

Fare to Fair Recovery

AEG Chicago 21Q4 Mobility & Transportation Task Force Summary Findings

Introduction

The Advanced Energy Group (AEG) “Fare to Fair Recovery” Task Force was formed in December 2021 after the AEG Chicago 21Q4 Stakeholder Challenge on Mobility and Transportation. [Leah Mooney](#) (Director of Strategic Planning and Policy, Chicago Transit Authority), presented a challenge that highlighted **pressures faced by transit to be efficient and revenue-generating** and the ways this conflicts with broader goals related to **climate, equity, and economic growth**.

Mooney’s challenge was ultimately selected to work on for 12 months by a dedicated group of Task Force Volunteers who would ultimately give their time and resources to tackling this important issue. These volunteers include: [Divya Singh](#) (WSP USA), [Erin Aleman](#) (CMAP), [Sophie Cohen](#) (WSP USA), [Robert Spragg](#) (WeaveGrid), [Christopher Townsend](#) (CJT Energy Law), [Billy Davis](#) (JitneyEV), [Reshawn Fields](#) (WSP USA), [Matt Marth](#) (CMAP), [Emily Drexler](#) (CTA), [Jason Wald](#) (CTA), [Jack Jordan](#) (AEG, Invenergy).

Getting to Work

The goal of the Task Force was to create public awareness around the **funding challenges faced by Chicago transit agencies and the need for a new approach**. The Task Force was not alone in this idea; in the months following the December 2021 Stakeholder Challenge, [state legislation](#) was introduced and passed requiring development of a report of legislative recommendations to the Governor and General Assembly regarding changes to the recovery ratio, sales tax formula and distributions, governance structures, etc. In addition, the RTA released its strategic plan, [Transit is the Answer](#), which covers many of the same themes that our Task Force was tackling.

Culminating in a public event at the [City Club of Chicago](#), the Task Force successfully amplified RTA’s [Transit is the Answer](#), and **took the important first step to build public and private partnerships on the future of equitable and clean public transit in Chicagoland**. The Task Force acted as a catalyst between regional public

and private entities to build consensus surrounding the vital role of equitable public transit to reduce regional GHG emissions.

Panel: Future of Chicagoland Transit: Funding, Fares, and Flexibility

The **Future of Chicagoland Transit: Funding, Fares, and Flexibility** panel took place on December 7, 2022, nearly one year after the Stakeholder Challenge that launched the Task Force. It was hosted by City Club of Chicago at Maggiano's, with approximately 200 guests in attendance.

AEG's CEO/Founder, H.G. Chissell, moderated a discussion between:

- Erin Aleman, Executive Director, Chicago Metropolitan Agency for Planning
- Representative Eva-Dina Delgado, State Representative from the 3rd Illinois House District
- Jacky Grimshaw, Center for Neighborhood Technology
- Leanne Redden, Executive Director, Regional Transportation Authority

The panelists covered many of the key messages from this taskforce: the importance of transit in creating an equitable, resilient future; the challenges with the region's statutory farebox recovery ratio requirement; the need for new, non-fare-based sources of revenue; and much more.



Above: Photo from Future of Chicagoland Transit: Funding, Fares, and Flexibility Panel



Above: Photos from Future of Chicagoland Transit: Funding, Fares, and Flexibility Panel

Preparing for Funding, Fares, and Flexibility

Leading up to the [City Club of Chicago](#) panel, the Task Force developed some background information on the following topics:

- Challenges with treating transit as a business not a service
- Transit operating funding in Chicagoland area and peer regions
- Recovery ratio requirements
- Benefits of transit related to climate goals
- Benefits of transit related to health
- An example of equity-oriented service changes: Route #31 and Route #157 Extension

Summaries of these items are included as appendices.

Takeaways / Recommendations

- 1) **Transit is a public good, not a business.** Our funding mechanisms should reflect this reality.
- 2) Cost Recovery policies and strategies need to be discussed more among key stakeholders and peer transit agencies. A strategic venue for these discussions would be regional and national transit conferences
- 3) The core metrics that determine transit system success need to be revisited given our greater appreciation for equity and the need for decarbonization.

- 4) Coordinating state and municipal lawmakers to best understand social benefits and consequences of policy change regarding fare recovery is important.
- 5) In order for transit to meet climate, health and economic needs, new approaches beyond farebox recovery are needed.

Transit is critical to meet climate, mobility, equity, economic, health goals.

The way we currently fund transit with farebox recovery is not conducive to meeting these goals.

Appendix 1:

Challenges with treating transit as a business not a service

The challenge of achieving transportation equity with a public system means distributing all the system's resources equitably, which means operating routes with modest ridership in low-income neighborhoods during overnight hours.

The current fare recovery requirements force delivery of services in a manner that favors more well-traveled routes over those that are less profitable. Even though those routes with lower ridership are no less essential to the users for whom it may be a lifeline to employment.

The current funding formula punishes riders by forcing transit services in Chicago to run more like a business than a service.

How do we rehabilitate a public transit system to account for differences in income and ridership levels and remain sustainable? How do we redesign the funding formula, so transit can operate as a public good?

Free or reduced fares can make transportation fairer and more accessible for low-income residents, but how is revenue generated if not from fares. Shifting the cost away from riders onto the beneficiaries of labor and commerce may be key to the solution. Ultimately, transportation is essential infrastructure that is vital to productivity and GDP and should be funded as such.

Transit is a public good, not a business. Our funding mechanisms should reflect this reality.

Appendix 2:

Transit operating funding in Chicagoland area and peer regions

Across the United States, transit operations are funded by a combination of farebox revenues and other user-generated sources (e.g., advertising, investment income, etc.) and public subsidy from local, state, and federal governments. The degree to which transit agencies rely on each of these sources varies by agency, as seen in **Figure 1** for 2019.

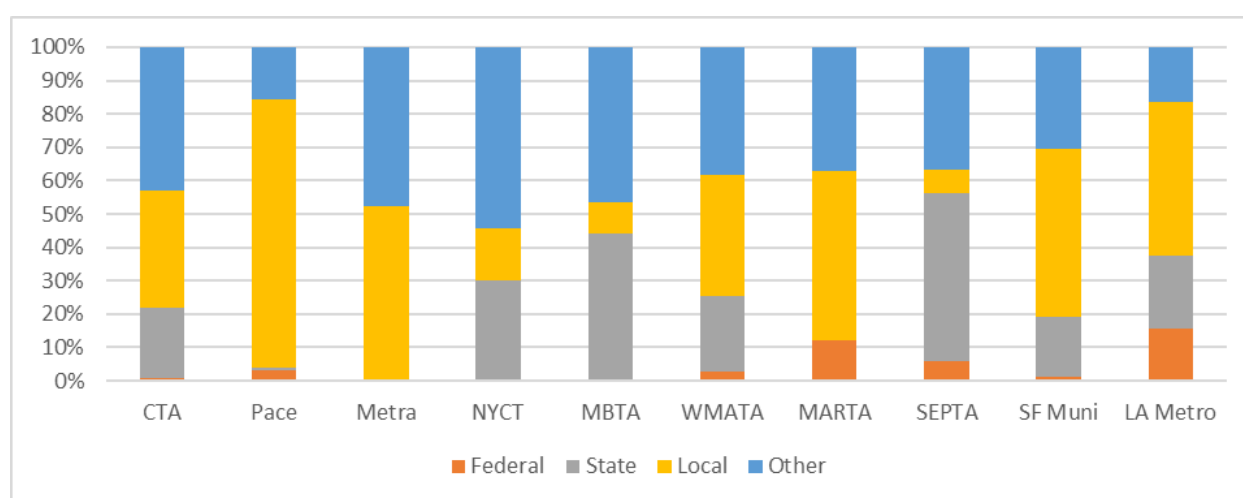


Figure 1: Operating Revenues, 2019

Source: Analysis of FTA's National Transit Database, Table TS1.2 Operating and Capital Funding Time-Series

In the Chicago area, agency-generated revenues (represented as “Other” in the chart) and local taxes provide the vast majority of operating funds. In contrast, transit systems in New York (NYCT), Boston (MBTA), and Philadelphia (SEPTA) all receive significant state funds. In 2019, only Atlanta (MARTA) and Los Angeles (LA Metro) relied on funding from the federal government for more than 10% of their operating revenues, by using flexible dollars to support operations rather than capital investment. As a result of the COVID-19 pandemic, the federal government provided significant relief funds to support transit operations during the emergency, helping to offset reduced fare revenues. However, these funds are temporary and are expected to run out by 2025.

The primary sources of local and state funding in the Chicago area include:

- **RTA Sales Tax:** The RTA levies a sales tax of 1.25% in Cook County and 0.5% in DuPage, Kane, Lake, McHenry and Will Counties. The RTA keeps 0.15% and distributes the remaining 1.10% across CTA, Metra and Pace based primarily on statutory formula, with a portion up to the discretion of the RTA board.
- **Real Estate Transfer Tax (RETT):** The City of Chicago levies a tax of \$1.50 per \$500 of the price of transferring title to, or beneficial interest in, real property located in the City for the purpose of providing financial assistance to the CTA. This is on top of the \$3.75 per \$500 tax levied for the City of Chicago itself, and is referred to as the “CTA portion” of the RETT.
- **Public Transportation Fund (PTF):** The Illinois State Treasurer transfers an amount equal to 30% of RTA sales tax collections and 30% of the CTA portion of the RETT from the State’s General Fund to the PTF which is provided to the RTA for distribution. The majority of the PTF goes to CTA.

Appendix 3: Recovery Ratio Requirements

The share of operating expenses paid for via fares is often referred to as the “farebox recovery ratio,” representing the portion of operating expenses “recovered” via fares.¹ Prior to 2020, CTA and Metra had among the highest recovery ratios across the top 50 largest transit agencies (by operating budget), as shown in **Figure 2**. Rail agencies generally have higher recovery ratios compared to bus operators, with transit agencies operating both bus and rail falling in between. This is due to the higher efficiency associated with trains, which can carry more passengers per run and tend to operate on denser routes.

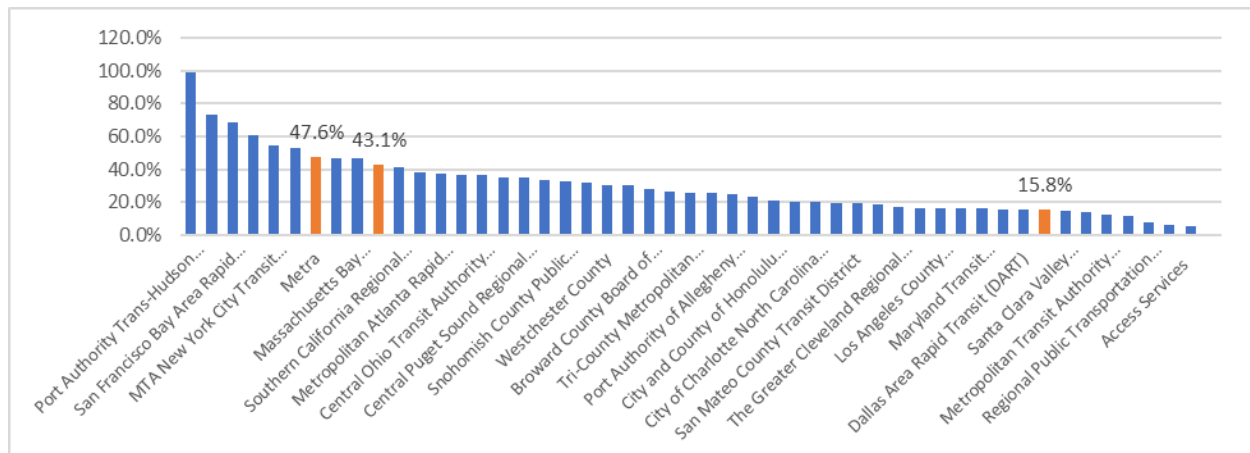


Figure 2: Recovery Ratio in 50 Largest Transit Systems

Source: Analysis of FTA’s National Transit Database, Table TS1.2 Operating and Capital Funding Time-Series.

In Illinois, state law requires the Regional Transportation Authority (RTA), which oversees CTA, Metra, and Pace, to recover 50% of its operating expenses via agency-generated revenues; this requirement is distributed across the three service boards such that that the target is greater than 50% for CTA and Metra and closer to 30% for Pace. The calculation of the recovery ratio for statute compliance is more

¹ This sometimes includes other agency-generated revenues such as advertising, investment income, or lease payments, though these typically make up only a fraction of the revenues from fares. The calculations in Figure 2 are based on total agency-generated revenues, not fares alone.

complex than the ratio generated based on National Transportation Database (NTD) data in **Figure 2**, explaining the discrepancies between those values and each agency's required recovery ratio.

While legislatively-mandated recovery targets are not unique to Chicago, Chicago's target is among the highest requirements, and several other systems lack any requirement at all.

In light of the COVID-19 pandemic, Illinois Public Act 102-0678 suspended the recovery ratio requirement for fiscal years 2021, 2022, and 2023. An influx of federal operating funds has helped to bridge the gap between expenses and revenues for the time being, but these funds are expected to run out before long. The reinstatement of the recovery ratio requirement poses a challenge to Chicago-area transit that is still rebounding and where ridership remains well below pre-pandemic levels.

Even in the absence of the pandemic, the recovery ratio requirement, and more broadly the heavy reliance on fare revenue to support transit operations, may distort decision making and limit transits' positive impacts. For example, a focus on fare recovery leads to prioritizing service in the densest corridors, though these may not be the areas of highest need.

Appendix 4: Benefits of Transit Related to Climate Goals

With each passing year, the need for large-scale and immediate action to combat climate change increases, as the human costs of inaction continue to mount across the globe. While the window for meaningful action is increasingly small, community members and policymakers in large cities like Chicago are uniquely positioned to take the action necessary to decarbonize regional economies. A well-funded, equitable, and far-reaching public transportation system must be a key component of necessary climate goals and action in every US metro area.

The transportation sector generates the largest share of greenhouse gas emissions, more even than electricity production or industry². These emissions come from planes, cars, trucks, trains, and ships, yet the largest amount of these emissions come from passenger vehicles and light-to-heavy-duty trucks³. Trains and buses—the backbone of public transportation in the US—emit significantly less greenhouse gasses per passenger than cars and are vastly more efficient when it comes to moving people both short and long distances.

The Center for Neighborhood Technology (CNT) found that public transportation in the United States saved 63 million metric tons of carbon dioxide equivalent (MMT CO₂e) emissions in 2018—equivalent to the annual emissions of 16 coal-fired power plants⁴. Currently, a trip on public transportation emits about 55% less emissions than riding in a car alone⁵. Public transportation's efficiency will only increase as technology for electric buses becomes more widespread and advanced and the grid powering electric trains and buses further decarbonizes. Beyond direct reductions in carbon emissions, there are also clear indirect benefits from robust transportation networks. By fostering land-use conducive to active transportation—walking, bicycling, and transit—in 2018 CNT found that public

² <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

³ <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>

⁴ <https://cnt.org/blog/public-transportations-impacts-on-greenhouse-gas-emissions>

⁵ <https://cnt.org/blog/public-transportations-impacts-on-greenhouse-gas-emissions>

transportation resulted in an additional 66 million metric tons of indirect carbon dioxide reductions⁶.

Given the massive impact of public transportation on reducing greenhouse gas emissions both directly and indirectly, community members, policymakers, and politicians must take the steps necessary to support robust public transportation networks. As the catastrophic effects of climate change become less hypothetical and more real, local decision-makers have a crucial responsibility not to maintain the public transit status quo, but to envision and build a dynamic system that increases mobility and equity in the region while contributing to a meaningful reduction in greenhouse gas emissions.

⁶ <https://cnt.org/blog/public-transportations-impacts-on-greenhouse-gas-emissions>

Appendix 5:

Benefits of Transit Related to Health

Transportation activity is correlated with a wide array of health outcomes, and offering a strong public transit system can address various drivers of these outcomes. For this reason, the U.S. Department of Health and Human Services (HHS) considers transportation to be a Social Determinant of Health (SDOH)⁷. HHS's primary objective by which to improve health through transportation is to increase trips made by mass transit, an objective it recognizes it is not meeting. An approach to transit planning that views transit as a public good can help make inroads in the areas of public health and health equity.

Public transit's health impacts range from mental to physical. It promotes livability largely through the development patterns it spurs around it. There is evidence suggesting that increasing access to public transit is positively associated with higher levels of happiness and social cohesion⁸. Additionally, public transit promotes active transportation, largely thanks to the compact, mixed-use transit-oriented developments (TODs) that it often foments. Walkability—a hallmark of TOD—has been repeatedly positively correlated with lower rates of metabolic illness⁹. Unsurprisingly, a person's ability to walk to a public transit stop makes them more likely to take transit¹⁰.

Motor vehicle injuries and fatalities can be reduced through increasing public transit. The American Public Transportation Association found in 2018 that metro areas that provide "more than 40 annual transit trips per capita have around half the traffic fatality rate of metro areas with fewer than 20 transit trips per capita"¹¹. The Chicago-Naperville-Elgin Metropolitan Area specifically, which has about 67 stops per capita, saw 5.8 traffic fatalities per 100,000 residents. This is in contrast

⁷ <https://health.gov/healthypeople/objectives-and-data/browse-objectives/neighborhood-and-built-environment>

⁸ <https://www.vtpi.org/cohesion.pdf>, pg. 5-6

⁹ <https://www.ahajournals.org/doi/10.1161/JAHA.119.013146>

¹⁰ https://transitcenter.org/wp-content/uploads/2016/07/Whos-On-Board-2016-7_12_2016.pdf

¹¹ <https://www.apta.com/wp-content/uploads/Resources/resources/hottopics/Documents/APTA%20ZN%20Transit%20Safety%20Brief%208.2018.pdf> pg. 1

with the average metro of 500,000+ residents, which provides 21.2 transit stops per capita and sees 10.0 traffic fatalities per 100,000 residents. (Notably, despite the high standing of the city nationally, Black Chicagoans are more than twice as likely to be killed in a traffic crash as white Chicagoans, and almost half of all fatal crash victims in the city proper are Black¹². Taking injuries and deaths combined, transit passengers are about ten times safer than automobile occupants¹³. The implications of this in the United States are staggering; the latest numbers from the Centers for Disease Control and Prevention (CDC) show that lifetime medical costs incurred from motor vehicle crashes in a given year are around \$18.4 billion across the entire population, plus over a million days in the hospital¹⁴.

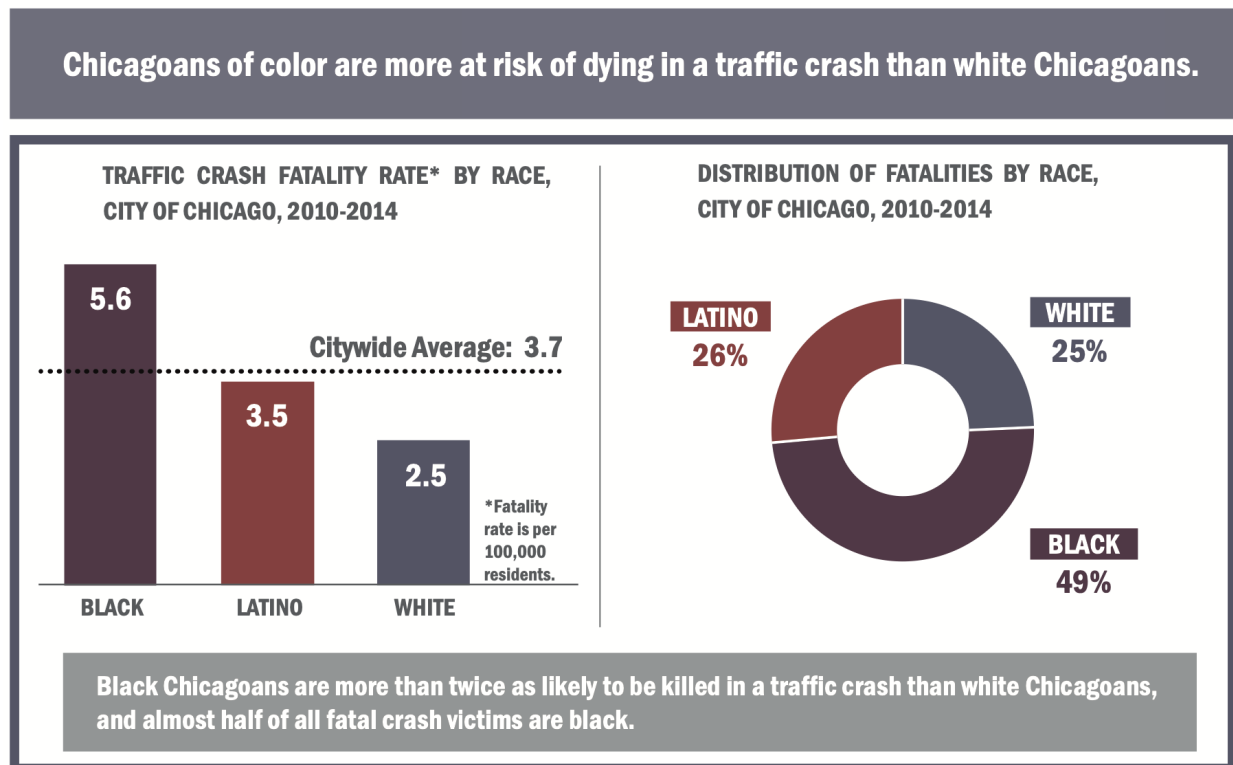


Figure 3

The benefits of public transit on air quality are well-documented. Even fossil fuel-powered public transit produces less carbon monoxide, carbon dioxide,

¹² <https://www.ghsa.org/sites/default/files/2021-06/An%20Analysis%20of%20Traffic%20Fatalities%20by%20Race%20and%20Ethnicity.pdf> pg. 6

¹³ <https://www.vtqi.org/safer.pdf> pg. 3

¹⁴ <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6340a4.htm>

nitrogen oxides, and other air pollutants per passenger mile than single-occupancy vehicles, while reducing the number of such vehicles on the road¹⁵. The health issues resulting from these pollutants include asthma, pneumonia, bronchitis, heart disease, and cancer, and are felt disproportionately by lower-income and racial/ethnic minority populations. The proximity of these populations to freeways that were deliberately built through them is partially responsible¹⁶. These policy-driven health disparities have resulted in renewed calls for environmental justice interventions that prioritize the most burdened communities. The Biden-Harris Administration's Justice40 Initiative seeks to ensure that "40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution"¹⁷. Investing in public transit and turning away from auto-related infrastructure in disenfranchised communities can meet this goal and reduce our health outcomes related to poor air quality and promote health equity.

The existing transit paradigm has a large price tag that is missed by fixating on revenue. In addition to ignoring the physical and mental suffering promoted by car-centered development, which cannot be enumerated, it also does not capture work time missed, healthcare costs, and years of life lost that could be avoided by viewing transit as a public good. By being forced to deprioritize community needs, such a model also perpetuates a suite of racial and socioeconomic health disparities that have long demanded attention.

¹⁵ <https://www.acogok.org/why-transit-matters-environment/>

¹⁶ <https://www.scientificamerican.com/article/people-poor-neighborhoods-breathe-more-hazardous-particles/>

¹⁷ <https://www.whitehouse.gov/environmentaljustice/justice40/>

Appendix 6:

Fare to Fair Example - Route #31 and Route #157 Extension

What does it look like when a transit agency prioritizes equity? Two recent CTA service changes provide some insights. In September 2016, CTA began piloting Route #31 31st, connecting South Side residents to three CTA train lines and the Lake Meadows Shopping Center. Despite almost being canceled in 2018 due to low ridership and, rather ironically, complaints about traffic, the route was made permanent in February 2022.



Figure 4

At the same February 2022 board meeting, Route #157 Streeterville/Taylor was re-extended to the North Lawndale neighborhood for the first time since 2008,

providing a disadvantaged community with a one-seat ride to Near North Side jobs, the Illinois Medical District, and Northwestern Medical Center.

During the pilot project’s operations, multiple affordable housing developments were announced along the Ogden corridor adjacent to the #157 extension, including the 65-unit Grace Manor apartments and Lawndale Redefined, one of the Invest South/West projects. In addition to housing, Lawndale Redefined will also include a grocery store, community center, and tech center. It is possible that these projects would not be viable were it not for the improved transit service to the neighborhood.

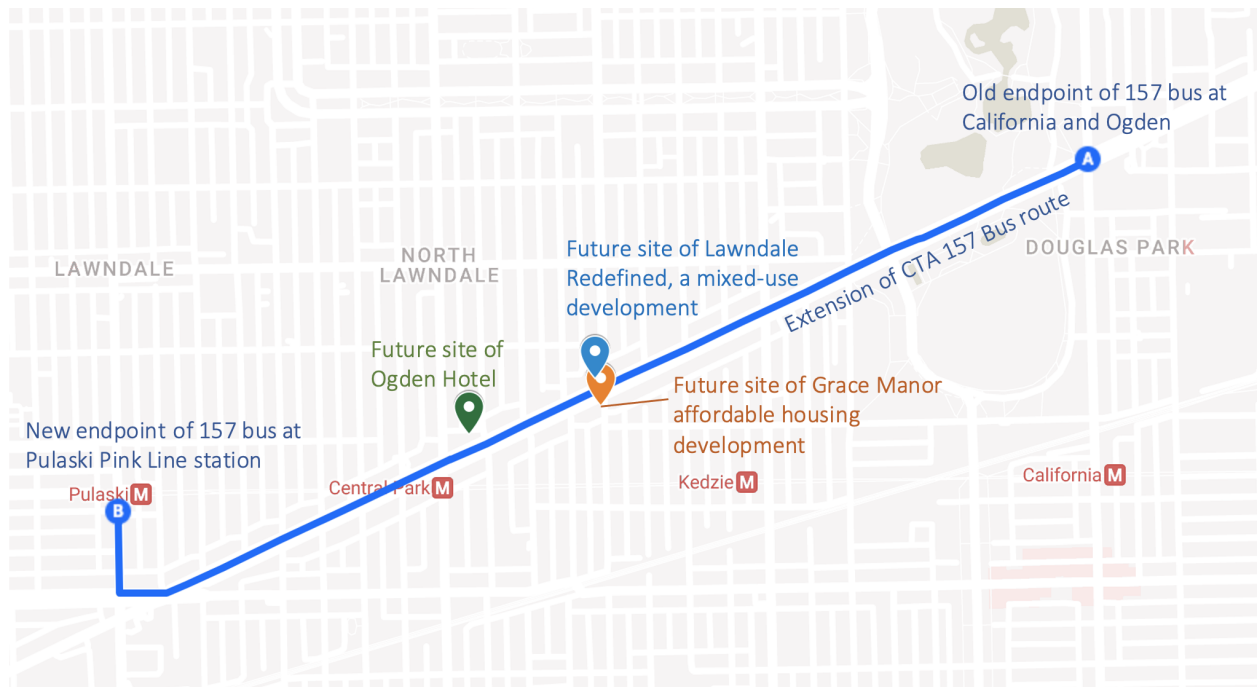


Figure 5: Map showing extension of CTA 157 Streeter/ Taylor bus and adjacent new development.

In 2022, CTA made these routes permanent despite an additional annual operating expense of approximately \$1.1 million. In a Letter to the Editor, CTA president Dorval Carter, Jr. noted that, “Public transit funding decisions directly reflect who we value in our society. Unfortunately, in many cases, the current state of transportation funding suggests a diminished value placed on low-income and

minority individuals. That must change.” he goes on to say, “Public transit can and should be a catalyst that links disenfranchised and underserved neighborhoods to jobs, education, and economic opportunity.”

The recent decision by CTA to provide new operations in disadvantaged communities, along with recent announcements by community partners and developers to build new affordable housing in the same communities demonstrates how CTA can help spur economic growth in a more equitable manner. With the COVID-19 pandemic continuing to harm communities, gas prices rapidly rising, and the climate crisis ever-growing, these decisions could not have come at a better time.