

RETHINKING MOBILITY IN A POST-COVID CHICAGO REGION

**Policy Benchmarking Report
November 2021**

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Chicago Metropolitan Agency for Planning**

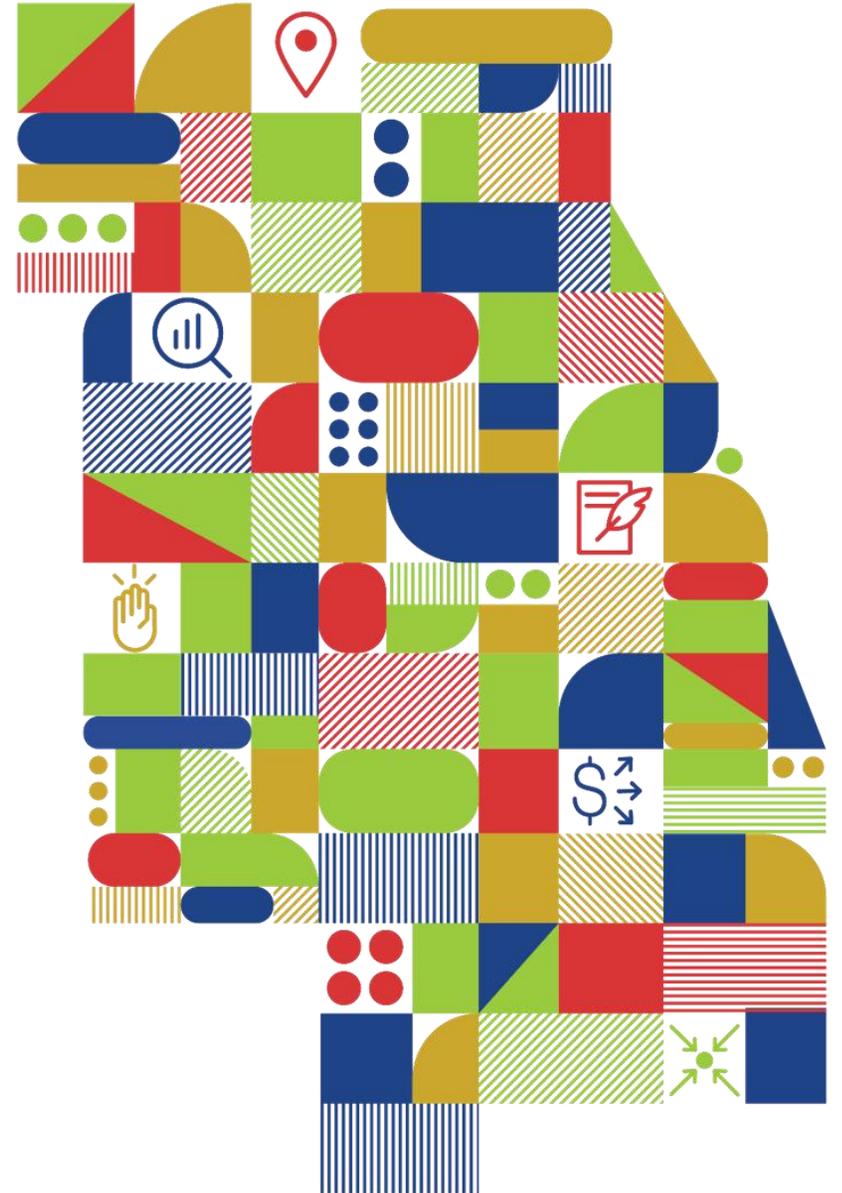


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1. RETHINKING MOBILITY

The COVID-19 pandemic has caused enormous challenges for the transportation system in northeastern Illinois. Transit ridership has fallen significantly, especially during the peak of the crisis. More travelers are choosing to drive, with congestion returning as auto travel rebounds more quickly than other modes. New practices, such as the wider adoption of remote work, are likely to remain even after the pandemic subsides. These shifts, and others, indicate that the COVID-19 pandemic could increase the region's reliance on auto travel, especially if there is an increase in single-occupant trips.

These challenges are not restricted to any single county or jurisdiction within northeastern Illinois. Recognizing that the transportation network is interconnected and policy solutions are needed at the regional scale, the region's seven county Board Chairs and the City of Chicago's COVID-19 Recovery Task Force requested that CMAP lead efforts to facilitate a resilient and equitable recovery.

To fulfill that mandate, CMAP and its partners are developing a mobility strategy, *Rethinking Mobility in a Post-COVID Chicago Region*. The plan will identify policy strategies to support an equitable recovery from the COVID-19 crisis and keep the region on track meeting the goals in ON TO 2050, the region's comprehensive plan. The plan will recommend solutions to help mitigate an already apparent rebound in congestion, sustain the transit system, and increase the overall resilience of the region's multimodal transportation system.

The goals of this project are to:

1. Identify and plan for mobility strategies and policies that will allow the region to make progress towards the goals of ON TO 2050, despite the challenges accelerated by the pandemic;
2. Increase the resilience of the region's transportation network to better adapt to future changes in travel patterns
3. Ensure that recovery and growth strategies and policies are equitable, coordinated with land use and other broader policy priorities, and represent the needs of the whole region.

While this project focuses on mobility-related solutions, land use (including policies, regulations, and development) is a critical and inextricably linked component impacting how, where, when, and why people move throughout the region. Any mobility-related solution recommended through this project should therefore be deployed in close coordination with associated land use considerations. Examples of land use policies and strategies that can support an equitable region and mobility are included for reference in Section 4 of this report.

2. KEY TAKEAWAYS

The COVID-19 pandemic highlighted the fact that **the mobility status quo was broken** – from uncoordinated service between various modes and operators, to inequitable access, to insufficient incorporation of active transportation and new modes. Rather than settling for what exists now, **the Chicago region has the opportunity to be visionary in rethinking mobility in the post-COVID-19 era**, towards a more inclusive, sustainable, resilient mobility future. Within the CMAP region, nationally, and globally **public agencies have responded with flexibility and creativity not only to react to immediate needs, but also to set a foundation for future disruptions**. Many efforts are already underway in northeastern Illinois to respond to the immediate needs created by the pandemic, while improving mobility in the future. Global examples offer key lessons for the CMAP region:

Center Equity in Funding and Programming Decisions

Equity must be a central component of funding and programming decisions. The pandemic disproportionately harmed historically marginalized groups; however, novel practices adopted in response to those harms provide a basis for future improvements. Public officials must institutionalize and bolster these practices in the coming years. In the post-COVID era, CMAP and its regional partners must develop policy and funding schemes with equity impacts, benefits, and burdens serving as explicit and central factors. This can include applying a qualitative equity lens when making project selections and funding decisions by evaluating the impact of the programs on vulnerable communities and identifying ways

to mitigate them (for example as done with LA Metro’s Rapid Equity Assessment Tool), as well as developing a framework to assess the level of interventions on different groups in society and then further facilitate decisions on how funding and services are allocated (for example as the UK Treasury’s Distributional Appraisal).

Establish Cross-Agency Collaboration for Agile and Rapid Deployment

With all transit agencies impacted by reduced ridership, public health concerns, and operator safety, the COVID-19 pandemic highlighted the commonality of challenges faced by transportation agencies, and the need to coordinate closely in order to best meet travelers’ needs. Cities and regions across the world demonstrated they could rapidly deploy transportation solutions, such as pop-up bike lanes, bus lanes, and shared streets, at an unprecedented scale. The regions, cities, and agencies that were most successful were those where agencies were already institutionally adept at cross-agency collaboration, as well as those that had pre-existing programs that could be rapidly deployed or scaled. The COVID-19 pandemic required public agencies to reimagine existing services and be ready to adapt to situational changes quickly (such as how LA Metro pivoted their Mobility on Demand project to serve meals in addition to passengers), as well as temporarily or permanently repurposing physical space to respond to communities’ needs (as shown in Boston, Oakland, and Seattle’s use of streets and curbsides for outdoor dining, shared space, and pickup and delivery zones). These agencies’ abilities to rapidly adjust transportation services and how and when public space is used demonstrated their

flexibility and agility in the face of a new threat. Similar examples were deployed throughout the CMAP region, like CTA’s quickly implemented bus-only lanes. Moving forward, the region can build on these existing efforts and streamline and standardize the mechanisms for deploying additional quick-build pilot projects.

Take Bold, Proactive Action Now to Support System Sustainability

Regions will need to take deliberate action now to counter the COVID-induced collapse in transit ridership and prepare to mitigate the return (and worsening) of congestion on the roadway network. Policies such as congestion pricing, transportation system integration, and the adoption of new and sustainable revenue sources have been successful elsewhere and could play a role in supporting the Chicago region’s recovery. The pandemic further illustrated the key role that transportation plays in sustainable communities. Sustainability can be encouraged through congestion charging (such as the mandated daily charges for vehicles that do not meet certain emission standards in London’s Ultra-Low Emission Zone) and proactive provision of sustainable modes championed by the transportation agencies directly (as with Colorado’s EV Car Share and LADOT’s Zero Emission Bus Rollout Plan). As the CMAP region considers future mobility needs, these approaches can be used to encourage system-wide sustainability.

3.METHODOLOGY

This benchmarking study targets two types of geographies relevant for the context of northeast Illinois and Chicago. The first set of regions was selected based on similarities with the Chicago region and northeastern Illinois in terms of physical structure, population, demographics, age, or other factors. The purpose of this review is to identify peer regions that are directly relevant for the Chicago region.

The second set of regions was selected to illustrate visionary policies or mobility concept examples regardless of similarities or differences with northeastern Illinois – places that engaged in “thinking big”, encouraged open conversations about changes to the status quo, and implemented policies previously believed to be near impossible. The intent of this approach is to identify relevant and feasible examples for the CMAP region, while also identifying initiatives that could bring about transformational change.

3.1 Identification of Case Study Regions and Policies

When selecting comparable regions for case studies, trends across three categories were considered: regional mobility system, COVID impacts, and technology deployment. To have a comparable transit network, a commuter and local system does not necessarily have to have separate operators; rather, it could be one agency that serves both markets.

Several screening metrics were used to identify regions that are comparable to CMAP in terms of regional mobility and urban form.

These metrics included demographic characteristics, industry clusters, regional transportation system and governance, Travel Demand Management (TDM) and Transportation Systems Management and Operations (TSMO) policy deployment, and other elements that indicate a region has similar qualities to the CMAP region. Emphasis was also placed on identifying whether a region featured a spoke-and-wheel regional mobility network and a commuter and local rail system, as well as having downtown areas as major employment centers.

In the screening for comparable regions based on COVID impacts, the key metrics to identify best practice regions were agency management and governance, capital expenditure reprioritization, pursuit of long-term sustainable funding applications, changes in future expectations of growth in the region, shift in economic development strategy, larger emphasis on TDM policies going forward, environmental justice considerations of air quality changes due to COVID, and planning for future disruptions. For identifying comparable regions with experience in Mobility Technology Deployment, screening metrics included presence of Mobility as a Service (MaaS) providers and market penetration, TSMO deployment, frictionless payment for transit, automated technology deployment and pilots (with a focus on ITS), and TNC regulations and fleet electrification.

The initial target list of places and policies for the benchmarking review was finalized with CMAP’s input. Profile sheets have been

prepared for each policy explored, including the following areas:

- Summary of the policy, for example, what was recommended, who benefits, how will it be implemented and funded
- Background of the policy development and adoption
- Current state of policy implementation
- Assessment of applicability and relevance to northeast Illinois and similarity / alignment of governance structures and planning principles.

Table 1 below shows the identified peer and aspirational regions.

Table 1 Peer and Aspirational Regions

Peer Regions – Population (MSA Population)	Peer Regions – Geography (Physical Size)	Peer Regions- Mobility System (Spoke and Wheel)	Aspirational Regions
San Francisco	San Francisco	San Francisco	London
Los Angeles	Los Angeles	Los Angeles	Paris
Dallas	Dallas	Dallas	Sydney
Atlanta	Atlanta	Atlanta	Singapore
Phoenix	Phoenix	Phoenix	Santiago
Boston	Boston	Boston	Berlin
Washington, D.C.	Washington, D.C.	Washington, D.C.	Auckland
Seattle	Seattle	Seattle	Barcelona
St. Louis	St. Louis	St. Louis	
Pittsburgh	Pittsburgh	Pittsburgh	
Portland	Portland	Portland	
Miami	Miami	Miami	
New York City	New York City	New York City	
Austin	Austin	Austin	

Key: **Selected as comparable**

3.2 Stakeholder Interviews

Interviews were conducted with selected stakeholder agency representatives to gather insights on the relevant policies that were implemented or considered by these agencies. The case studies selected for interviews were informed by priority interest areas shared by the project steering committee. Discussions were conducted around pros and cons of the selected policies, as well as suggestions from the agencies on refinement and improvement if similar policies were to be implemented again. The input received from the stakeholder interviews is intended to help better apply

lessons-learned from the case studies to the CMAP context.

3.3 CMAP and Steering Committee Reviews

The overall project goals, study scope and approach, and schedule were presented to CMAP and the Steering Committee in early 2021, where the committee provided recommendations on regions and policy focus areas, which had been incorporated into the analysis. The initial list of regions and research findings were submitted for CMAP review and comment before finalization.

The current policies, guidelines and statutes were evaluated to determine what changes may be required to facilitate implementation of the approaches from the benchmarking review, including the ON TO 2050 plan as well as the 2018-2023 Regional Transit Strategic Plan for Chicago and Northeastern Illinois. Based on the research findings and input received from CMAP and the Steering Committee, policy direction was developed to help CMAP navigate through the current challenges, prepare for future uncertainties, as well as to best utilize emerging technologies to improve mobility for all in the region.

4. FINDINGS

4.1 Case Studies Review

The purpose of this phase of work is to review piloted and implemented policies and programs in peer regions to identify best practices that are examples of innovation in mobility systems, triggered by or amplified by the COVID-19 pandemic. Once peer regions were identified, the project team worked with steering committee members and CMAP to identify case studies that are relevant to the region.

The case study summaries have been categorized under four themes, as detailed below.

Table 2 lists all case studies.

Table 3 summarizes takeaways from the review process.

4.1.1 Case Study Takeaways

Equitable Transportation and Places

At the onset of the pandemic, CMAP research shows that essential workers from disadvantaged communities – particularly people of color and those who live in low-income communities – were playing critical roles in providing healthcare and keeping the transportation, food supply, and other essential systems functioning.¹ Although there was a significant decline in transit usage across the full network, essential workers continued to use transit to reach their destinations. Communities in the region and other peer regions quickly pivoted to providing resources for these residents during the pandemic and identified equity goals that could address the needs of these populations

during the pandemic and into the future. Key trends related to centering equity in transportation during and beyond the pandemic from peer regions include:

- Communities adopted frameworks that can incorporate equity consideration in the decision-making process. These frameworks can be qualitative and incorporate a set of questions that explore the impact of decisions on vulnerable communities and ways to mitigate these. These frameworks can also be quantitative and incorporate weights in evaluation methods to prioritize and better serve vulnerable communities.
- Communities throughout the globe adopted a ‘pop-up’ model to deploy critical services in a short period of time with limited resources. As public health protocols for social distancing began to emerge, communities began to deploy innovative solutions to maintain service while protecting public health. For example, transit operators created priority or bus-only lanes to key destinations to serve essential workers. These were often demarcated on the right-of-way by low cost materials such as traffic cones and signage. Communities leveraged existing plans such as transit priority programs or bicycle master plans to quickly deploy ‘pop-up’ infrastructure along identified key routes.
- Agencies took advantage of the historic low ridership to accelerate project schedules and advance construction and maintenance projects. This nimble approach to project implementation schedules can be used

to reduce passenger inconvenience in the future at opportune times.

Shared Mobility and Streets

Shared mobility can broadly be defined as transportation services and resources that are shared among users, either concurrently or one after another. CMAP and peer regions have leveraged shared mobility options during the pandemic to meet community needs.

- Several regions including northeastern Illinois have piloted micromobility solutions to address first- and last-mile connectivity issues to transit stations. During the pandemic, these services (in some regions) operated as point-to-point service to provide transit dependent populations an option to reach essential services such as testing centers and grocery stores.
- During the lockdown, many regions witnessed a drastic decline in ridership. In order to continue service for essential workers and transit dependent populations while remaining cost effective, transit agencies partnered with rideshare companies such as Lyft and Uber to provide rides. This partnership enabled agencies to continue service while modifying schedules.
- During the pandemic, biking and walking emerged as safe modes of travel that enabled people to social distance and exercise. Communities rapidly increased pop-up biking lanes and agencies expanded bike share programs and subsidized their cost.

CMAP notes that COVID-19 has changed demand for curb space and right-of-way in

communities across northeastern Illinois. Local governments have piloted new curb uses, including outdoor dining and designated zones for curbside pickup and deliveries. Public officials may consider making these innovations permanent, while taking into account the impact on all community members.²

In order to support local businesses, communities updated ordinances and made provisions for drop-off/pick-up zones and outdoor dining. Several city departments coordinated to streamline the application process and fast track approval. While post-pandemic demand for curb space may change, lessons from this experience can be applied to rapidly meet community needs and more flexibly allocate curb space.

- During the lockdown, several cities initiated shared street or slow street programs that limited through-traffic in residential neighborhoods. This enabled communities to use the right-of-way as a place for exercise and congregation. Programs like this have an opportunity to repurpose the right-of-way for community benefits and increase community cohesion.

Demand Management

Even before the pandemic, the CMAP region and other peer regions were challenged by congestion issues and poor air quality that resulted in poor public health outcomes. Several regions, including northeastern Illinois, have deployed innovative strategies to resolve these issues. The pandemic provided an opportunity to deploy strategies and observe the benefits of ongoing programs.

- Agencies and councils of governments across the country worked towards

expanding work-from-home/telecommute programs. The lockdown forced non-essential businesses to quickly pivot to a work-from-home model. Peer regions conducted studies to understand how these solutions can be continued and encouraged in the long term.

- Peer regions instituted dynamic pricing models, VMT-based taxes, and congestion or low emission zones to better manage vehicular traffic. In the long term, these models can serve to manage congestion, improve air quality, and be a sustainable revenue source.

Technology Deployment

Northeastern Illinois and peer regions deployed innovative technologies to address regional concerns that were further exacerbated by COVID-19. Regions are now exploring opportunities for fare integration between transit agencies to attract ridership. Rollout of electric vehicles can improve public health by improving air quality and advance climate change mitigation goals. As e-commerce continues to grow and the number of delivery trucks increases, communities can pilot vendor-neutral locker systems to better manage delivery trucks.

Overall, while several of the case studies were initiated or advanced during the pandemic to address its public health and mobility challenges, they also advance long-term regional goals such as equity, climate change, community development, and public health. Post-pandemic, these case studies can serve as resources or potential pilot programs that can contribute towards long-term goals.

Table 2 List of Case Studies

Equitable Transportation and Places	Shared Mobility and Streets	Demand Management	Technology Deployment
<ol style="list-style-type: none"> 1. Rapid Equity Assessment Tool Los Angeles, California 2. Distributional Appraisal United Kingdom 3. Emergency Bike Lanes Paris, France 4. MBTA Rapid Response Bus Lanes Program Boston, Massachusetts 5. Fare-free Shuttles to COVID-19 Vaccine Sites Oakland, California 6. Accelerate Project Schedule Washington, D.C. 7. Equitable Transit-Oriented Development Program Seattle, Washington 8. Project Connect Austin, Texas 	<ol style="list-style-type: none"> 1. LA Metro’s Mobility on Demand Service Los Angeles, California 2. Go Nightly Rideshare Program Miami, Florida 3. Pick-up & Delivery Zones Seattle, Washington 4. PBOT Micromobility Policies Portland, Oregon 5. Boston’s Outdoor Dining Program Boston, Massachusetts 6. Oakland Slow Streets Initiative Oakland, California 7. Superblock Model Expansion Barcelona, Spain 	<ol style="list-style-type: none"> 1. Miami-Dade Transportation Planning Organization (TPO) Telecommute Study Miami, Florida 2. Île-de-France Smart Services Paris, France 3. Congestion Charge and Ultra Low Emission Zone (ULEZ) Zone London, United Kingdom 4. OReGO Vehicle Miles Traveled Tax Oregon 5. Road Pricing System Singapore 	<ol style="list-style-type: none"> 1. Fare Coordination and Integration Study Bay Area, California 2. Colorado EV Carshare Denver, Colorado 3. Parcel Locker Network Singapore 4. LADOT Zero-emission Bus Rollout Plan Los Angeles, California

Table 3 Case Studies and Takeaways

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
Equitable Transportation and Places					
<p>Rapid Equity Assessment Tool</p> <p>Los Angeles, California</p>	<p>LA Metro deployed a Rapid Equity Assessment Tool to identify and prioritize equity opportunities for the COVID-19 Task Force projects and proposals when actions must be taken quickly.³</p>	<p>Inclusive Growth, Resilience, Prioritized Investment</p>	<p>CMAP Community Cohorts tool makes project selections and funding decisions more equitable when communities apply for the local technical assistance program. It was altered and used by Cook County to allot CARES Act funds.⁴</p>	<p>The assessment provides a qualitative equity lens by evaluating the impact of program decisions on vulnerable communities and identifying ways to mitigate impacts.</p>	<p>In the long term, adoption of this assessment framework will reduce or prevent unforeseen burdens on vulnerable communities.</p>
<p>Distributional Appraisal</p> <p>United Kingdom</p>	<p>Distributional analysis is a term used to describe the assessment of the impact of interventions on different groups in society. The UK Treasury (Her Majesty's Treasury) publishes a handbook known as "The Green Book: Appraisal and Evaluation in Central Government." This handbook requires use of weighted costs and benefits when a proposal may have a significant redistributive impacts between groups of concern, including protected groups and different income groups.⁵</p>	<p>Inclusive Growth, Resilience, Prioritized Investment</p>	<p>CMAP scores proposed projects on the degree to which they benefit low-income population in its Surface Transportation Program Shared Fund program.⁶</p>	<p>COVID-19 has had a disproportionate impact on vulnerable communities. When allocating resources for projects, during the recovery period and after, a cost-benefits analysis that incorporates a weighting system can be adopted to provide more importance to and channel resources to these vulnerable communities.</p>	<p>In the long-term, incorporating equity considerations into the evaluation processes will promote inclusive growth.</p>
<p>Emergency Bike Lane</p> <p>Paris, France</p>	<p>Paris rolled out emergency bike lanes (~650km) for the use of key workers and others during the lockdown.⁷</p>	<p>Resilience, Prioritized Investment</p>	<p>While the region did not have large-scale emergency bike lane installations, some municipalities did install additional bike facilities during the pandemic. For example, in September 2020, the City of Chicago installed protected bike lanes along a stretch of Milwaukee Avenue — from Western to California avenues. The city used Qwick Kurb, rather than the typical concrete barriers, for their cost,</p>	<p>During the pandemic, cycling and walking are useful for both social distancing and meeting the minimum requirement for daily physical activity.</p>	<p>In the long term, increase in biking infrastructure promotes better public health by increasing opportunities for physical activity, improves air quality, and reduces SOV trips and traffic congestion.</p>

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
			flexibility and short timeline for installation. ⁸		
MBTA Rapid Response Bus Lanes Program Boston, Massachusetts	Boston and several of its neighboring suburbs provided or expanded transit-only/transit-priority lanes to make on-street transit a more reliable and efficient form of transportation for the people who need it most – essential and front-line workers. ⁹	Resilience, Prioritized Investment	The Chicago Department of Transportation (CDOT) and the Chicago Transit Authority (CTA) launched the Pop Up Essential Bus Lanes program in September 2020, as part of a pilot on two of the City’s highest ridership routes, Chicago Avenue (#66) and 79th Street (#79). ¹⁰	Dedicated bus lanes help to reduce bus delays and bus bunching, which may lead to crowding and longer bus trips, both of which are counter to the City’s and CTA’s efforts to promote social distancing.	In the long-term, transit-only or transit priority lanes can address service delays, improve service conditions, and attract ridership.
Fare-free Shuttles to COVID-19 Vaccine Sites Oakland, California	Transit service providers ran temporary free shuttles to COVID vaccine sites to support transit dependent populations in accessing the vaccine. ¹¹	Resilience, Prioritized Investment	While there were no examples of supplemental transit routes to serve COVID vaccine sites in the region, many of the region’s residents were able to access their vaccinations by transit. For example, an analysis conducted in March 2021 shows that a majority of regional residents, and all Chicago residents, could access at least four COVID-19 vaccination sites using transit within an hour. ¹² FEMA, Cook County, and the City of Chicago converted a United Center parking lot into a mass vaccination site, making it easier for people who live near transit to get vaccinated, because the stadium is accessible via four bus routes and ‘L’ lines. No-fare services through rideshare programs such as Uber/Lyft also reduced barriers to access vaccinations for households who are not near transit.	Policies and programs that reduce transportation barriers (access and cost) in accessing vaccination sites are a vital part of recovering from this pandemic.	Post-pandemic, these programs and policies can support in reducing barriers for vulnerable communities to access health care facilities such as pharmacies, clinics, and hospitals.

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
<p>Accelerate Project Schedule</p> <p>Washington, D.C.</p>	<p>Transit providers across the country are taking advantage of lower ridership and less service to accelerate or expand maintenance and construction projects. Making the most of historically low ridership and low-traffic highways, Washington Metropolitan Area Transit Authority announced plans to combine the schedules of two biggest capital priorities in Virginia: rebuilding platforms and connecting the Silver Line to Metro's existing network.¹³</p>	<p>Inclusive Growth, Resilience, Prioritized Investment</p>	<p>In April 2020, Metra began several major projects to get a head start on its 2020 construction since was experiencing service reductions due to the COVID-19 pandemic. By doing this, Metra will reduce the number of construction detours needed later in the year and potentially complete projects ahead of schedule.¹⁴</p>	<p>The benefits of an accelerated schedule are:</p> <ol style="list-style-type: none"> 1. Limits the exposure of frontline staff and contractors 2. Mitigates delays to capital program 3. Minimizes inconvenience to the public 	<p>Accelerating project schedules during low ridership periods can reduce the number of construction detours needed later and potentially complete projects ahead of schedule in the future.</p>
<p>Project Connect</p> <p>Austin, Texas</p>	<p>In November 2020, Austin voters approved the Project Connect transit plan. The plan includes a \$300 million anti-displacement fund, aiming to offset the increase in housing costs expected along the corridors served by new rail and rapid bus routes. This makes it the largest program of its kind to be launched in the U.S.¹⁵</p>	<p>Inclusive Growth</p>	<p>In June 2021, the City of Chicago completed the Equitable Transit-Oriented Development (eTOD) Policy Plan that outlines a comprehensive set of actions for the City to take to advance racial equity, wealth building, public health and climate resilience goals through equitable Transit-Oriented Development. This effort includes a cross-sector engagement process and analysis of the City's programs, and an evaluation framework focused on outcomes, equity, and implementation criteria. Over 70 stakeholders representing numerous City departments, community-based organizations, the private sector, philanthropies, and regional non-profit and governmental partners have been engaged.¹⁶</p>	<p>Geographies with more disadvantaged communities have experienced more severe negative impacts due to COVID-19 related to housing affordability and can benefit from policies and program like these in the post-COVID era.</p>	<p>eTOD brings benefits of dense, mixed-use, pedestrian-oriented development near transit hubs to all, as well as elevates and prioritizes investments and policies which aim at narrowing and closing the socioeconomic gaps between neighborhoods with different race and ethnicity clusters. In addition, eTOD can support more vibrant, prosperous, and resilient neighborhoods connected to opportunities throughout the region as it focuses on the realization of community-focused benefits (such as affordable housing, public health, strong local businesses, and environmental sustainability).</p>
<p>Equitable Transit-Oriented Development Program</p> <p>Seattle, Washington</p>	<p>In 2016, Seattle Sound Transit deployed the 80-80-80 policy. This policy requires Sound Transit to offer 80 percent of suitable surplus property to affordable housing developers, and requires those developers to make at least 80 percent of units on site affordable to people earning 80 percent or less of area median income.¹⁷</p>	<p>Inclusive Growth</p>			

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
Shared Mobility and Streets					
<p>LA Metro's Mobility on Demand Service</p> <p>Los Angeles, California</p>	<p>LA Metro's Mobility on Demand service runs point-to-point trips within service zones. Services were adapted to accommodate essential trips for customers who need to access services, such as grocery stores, pharmacies, and medical centers. Metro's partner Via has discontinued shared rides and shifted to private rides for social distancing.¹⁸</p>	<p>Inclusive Growth</p>	<p>Pace operates "Pace on Demand" service, a reservation-based, shared-ride service in 10 designated service areas throughout the suburban region.¹⁹ In addition, the private company Via offered rides to-and-from all CTA and Metra stations within its service zones, however this service has been temporarily suspended due to the pandemic.²⁰</p>	<p>Metro has made emergency adjustments to its Mobility-on-Demand program in order to ensure there are last mile transportation options for people to essential services such as grocery stores during the pandemic.</p>	<p>Flexible and on-demand services can help to support mobility for those without access to fixed-route transit or a personal vehicle during future emergencies, as well as supplement gaps in fixed route services long-term.</p>
<p>Go Nightly Rideshare Program</p> <p>Miami, Florida</p>	<p>The City of Miami suspended overnight Metrobus service due to low ridership and partnered with Uber and Lyft on a Go Nightly on-demand ride option to provide essential workers trips during this service suspension.²¹</p>	<p>Inclusive Growth</p>	<p>Bedford Park's Connect2Work program provides subsidized Uber late night rides between 9 p.m. and 6 a.m. Monday through Sunday. Bedford Park employees are eligible for two discounted rides per day, at a 50% subsidy per ride up to \$7.²²</p>	<p>For transit providers that are experiencing declines in ridership, partnering with ride-share companies during non-peak hours can be a cost-effective option.</p>	<p>On-demand service and smaller vehicles may provide cost-effective alternatives to existing fixed-route service during some low-ridership periods. Partnerships can also provide transportation providers with more flexibility if service demands change.</p>
<p>Pick-up & Delivery Zones</p> <p>Seattle, Washington</p>	<p>Seattle increased its support to local businesses by creating priority pick-up zones so residents can do their shopping remotely and pick up from local businesses.²³</p>	<p>Inclusive Growth, Resilience</p>	<p>Local communities throughout northeastern Illinois implemented new strategies for curb use as a result of COVID-19. Curbside pickup is now offered by many establishments, including restaurants in both Chicago and suburban communities, often with the support of local governments. For example, in Glen Ellyn, officials instituted short-term curbside pick-up parking in the downtown area to support local restaurants and other businesses.²⁴</p>	<p>Cities increased their support to local businesses, restaurants, and retail that had to limit services to satisfy social distancing guidelines by creating priority pick-up zones so residents can do their shopping remotely and pick up from local businesses.</p>	<p>Curb space, formerly primarily providing short-term parking, now has many competing users. Ride-hailing apps need pick-up and drop-off spaces; commercial and on-demand deliveries require loading zones; dockless scooters and bike-share operators want parking spots; and restaurants are embracing parklets for outdoor dining. Communities are adopting dynamic policies to best fit all these demands. CMAP also notes that parking tends to be priced in only the highest activity areas and is otherwise generally free. Highly</p>

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
					congested areas can benefit from setting aside some spaces for pick-ups, drop-offs, and deliveries - particularly during peak periods. ²⁵
<p>PBOT Micromobility Policies</p> <p>Portland, Oregon</p>	<p>The Portland Bureau of Transportation (PBOT) reduced the fees to use Biketown, the city's bike-share system, so residents have an affordable mode of transportation to purchase groceries or prescriptions during the COVID-19 pandemic. PBOT also partnered with Spin—an e-scooter company—to reduce the cost of scooter rentals by 50 percent and add 250 scooters to the city's fleet.²⁶</p>	<p>Inclusive Growth</p>	<p>The Chicago Department of Transportation (CDOT) and Divvy launched a program during the pandemic to give critical healthcare workers free, monthly bikeshare memberships. The goal was to provide an additional, affordable option to help essential workers get to and from work or make other trips during the pandemic. The program was in place from March through September 2020 and provided 15,619 trips.²⁷ Divvy also offered sharply discounted Dollar Divvy rides and half-off annual memberships through the end of April for all Chicago residents.²⁸</p>	<p>During the pandemic, reduced fees for bike and scooter share systems can improve equitable access and provide better bike access to lower-income and under-served communities.</p>	<p>Post-pandemic, maintaining reduced fares for micromobility and expanding the number and locations of devices can support more diverse and equitable access and increased usage.</p>
<p>Boston's Outdoor Dining Program</p> <p>Boston, Massachusetts</p>	<p>To allow more space for restaurants to operate, the City of Boston altered their outdoor dining program so restaurants could establish parklet-style cafes in curb space that was traditionally reserved for parking. In instances where there was significant restaurant density, entire curb lanes and portions of streets were completely closed to motor vehicles.²⁹</p>	<p>Inclusive Growth, Resilience</p>	<p>Communities across the region, including Arlington Heights, Aurora, Orland Park, Chicago, and Woodstock, allowed restaurants to replace parking and travel lanes with outdoor seating.³⁰ In some cases, this has meant closing the street to cars and using it for outdoor restaurants and gatherings. In other areas, dining and car travel coexist side-by-side.</p>	<p>Cities increased their support to restaurants that had to limit indoor seating capacity to satisfy social distancing guidelines by transforming curb and parking spaces for outdoor seating.</p>	<p>Post-pandemic, cities can continue to leverage their rights-of-way and parking lots for non-car uses, including both outdoor dining and other amenities like public seating, bike parking, etc. The innovations adopted during COVID-19 have also required many municipalities to rapidly streamline their permitting processes, much of which could be continued even after COVID-19 subsides.</p>

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
<p>Oakland Slow Streets Initiative</p> <p>Oakland, California</p>	<p>Oakland Department of Transportation (OakDoT) launched a “Slow Streets” initiative designating 74 miles of neighborhood streets to bikes, pedestrians, wheelchair users and local-vehicles-only across the city. Another phase of the program, Slow Streets: Essential Places, was launched in May 2020, which installed intersection improvements at 21 locations to support residents’ safe access to essential services.³¹</p>	<p>Resilience</p>	<p>The City of Chicago implemented a shared street program in May 2020 with a similar intent and has continued it during summer 2021. Shared Streets were selected based on a variety of factors including community input and coordination with local officials, residential streets that had existing pedestrian and bicycle amenities, dense neighborhoods with limited access to green space, and streets with no active CTA routes.³²</p>	<p>The initiative is to make it safer to walk and bicycle throughout the city, with sufficient space for physical distancing. COVID-19 lockdowns have underscored the need for walkable and pedestrian-safe environments.</p>	<p>In the long term, neighborhoods or streets that can reroute through-traffic can repurpose the rights of way and parking spaces to enhance community needs.</p>
<p>Superblock Model Expansion</p> <p>Barcelona, Spain</p>	<p>The superblock scheme, introduced in 2016, groups together nine city blocks and closes them to through-traffic with plant pots and benches, introduces cycle lanes, and replaces many of the parking spaces with seating areas. An ambitious new 10-year plan, unveiled by Barcelona City Hall in November 2020, aims at drastically cutting traffic and expanding green spaces in the central district in response to COVID- 19. The new urban design aims to put at its center groups that have traditionally been excluded, like children, women, and the elderly.³⁴</p>	<p>Inclusive Growth</p>	<p>Other regional municipalities, such as Oak Park,³³ also implemented similar programs in 2020.</p>		<p>These changes can be made permanent over time to provide more space for active transportation.</p>

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
Demand Management					
Miami-Dade Transportation Planning Organization (TPO) Telecommute Study Miami, Florida	The Miami-Dade TPO, in partnership with FDOT District Six and Florida International University, embarked on an effort to understand telecommuting trends and the possibility that telecommuting can be used as a traffic mitigation strategy to “Flatten the congestion curve” post-COVID-19. The findings indicate that the shift to telecommuting in the pandemic lowered peak period traffic and reduced congestion, although people are driving more due to increased single-destination trips, and post-COVID travel patterns remain unclear. ³⁵	Resilience, Prioritized Investment	The Regional Transportation Authority’s COVID-19 Lapsed Rider Survey highlights trends related to telecommuting in the region. Many lapsed riders expected to return to transit as the COVID-19 pandemic abates but transformational trends such as telecommuting may supersede diminishing health concerns. ³⁶	Telecommuting allowed many, although not all, employees to continue their work without going into a physical office. This protected these telecommuters from COVID-19. However, these protections and benefits were not universally available. Telecommuting was much more prevalent among higher-income workers before the pandemic. The expansion of remote work during the pandemic also has favored higher-income workers. The pandemic has also shed light on the need for reliable internet connections and the digital divide.	Telecommute policies can be promoted as part of a long-term overall strategy to reduce congestion and improve mobility in the region. However, it will be important for officials to monitor the accompanying changes, such as residential and employment locations, to ensure that these policies do not worsen overall regional mobility.
Congestion Charge and Ultra Low Emission Zone London, UK	Vehicles that do not meet certain emission standards are subject to a daily charge to reduce congestion and improve air quality when driving through the Ultra Low Emission Zone (ULEZ) in central London. ³⁷	Resilience	N/A.	The congestion charge during COVID-19 was able to help reduce traffic and enable more journeys to be made safely by foot or by bike while keeping the bus network reliable.	A congestion charge and a low emission zone can reduce congestion, improve air quality, and contribute towards greenhouse gas emission reductions.
Île-de-France Smart Services Paris, France	“Île-de-France Smart Services” is a service platform that uses both public and private data to provide innovative digital services. The Smart Work program promotes new ways of working for residents by partnering with businesses to provide flexible and temporary workspaces for	Resilience, Prioritized Investment	Across the CMAP region, several TDM programs and pilot studies are being conducted by local agencies, such as 1) Transportation Management Association of Lake-Cook’s Shuttle Bug program in response to the first/last mile connectivity challenge. ³⁹ 2) Metra Lake County	This program helps to reduce crowding of the transit system while maintaining social distancing protocols.	The Intelligent Travel Management strategies employed in the Île-de-France Region can serve as an example for how other transit systems can manage crowding and begin to adapt to alternate work/commute

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
	residents through an online booking system. It is aimed at providing flexibility for employees and easing pressure on public transport at peak hours. ³⁸		Reverse Commute Pilot: a two-year pilot project funded by a public-private partnership between Metra and Lake County businesses and governments in 2019. ⁴⁰		arrangements post-pandemic
Road Pricing System Singapore	<p>In 1998, Singapore launched the Electronic Road Pricing (ERP) as a tangible solution to Singapore's limited land and worsening traffic gridlock.⁴¹</p> <p>Singapore will switch to a satellite-based ERP system in the middle of 2023. The installation of a new onboard unit to replace the current in-vehicle unit will start in the latter half of 2021. New on-board units will provide information on electric vehicle charging locations and rates, traffic conditions, school zones, and silver zones (for senior citizens).⁴²</p>	Prioritized Investment	The Illinois Tollway currently varies pricing for trucks, with a daytime and an overnight toll cost. However, other Tollway users pay the same cost at all times. ⁴³	Singapore Land Transport Authority (LTA) has been closely monitoring traffic conditions during COVID-19 pandemic and suspended/lowered ERP charges when congestion pricing is not required. ⁴⁴	Road pricing, whether through a dynamic distance-based fee, a cordon fee, or some other structure, can help to manage congestion, improve air quality, and improve the overall mobility system for both drivers and non-car users.
OReGO Vehicle Miles Traveled Tax Oregon	Oregonians pay 36 cents per gallon of fuel (gas tax) to fund road projects. But, as more cars run on electricity or use less gas, the state gets less funding to maintain its roads and bridges. OReGO is a program that preserves roads by creating a funding model that is based on actual use – miles driven – instead of gallons consumed. OReGO program participants receive a credit for fuel taxes they pay. ⁴⁵	Prioritized Investment	There are no active VMT fee pilots or programs in the CMAP region. However, CMAP's ON TO 2050 Comprehensive Regional Plan recommends that the region adopt a Vehicle Miles Traveled (VMT) tax as a long-term replacement for the Motor Fuel Tax (MFT).	N/A.	As CMAP has previously reported, a VMT fee would be a more sustainable method of revenue collection in the future compared to motor fuels taxes.

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
Technology Deployment					
<p>Colorado EV Carshare</p> <p>Denver, Colorado</p>	<p>Denver's Office of Climate Action, Sustainability and Resiliency (CASR) announced the addition of seven electric carshare vehicles into six under-resourced communities in Denver, and subsidized memberships for at least 450 residents of these areas. The City allocated \$300,000 of federal CARES Act funding to support the deployment of seven electric carshare vehicles and the necessary charging infrastructure in under-resourced communities to improve local mobility options for residents.⁴⁶</p>	<p>Inclusive Growth, Resilience, Prioritized Investment</p>	<p>N/A.</p>	<p>Providing easy and affordable access to zero-emission vehicles will mitigate some of the economic and public health impacts of the COVID-19 emergency.</p>	<p>Locating electric car share vehicles where people need them and providing discounted rates advances Denver's equity and climate change goals and can similarly advance CMAP's goals.</p>
<p>LADOT Zero-emission Bus Rollout Plan</p> <p>Los Angeles, California</p>	<p>The City of Los Angeles is committed to reducing GHG emissions. In November 2017, the City Council approved a directive to transition LADOT's fleet to zero-emission battery-electric buses (BEBs) by 2030 if not sooner.⁴⁷</p>	<p>Resilience, Prioritized Investment</p>	<p>The CTA is currently operating six prototype electric buses, with plans to deploy additional ones in the coming year.⁴⁸ In April 2019, the Chicago City Council committed to complete the electrification of CTA's entire bus fleet by 2040.⁴⁹ While Pace does not currently operate any electric buses, its recently released strategic plan includes a commitment to study the feasibility of adding battery electric buses to its fleet.⁵⁰</p>	<p>The pandemic has shed light on the need for cleaner air to protect public health within cities. Electric bus fleets can serve the dual purpose of serving transit-dependent populations and improving public health.</p>	<p>Electrifying bus fleets can advance regional climate change and public health goals.</p>
<p>Parcel Locker Network</p> <p>Singapore</p>	<p>Singapore is planning a national locker network of 1,000 locations open to logistics companies and e-commerce platforms. The goal is to place a locker station around a five minute walk from every block.⁵¹</p>	<p>Inclusive Growth, Prioritized Investment</p>	<p>Some private companies, such as Amazon, have created private networks of package lockers. However, these lockers are typically not available for public use by other companies.⁵²</p>	<p>Demand for transportation and logistics in e-commerce has increased since the start of the pandemic. Lockers for distribution can streamline distribution and</p>	<p>The volume of single-unit trucks (the type of vehicles often used for local deliveries) in October 2020 was 10 percent higher in northeastern Illinois than it was in March 2020. As e-commerce and door delivery trends continue</p>

Case Study	Description	ON TO 2050 Principles Alignment	Similar Efforts in the CMAP Region	Benefits during COVID-19	Long-term Benefits
				facilitate contactless deliveries.	to increase, a vendor-neutral locker system can simplify and reduce the number of deliveries.
<p>Fare Coordination and Integration Study</p> <p>Bay Area, California</p>	<p>The objectives of the Fare Integration Study are 1) Develop goals for the regional fare system that will support an improved user experience, increased transit ridership and build on robust public outreach; 2) identify barriers that impede increased ridership; and 3) develop a detailed implementation plan, including funding plan, and recommended infrastructure improvements.⁵³</p>	<p>Inclusive Growth, Resilience, Prioritized Investment</p>	<p>ON TO 2050 calls for the region to continue to coordinate transfers, payment, and fares between transit services and other transportation modes. Efforts towards full fare integration are underway in several areas. As a universal fare payment system, Ventra has helped the region make progress on fare integration: passes for all three transit agencies may be purchased through the app; riders can receive transfer discounts on trips that include both Pace and CTA; other mobility options (like Divvy or TNCs) can also be integrated. Further work will need to address integrated fare products and interagency agreement to deliver customer discounts and seamless travel. Continued coordination on such efforts is crucial to finding ultimate revenue solutions that can enable riders to use the region's transit network without paying multiple fares to multiple providers.⁵⁴</p>	<p>Decline in ridership post COVID-19 is a concern for several transit operators. An integrated fare system that is intuitive and affordable can help attract more ridership.</p>	<p>An integrated fare system that is intuitive and affordable can help attract more ridership in the long run. It can also provide better access to education, employment, healthcare, and more, especially for those residents of the region that rely on transit because of its low costs relative to those of owning a personal automobile.</p>

4.2 Peer Interview Summaries

Interviews were conducted with selected stakeholder agency representatives to gather insights on the relevant policies that were implemented or considered that are relevant as CMAP considers mobility post-COVID. The case studies selected for interviews were informed by priority interest areas shared by the project steering committee. Discussions were conducted around pros and cons of the selected policies, as well as suggestions from the agencies on suggested improvements if similar policies were to be implemented again. The interviews were conducted in May and June 2021 via video conference calls, with some additional input and resource documents received in e-mails. The following list summarizes the organizations interviewed and the case study names respectively.

From May to June 2021, the Mobility Recovery project team interviewed staff from peer agencies to learn more about key case studies:

- LA Metro, Rapid Equity Assessment Tool
- Metropolitan Transportation Commission (MTC), Bay
- Area Fare Coordination Study
- Oregon Department of Transportation (DOT), OReGO VMT Tax
- LA Metro, Mobility on Demand

Potential questions were prepared and shared with the interviewees prior to each interview, including the following:

- Would you summarize the work you have done for this project?
- What was the biggest motivation for planning and implementing this project?

What are your department's/agency's specific needs and concerns?

- What policies, pilot projects, and/or incentives were most effective in supporting the implementation of this project?
- Were there any safety, technical, or regulatory hurdles that your agency encountered while developing and implementing the project?
- What potential do you see for this project to inform the mobility enhancement? What is your future vision of this project?
- How well received was the project among the public and/or within your agency?
- What are the lessons learned from this project? What would have you done differently if you were to implement a similar policy or project?

A summary of input provided from these interviews on project motivation, coordination and implementation, public and agency acceptance, as well as lessons learned are provided in the subsequent sub-sections.

4.2.1 Project Motivation

Depending on the nature and implementation environment of the case study projects, agencies interviewed noted diverse motivations behind the development of the projects.

Some projects are developed as results of the market assessment by the transit agencies as ways to incentivize transit usage and preserve competitiveness of transit. For example, the MTC Fare Integration Study was initiated as a board decision from a group of transit agencies to have a more customer-focused fare policy in the Bay area in order to encourage transit usage. Similarly, the LA

Project	Agency	Project Description
Rapid Equity Assessment Tool	LA Metro	LA Metro deployed a Rapid Equity Assessment Tool to identify and prioritize equity opportunities for the COVID-19 Task Force projects and proposals when actions must be taken quickly.
Fare Coordination Study	MTC	The objectives of the Fare Integration Study are 1) develop goals for the regional fare system that will support an improved user experience, increased transit ridership and build on robust public outreach, 2) identify barriers that impede increased ridership, and 3) develop a detailed implementation plan, including funding plan, and recommended infrastructure improvements.
OReGO VMT Tax	Oregon DOT	Oregonians pay 36 cents per gallon of fuel (gas tax) to fund road projects. But, as more cars run on electricity or use less gas, the state gets less funding to maintain its roads and bridges. OReGO is a program that preserves roads by creating a funding model that is based on actual use – miles driven – instead of gallons consumed. OReGO program participants receive a credit for fuel tax they pay.
Mobility on Demand	LA Metro	LA Metro's Mobility on Demand service runs point-to-point trips within service zones. Services were adapted to accommodate essential trips for customers who need to access services, such as grocery stores, pharmacies, and medical centers. Metro's partner Via discontinued shared rides and shifted to private rides in support of social distancing during the pandemic.

Table 4 Summary of Interviews

Metro Mobility on Demand project was rolled out with the goal to align TNC service with transit options to provide convenient first/last mile solutions for transit riders, thereby encouraging transit use and preserving the transit market.

Some agencies are motivated to address specific concerns that the agency has become aware of either through internal performance review or external incidents. For example, the OreGO VMT Tax project started with the intention to have a more sustainable revenue source from the gas tax; and the LA Metro Rapid Equity Assessment Tool was mainly developed as a response to the emergency situation during the George Floyd protests, providing a tool for Metro to conduct robust equity analysis to inform decision-making in a more timely manner.

4.2.2 Coordination and Implementation

Some projects have gone through pilot phases to help the parameters of the projects mature before formal implementation, while some others are developed for specific purposes and situations without concrete precedents in place.

For the MTC Fare Integration Study, a task force was formed between MTC and operators to tackle the complexity in the governance structure and to come up with a way to capture the missed opportunity of a universal payment structure. Realizing the lack of consistent guidance, rules, and structure on how the equity lens could be applied during the project decision-making process, LA Metro developed the Rapid Equity Assessment Tool by reviewing the best practices from other

agencies and the exploration of benefit and burden analysis.

LA Metro's Mobility on Demand project started with the FTA MoD Sandbox demonstration grant in 2016; a few concepts were developed and assessed before the project's initial launch in 2019. Service and fare adjustments have been made a few times since the launch as Metro monitors the project's performance and understands the communities' needs better; most recently since COVID, further adjustments have been made to respond to the pandemic (including ending shared rides and adding essential goods delivery services).

The Oregon Department of Transportation established an advisory group to review alternatives to fuel tax two decades ago, and has guided two pilots in 2006 and 2012, which have been instrumental in building out the OreGO VMT Tax program. The State has conducted significant studies, tests, planning, and advisory throughout the development and implementation of the program. The State has yearly plans for the next seven years to keep the program moving forward.

4.2.3 Public and Agency Acceptance

The stakeholders interviewed experienced acceptance and reluctance to different extents from the public or within the agencies during the course of the projects.

The State of Oregon saw public education and acceptance as one of the biggest challenges because of the different messaging needed to resonate with the public and elected leaders. For example, they found that describing the program as a user-based system where everyone pays for roads was preferred by the public (this resonated with public support and

sentiment around the idea that all community members contribute), while comparing the program to how utilities are paid for (where payment is associated with usage) resonated more with elected and appointed officials.

LA Metro's Mobility on Demand project has been very well received by the public with very high ratings from the riders; however, some hesitancy was experienced within the agency, as Metro has other similar initiatives, and it is hard to communicate success and lessons learned while new pilots are starting.

LA Metro's Rapid Equity Assessment Tool has been mostly used internally so far. While it has been generally welcomed within Metro to help give guidance on equity-related topics, some departments have expressed concerns in not knowing how to answer all the questions or not having disaggregated data to work with. Some other departments have seen the tool as helpful but would like to meet specific needs (such as analyzing ethics or conducting audits).

MTC noted that during the Fare Integration Study, they have faced skepticism due to the failure of similar initiatives earlier, which did not succeed because of unrealistic requirements set without sufficient understanding of the revenue structure of different partner agencies. However, the collaboration at the leadership level between different agencies and a well-established process for transit operator engagement helped promote acceptance for the partner agencies.

4.2.4 Lessons Learned

While the nature of the case study projects differs, the stakeholders interviewed provided valuable insights on the key lessons they

learned throughout the planning and implementation phases of each project or program.

Agency-level Collaboration

For projects that require agency-level collaboration, it is important to get all parties on board before finalizing specific aspects of the project, so that all players can fully understand their roles in the process.

Timely and Effective Communications

Timely and frequent communication is an important way to keep projects on track; effective communications should happen not just externally with other agencies and stakeholder, but also internally with other departments within the agency, as well as with community groups and potential passengers at large.

Formal Training

For new initiatives, proper training for internal staff in the early phase of a project will improve efficiency of the team and reduce potential risks related to misuse of new tools. Formal and pre-developed training sessions can not only get staff better prepared during the roll-out, but also will help the project better meet the original goals and further expand.

Proactivity and Flexibility

When unexpected situations occur (such as COVID-19), it is important for a project to be able to adjust accordingly and to pivot to changing demand. Designing a project's framework with proactivity and flexibility will allow the project to be more resilient to changes and stay useful when the original goals and settings have changed.

5. CONCLUSION

The COVID-19 pandemic caused major impacts to public health and welfare and disruptions to people's lives and mobility. The policies, strategies, programs, and projects summarized in this report demonstrate that public agencies within the CMAP region, nationally, and globally have developed flexible and creative solutions to address immediate needs, prepare for potential disruptions in the future, and reimagine their transit systems as regions emerge from the pandemic.

Along with analysis of financial feasibility and needs, ridership forecasting and scenario planning, and real estate trends, the initial lessons from this review of peer agencies and regions will help to inform policy recommendations for CMAP and regional stakeholders as part of this project. Northeastern Illinois today has the opportunity to rethink mobility in a post-COVID era, leveraging these national and global policy insights to address the region's mobility needs. The time to act is now.

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