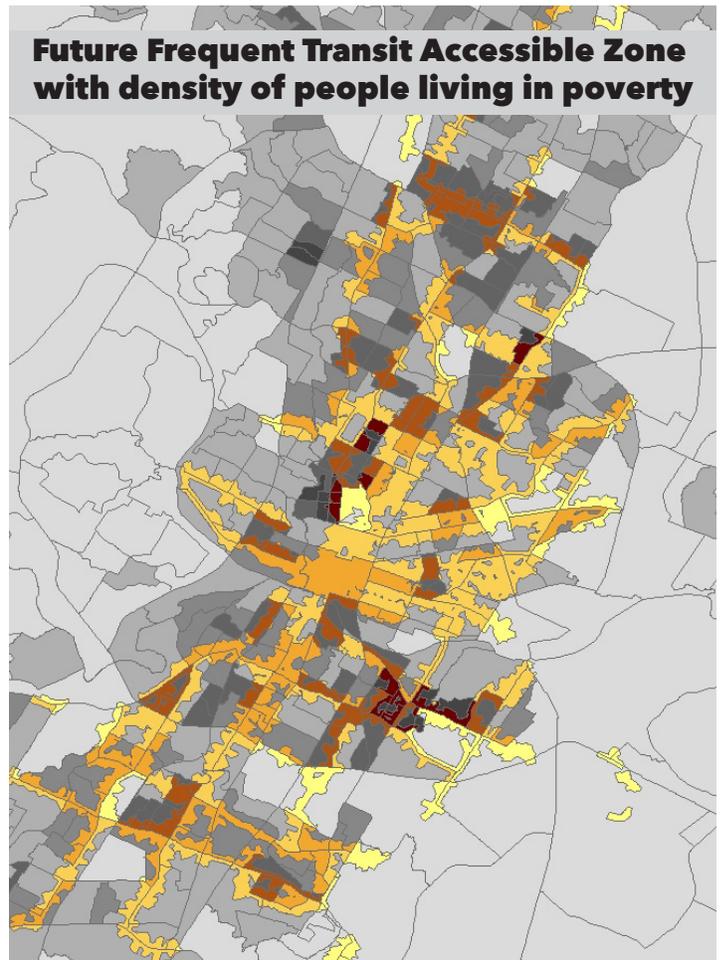
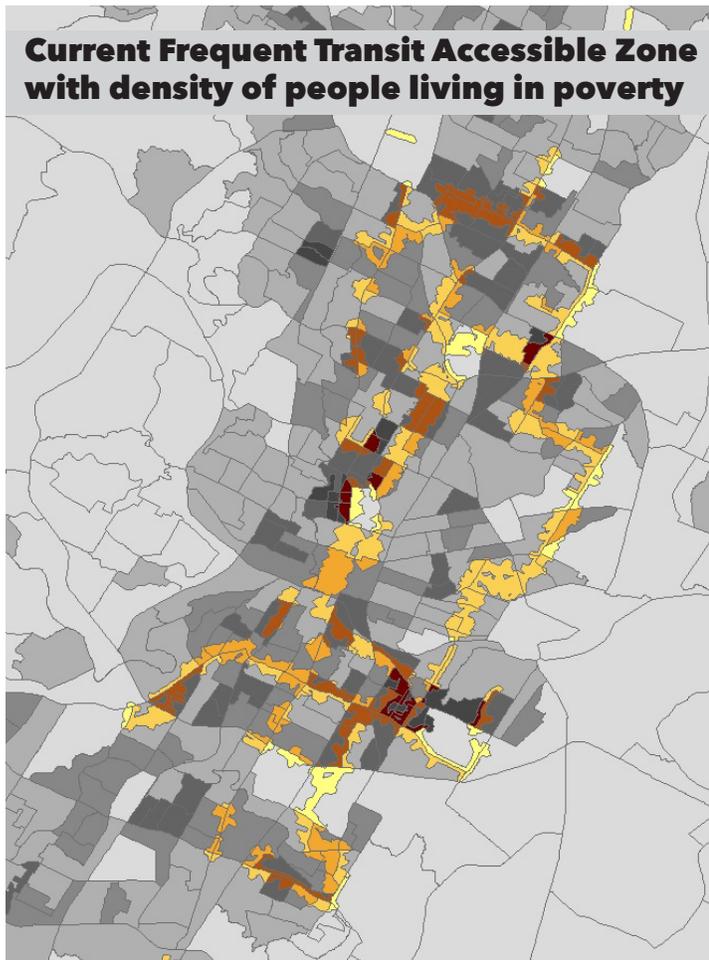
Households under the poverty line within a quarter mile of a frequent station / Households under the poverty line in the Cap Metro service area
18% -> 32%

Legend

- Frequent Stops
- Stops Without Frequent Service
- Area losing frequent service
- Area currently with frequent service
- Area gaining frequent service



Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom



To understand the impact of the proposed changes to transit service in the Connections 2025 plan, we looked at the 2015 American Community Survey data from the US Census Bureau on the amount of households living under the poverty line in each census tract across Travis and Williamson County. In the maps above, darker areas represent neighborhoods with higher concentrations of people living in poverty.

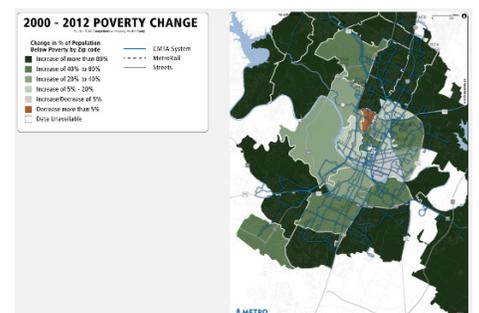
We then mapped out the area that is within a quarter mile walk of all of the current frequent transit stations - the map on the left - and the area within a quarter mile walk of all of the proposed future frequent trans-

it stations - the map on the right. As has been quite clear in the Connections 2025 plans, the area in Austin with access to high quality transit will be growing substantially. Yet many have questioned whether low income people are benefitting from these changes.

There is a narrative of the “suburbanization of poverty”, wherein households that can no longer afford to live in Austin are increasingly moving to the suburbs, with the implication that transit service should move there as well.

However, as the above maps show, the greatest concentrations of households living in poverty remain in the urban

core. Providing these households with frequent transit is cheaper and more effective than express buses to the suburban areas of Austin - meaning more people living in poverty will be served for every dollar spent providing frequent service to dense areas than serving car-dependent areas.



Maps like this that many have referred to when criticizing the proposed changes - maps that highlight areas with high-

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er increases in the percent of people that are living under the poverty line - are not good maps to use for transit planning. This is predominantly a map of the places that previously did not have people living in poverty and now have some. Rapid percentage growth in this case - as in most cases - simply indicates a low starting number to begin with.

Optimizing transit service to connect the most people, jobs, and students - including using actual density maps to target services to people living in poverty - will yield a more efficient use of funds and improve more people's lives.

The Connections 2025 proposal will provide more people living in poverty with access to an improved frequent network.

Further questions:

How many people live, work, and go to school within a 1/4 mile of all current and proposed future transit stations, distinguishing between frequent and non-frequent stations?

The above question for people living in poverty?

The above question for people of all income levels, with particular attention to middle and low income people?

How many people - including people living in poverty - live within 1/4 mile of the current 1 and 801 stations and the proposed future 801 stations?

How would these numbers be changed if the goal were achieved of having an 801 station every 1/3 mile?

Methodology:

The above maps use shapefiles of the proposed Connections 2025 frequent routes to determine what stops will be frequent in the future. In general, it is assumed that no new stations will be added and that the new routes will connect existing stops. The new stops on the MetroRapid lines already approved were added, as were several stops on 51st and within Mueller. A handful of stops will no longer be served by frequent service, because their routes are being changed to different streets - for instance the 300 will be moved from Rogge to 51st street. In every case, a frequent station will still be within 1/2 mile of the existing stop.

Using these stops as facilities, a service area was generated using the street network of the city of Austin. The colored lines in Map 1 represent streets that are within 1/4 mile of a frequent stop. In Maps 2 and 3, polygons are generated around those lines. Numbers for households were determined using an area-proportional allocation, i.e. that the population in the service area is proportionate to the population in the entire area of the Census block.

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info@farmandcity.org

713-244-4746

PO Box 171

Austin, TX 78767

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