

INNOVATIVE WAYS TO MOVE PEOPLE

A **Flipbook** that introduces the fundamentals of zero-emission innovative mobility options.



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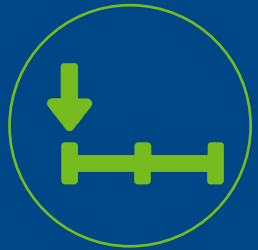
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INTRODUCING THE FLIPBOOK

Background and context to the Flipbook

WHAT IS INNOVATIVE MOBILITY?

Innovative mobility (IM) is a term used to describe transportation modes that leverage emerging, zero-emission technologies to move goods and people. IM can be used to fill critical transportation gaps, reduce vehicle miles traveled, improve air quality, and increase equity in transportation. Transportation accounts for the largest portion of total GHG emissions in the United States (29%), and it continues to grow. Moving away from car dependence to zero-emission transportation mode, is one pathway to lower emissions in the United States.

This flipbook focuses on IM that enhances personal mobility. Learn more about [CALSTART's Innovative Mobility Initiative here](#).

WHO IS THIS FLIPBOOK FOR?

This Flipbook is for transit practitioners at cities and local transit agencies that would like to provide zero-emission innovative mobility transportation options to their communities.

HOW CAN I USE THIS FLIPBOOK?

Step 1: Print It | Print a copy and have it handy to think outside of the box.

Step 2: Flip Through It | Learn about the latest IM options in the market and case studies.

Step 3: Select IM Options | Use the worksheet to identify IM options best suited for your community and their needs.

WHY SHOULD I USE THIS FLIPBOOK?

This Flipbook is a resource designed to provide a holistic overview of zero-emission transportation options available on the market and the levers you are in a position to pull as a transit practitioner working at a local level. In a fast-changing sector, this Flipbook is a starting point to understanding the advantages and disadvantages associated with each mode and how it may support transportation needs in your community and can be used to reach your climate goals.

GLOSSARY OF ACRONYMS

AV	Autonomous Vehicle	MDS	Mobility Data Specification
BRT	Bus Rapid Transit	MOD	Mobility On-Demand
DAC	Disadvantaged Community	MPC	Miles Per Charge
DMP	Data Management Plan	NEV	Neighborhood Electric Vehicles
EB	Electric Bus	SOP	Standard Operating Procedure
EPA	Environmental Protection Agency	OEM	Original Equipment Manufacturer
EV	Electric Vehicle	P2P	Peer to Peer
GBFS	General Bikeshare Feed Specification	PPP	Public-Private Partnerships
GHG	Greenhouse Gas	SOV	Single Occupancy Vehicle
G/PKm	Gram Per Passenger Kilometer	TNC	Transportation Network Companies
IM	Innovative Mobility	TRL	Technology Readiness Level
LSV	Low-Speed Vehicle	ZEB	Zero Emission Bus

CAVEATS

1. This Flipbook was published in 2024 and contains information gathered from a variety of sources published prior to this date.
2. This Flipbook includes information about transportation in the United States. Please refer to the regulations in your local jurisdiction before implementing the IM options outlined in the Flipbook.
3. The vehicles' market price and specifications may deviate from what is included in the Flipbook. Please get quotes from service providers, operators, and OEMs before implementing IM options.
4. The carbon footprint per passenger includes manufacture & disposal, roadway, maintenance, direct & indirect operations.
5. The funding sources presented are subject to change as deadlines pass and new funding opportunities become available.

ACKNOWLEDGEMENTS

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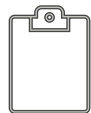
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Please take this 5-minute [survey to provide your feedback](#) and recommendations on the Flipbook.



INNOVATIVE ZERO-EMISSION MODES

Innovative Mobility 101

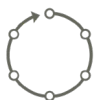
PEDAL BICYCLE

A breakdown per bike in a bikeshare program



How much does it cost?

\$3,000 - \$5,000/ pedal bicycle (includes bike, station equipment, and construction costs).¹



What's the average lifespan?

3 – 5 years for dockless bikes²

10 – 20 years for docked bikes²



How does it perform?

12 mph³, but depends on the terrain, environment, distance, and age, fitness, experience, level of the rider.⁴



What is the carbon footprint per passenger?

8 G/PKm⁵



What are laws, policies, and regulations that support this mode?

[Micromobility Policy Atlas](#)

[State Bike Laws](#)

[The League of American Bicyclists - Traffic Laws](#)



What are some implementation strategies?

- Pilot and iterate the service before full implementation.⁶
- Integrate bikeshare with public transportation and TNCs.⁶
- Organize and budget for community events and incentives such as community rides, learn to ride classes, and prizes.⁷
- Engage in PPP to share capital infrastructure & operational costs, ownership, and risk.⁶
- Establish a DMP that adheres to GBFS and MDS standards to capture trip data, system performance, real-time user information, & feedback.⁶
- Increase the number of protected bike lanes.⁷
- Design for all users with adaptive fleet options, rebalancing the system, and with multilingual materials and app.⁷



PEDAL BICYCLE

A breakdown per bike in a bikeshare program



What are some strategies to increase adoption in DACs?

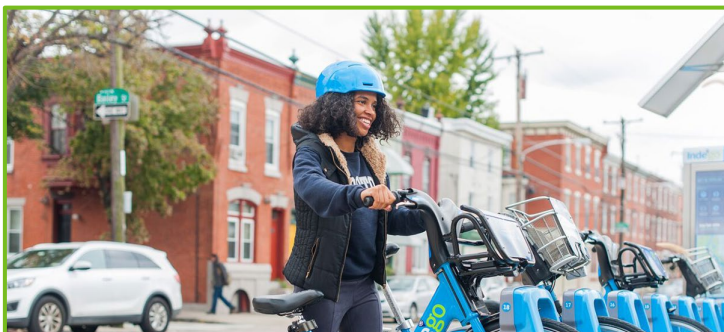
- Ensure the service design includes providing mobility services to equity or priority zones.⁷
- Provide multiple payment options such as credit card and cash payments.⁷
- Offer discounted membership and/or connect transit and bikeshare membership passes.⁷
- Offer multiple booking options through a smart phone app, key fob⁸⁸, website, e-mail, or text.
- Ensure walkability between stations by having the appropriate density level of bikes and/or stations in the area that is a less than 10-minute walk to the nearest station.⁸⁸
- Set a minimum requirement for service providers to have a percent of the fleet in high priority neighborhoods.
- Engage with the community early and often during the planning process. Ensure this process is clear and provides an opportunity for underrepresented residents to participate.⁷
- Hire locally to develop a local workforce or and/or a local ambassador program.⁷





PEDAL BICYCLE

Offerings around the world



Indego | Philadelphia
2015 – ongoing⁸
<https://www.rideindego.com/>
Image Source – (Independence, 2022)



Citi Bike | New York City
2013 – ongoing⁹
<https://citibikenyc.com/>
Image Source - (CitiBikeNYC, n.d.)



Capital Bikeshare | Washington D.C.
2010 – ongoing¹⁰
<https://capitalbikeshare.com/>
Image Source – (capitalbikeshare, n.d.)



Bluebikes | Greater Boston Area
2011 – ongoing¹¹
<https://bluebikes.com/>
Image Source – (bluebikes, n.d.)



ELECTRIC BICYCLE

A breakdown per bike in an e-bikeshare program



How much does it cost?

\$1,500 - \$4,000 / e-bike¹²

\$30,000 - \$50,000 / station for station equipment⁸⁸

\$10,000 - \$50,000 / station for electrification⁸⁸



What's the average lifespan?

2-5 years for the lithium-ion battery¹³

10 – 20 years for docked bikes²



How does it perform?

16¹⁴ – 20¹⁵ mph

25¹⁶ – 60¹⁷ mpc



What is the carbon footprint per passenger?

18 G/PK⁵



What are laws, policies, and regulations that support this mode?

[Electric Bikes Laws by State](#)

[Micromobility Policy Atlas](#)



What are some implementation strategies?

Same as Pedal Bike section plus:

- Ensure reliable connection to the electric grid for charging or that the operation plan includes SOPs for switching batteries.¹⁸
- Understand local regulations about speed caps.¹⁹



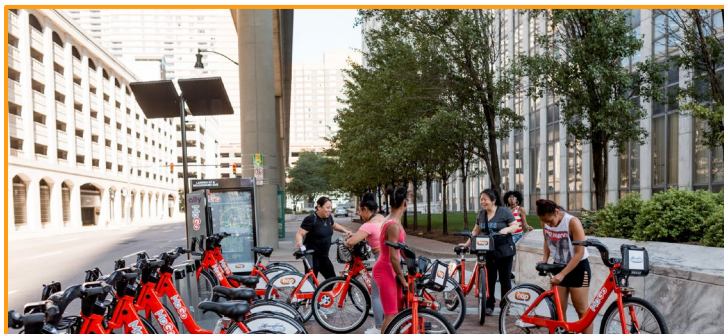
What are some strategies to increase adoption in DACs?

Same as Pedal Bike Section.



ELECTRIC BICYCLE

Offerings around the world



MoGo | Detroit
2017 – ongoing¹⁹

<https://mogodetroit.org/>

Image Source – (Taste the Local Difference, 2021)



Cardinal Bikeshare | Raleigh
2018 - ongoing²⁰

<https://cardinalbikeshare.com/>

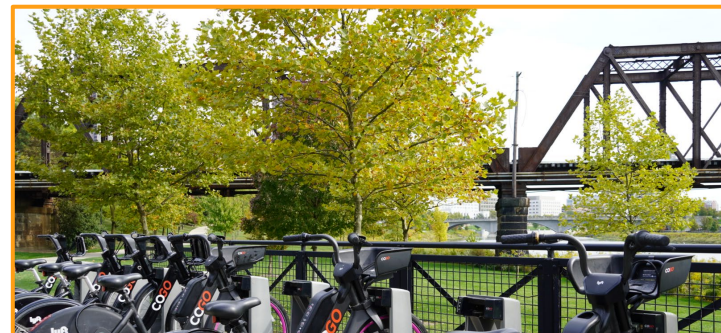
Image Source - (visitRaleigh, n.d.)



Bike Chattanooga | Chattanooga
2012 – ongoing²¹

bikechattanooga.com

Image Source - (bikechattanooga, n.d.)



CoGo | Columbus
July 2013 – ongoing²²

cogobikeshare.com

Image Source - (CoGoBikeShare, 2023)



ELECTRIC MOPED

A breakdown per moped in a moped share program



How much does it cost?

\$2,500⁹⁰ - \$4,000/electric moped²³

\$5,150 for permit / electric moped²⁴



What's the average lifespan?

3 years²⁵



How does it perform?

27 - 31 mph¹⁸

50¹⁸ - 60²³ mpc



What is the carbon footprint per passenger?

21 G/PK⁵



What are laws, policies, and regulations that support this mode?

[Motorcycle Helmet Law](#)



What are some implementation strategies?

- Offer free and mandatory rider instruction course virtually or in person.²³
- Curate a digital training course.
- Provide two helmets for the driver and passengers with the scooter.²⁵
- Require a photo of the driver and rider wearing the helmet uploaded to the app to unlock the ride.²⁶
- Offer discounted helmets for purchase.²⁸
- Include a comprehensive insurance plan upon sign-up.²⁸
- Ensure reliable connection to the electric grid for charging or that the operation plan includes SOPs for swamping batteries.¹⁸
- Design for all users with an adaptive fleet, rebalancing the system, and with multilingual materials and app.⁷



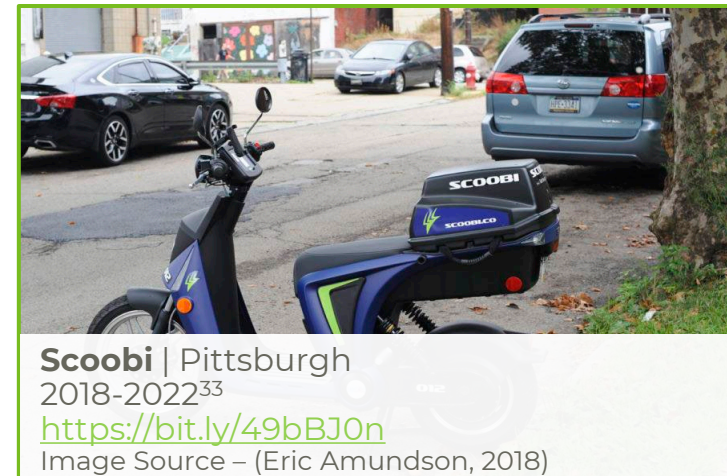
What are some strategies to increase adoption in DACs?

Same as Pedal Bike Section.



ELECTRIC MOPED

Offerings around the world





ELECTRIC SCOOTER

A breakdown per scooter in a scooter share program



How much does it cost?

\$650³⁴ - \$1,500⁸⁸ / e-scooter

\$350 / e-scooter for insurance, city permit, scooter software³⁹



What's the average lifespan?

4 – 5 years for the frame³⁵

3 – 4 years for the battery³⁵



How does it perform?

15-20 mph³⁶

25³⁷ – 50³⁸ mpc



What is the carbon footprint per passenger?

102 G/PKm⁵



What are laws, policies, and regulations that support this mode?

[Electric Scooter Laws By State](#)

[Micromobility Policy Atlas](#)



What are some implementation strategies?

Same as Pedal Bike Section plus:

- Check city ordinances for speed and weight limits and authorized operating area.³⁶



ELECTRIC SCOOTER

A breakdown per scooter in a scooter share program



What are some strategies to increase adoption in DACs?

- Ensure the service design includes providing mobility services to equity or priority zones.⁷
- Provide multiple payment options such as credit card and cash payments.⁷
- Offer discounted membership and/or connect transit and scooter share membership passes.⁷
- Offer multiple booking options through a smart phone app, key fob⁸⁸, website, e-mail, or text.
- Offer low-cost annual membership to low-income residents.
- Partner with community-based organizations (CBOs) to conduct focus groups with BIPOC communities.³⁹
- Hold in-person events in collaboration with CBOs to provide the opportunity to try an e-scooter, sign-up for discounted plans, and educate people on riding and parking practices.³⁹
- Hire locally to develop a local workforce or and/or a local ambassador program.⁷





ELECTRIC SCOOTER

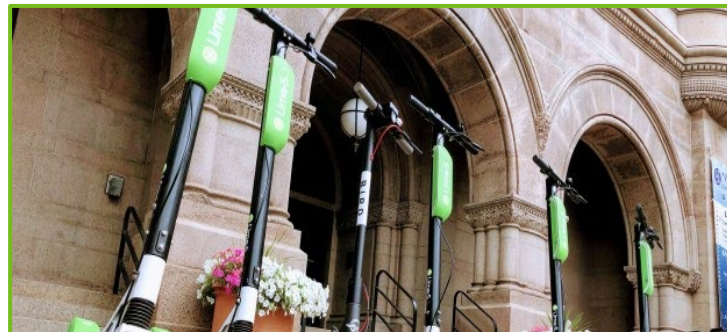
Offerings around the world



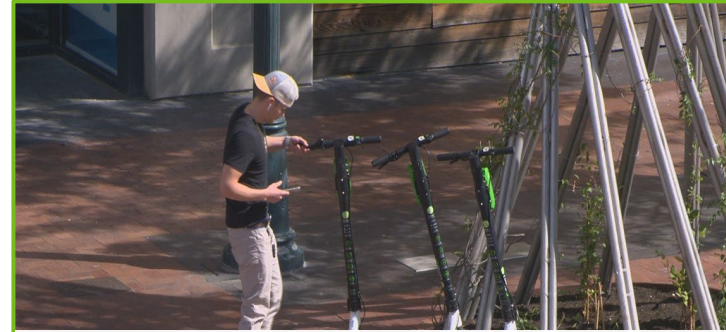
Spin | Tallahassee
 2020 – ongoing⁴⁰
<https://bit.ly/3IU7QqL>
 Image Source - (Tallahassee Government, n.d.)



Veo | Rochester
 2023 – ongoing⁴¹
<https://bit.ly/3TCbuuh>
 Image Source – (Veo, n.d.)



Shared Scooter Program | St. Paul
 2018 – ongoing⁴²
<https://bit.ly/3TyCsmQ>
 Image Source - J. Ojeda-Zapata, Pioneer Press, 2018)



Lime e-scooters | Boise
 2018 – ongoing⁴³
<https://bit.ly/3IWWLoS>
 Image Source - (KTVB, 2023)





ELECTRIC CARSHARE

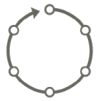
A breakdown per car in a carshare program



How much does it cost?

\$32,500 - \$40,000 / EV

\$14,000 / car per year (includes maintenance, insurance, software, and operations)⁴⁴



What's the average lifespan?

12 - 15 years for the battery, but depends on driving habits, battery size, and climate conditions.⁴⁵

18 – 25 years for the body of the car⁴⁶



How does it perform?

93 mph⁴⁷

110 – 300 mpc⁴⁵



What is the carbon footprint per passenger?

99 G/PK⁵



What are laws, policies, and regulations that support this mode?

[Shared Mobility: Current Practices and Guiding Principles](#)



What are some implementation strategies?

- For a PPP, consistently include all parties throughout contract negotiation⁴⁸
- Clearly define the responsibilities of the mobility operator before entering a formal partnership with a carshare operator.⁴⁹
- Collaborate with stakeholders for site selection and permitting.
- Have frequent reporting on origin and destination of the vehicles.
- Ensure parking stations are near charging stations or have charging stations installed at mobility hubs for easy access to charging the vehicle.⁴⁴
- Weather-proof parking and charging infrastructure.
- Acquiring longer-range EVs for longer trips and to improve the user experience.⁴⁴



ELECTRIC CARSHARE

A breakdown per car in a carshare program



What are some strategies to increase adoption in DACs?

- Organize events that share the benefits of EVs and to alleviate concerns on EV accessibility.⁵⁹
- Increase outreach and engagement efforts to effectively engage with communities by hosting trainings, attending localized events, and one-on-one communications with residents. Incorporate community feedback for site selection and service design.⁵¹
- Provide multiple payment options such as credit card, cash payments, cash exchange, pre-paid debit cards, or payment through a cloud-based wallet that can be loaded through in-person payment.⁵¹
- Offer lower costs for users who have an income below a specific amount.⁵⁹
- Offer multiple booking options through an app, telephone call, text, or a designated carshare station stop or concierge service.
- Identify and work with local people, players, CBOs, and community ambassadors that will help to reach DACs.⁴⁴





ELECTRIC CARSHARE

Offerings around the world





ELECTRIC, SHARED, & AUTONOMOUS VEHICLE

A breakdown per car in an AV carshare program



How much does it cost?

\$150,000 - \$200,000/ electric, shared, & AV⁵⁵



What's the average lifespan?

5+ years⁵⁶



How does it perform?

93⁶⁶ – 124⁵⁷ mph

246⁵⁸ – 259⁵⁹ mpc



What is the carbon footprint per passenger?

99 G/PK⁵



What are laws, policies, and regulations that support this mode?

[Autonomous vehicle laws](#)

[Self-driving vehicles enacted legislation](#)

[Autonomous Vehicle Exemptions to NHTSA's FMVSS](#)



What are some implementation strategies?

- Review AV laws and regulations for your state.⁶⁰
- Ensure AVs comply with federal laws, standards, & engage with NHTSA for approval if needed.⁶⁰
- Engage with infrastructure owners, utilities, first responders, & public safety officials to prepare for AVs.⁶¹
- Develop and implement a workforce and labor plan to support optimal service performance.⁶¹
- Initially, test service in a small service area with trained operators to evaluate performance and iterate the service.^{61 & 62}
- Implement AVs that are universally designed.⁶¹
- Invest in infrastructure upgrades such as lighting, emergency call lines, and video recording to support vulnerable passengers and improve the customer experience.⁶³
- Conduct culturally informed community engagement to demonstrate technology, educate the public, & receive feedback.⁶¹



ELECTRIC, SHARED, & AUTONOMOUS VEHICLE

A breakdown per car in an AV carshare program



What are some strategies to increase adoption in DACs?

- Ensure policies support *shared* and *electric* AV services.⁶³
- Fill transit deserts with this service. ⁶³
- Prioritize first and last mile connections to complement, not compete with, public transit and active transportation modes.⁶³
- Offer multiple booking options through smart phone, telephone call, or text.⁶³
- Implement equitable fees such as free or discounted fares that can be paid cash, transit card, or credit card.⁶³
- Collaborate with communities to co-design, right-size the service, and reduce mobility barriers.⁶³
- Use transit data to create a high-quality service that is reliable, safe, and affordable.⁶³





ELECTRIC, SHARED, & AUTONOMOUS VEHICLE

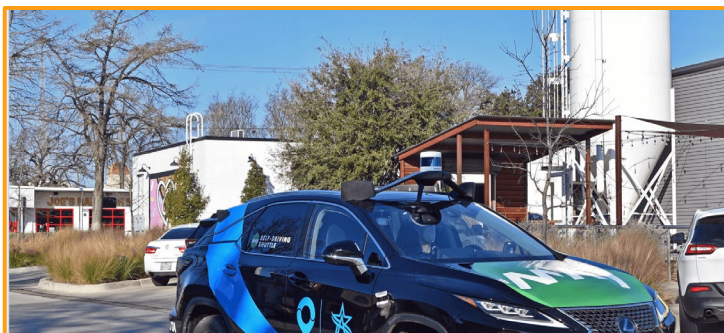
Offerings around the world



Waymo One | Phoenix
2020 – ongoing⁶⁴
<https://waymo.com/waymo-one-phoenix/>
Image Source - (Waymo, n.d.)



Zoox | Las Vegas
2023 – ongoing⁶⁵
<https://zoox.com/journal/las-vegas/>
Image Source - (Zoox, n.d.)



RAPID | Arlington
2021 – ongoing⁶⁶
<https://bit.ly/43xqLBa>
Image Source - (Via, n.d.)



Utah Automated Shuttle Pilot | Utah
2019-2020⁶⁰
<https://bit.ly/3PCfUQQ>
Image Source - (Rick Egan, 2019)



ELECTRIC SHUTTLE SERVICE

A breakdown per electric shuttle for MOD programs



How much does it cost?

\$42,360⁶⁷ - \$110,000 per vehicle⁶⁸

\$130,000 per year (includes insurance & operating costs.)⁴⁴



What's the average lifespan?

7 – 8+ years⁸⁹



How does it perform?

25⁶⁹ - 65⁸⁷ mph

126 – 330⁷⁰ mpc



What is the carbon footprint per passenger?

*75 – 95 G/PK_m



What are laws, policies, and regulations that support this mode?

[LSV Operating Roadways](#)



What are some implementation strategies?

- Integrate the payment system into a single user interface. This will improve travel convenience and mobility accessibility.⁷¹
- Budget for vehicle or station maintenance as an operational expense.⁴⁹
- The hours of operations should be clearly designated with services readily available to residents based on community needs.⁴⁴
- Keep wait times low (less than 25 minutes) by increasing operating hours and increasing the fleet.⁴⁴
- Reduce operating costs by leveraging city-owned lots as garages or charging stations.⁸⁹
- Right-size the fleet to fit the needs of the community. NEVs are ideal for smaller areas and lower-speed roads. Sedans and vans may be more appropriate for faster roads and to meet WAV needs.⁸⁹
- Include on-demand paratransit services option and ADA compliant vehicles for people with disabilities.⁷²





ELECTRIC SHUTTLE SERVICE

A breakdown per electric shuttle for MOD programs



What are some strategies to increase adoption in DACs?

- Increase outreach and engagement efforts to effectively engage with communities by hosting trainings, organizing localized events, and one-on-one communication with users.
- Emphasize personal stories of users and the impact of the service to connect with the communities, demonstrate the importance of using engaging and outreach strategies to build meaningful connections with users/community members.⁴⁴
- Co-design transit services by establishing a community advisory committee of local experts.
- Offer multiple booking options through an app, telephone call, text, flexible street hail, or designated shuttle stops.
- Provide multiple payment options such as credit card, cash payments, or pre-paid debit cards.⁴⁴
- Identify and work with local people, players, CBOs, and community ambassadors that will help to reach specific communities and can act as liaisons between the grantee/voucher recipient and these community groups.⁴⁴
- Hire and train local community members in service area as drivers to increase workforce development opportunities.
- Continue to improve the service by receiving ongoing feedback from riders and the community. This may be done through feedback sessions during meetings, through an online feedback form, or during community listening sessions.⁸⁹





ELECTRIC SHUTTLE SERVICE

Offerings around the world



GOtrenton | Trenton
 2023 – ongoing⁷³
<https://www.gotrenton.org/>
 Image Source - (GO Trenton, n.d.)



BellHop | Bellevue
 2023 – ongoing⁷⁴
<https://bit.ly/3TTDmM6>
 Image Source - (Visit Bellevue, n.d.)

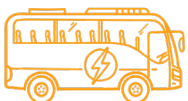


Richmond Moves | Richmond
 2022 – ongoing⁷⁵
<https://bit.ly/3ITGAsv>
 Image Source - (Via, n.d.)



CircuitNR | New Rochelle
 2019 – ongoing⁷⁶
<https://www.newrochelleny.com/circuitnr>
 Image Source - (Circuit, n.d.)





ELECTRIC TRANSIT BUS

A breakdown per 40' bus in an electric bus fleet



How much does it cost?

\$860,000 per bus (includes bus, charger capital, & installation costs).⁷⁷



What's the average lifespan?

12 years⁷⁸



How does it perform?

65 mph⁷⁹

178 - 221 mpc⁸⁰



What is the carbon footprint per passenger?

22 G/PK⁵



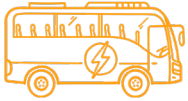
What are laws, policies, and regulations that support this mode?

[Alternative Fuels Data Center: Search Federal and State Laws and Incentives](#)



What are some implementation strategies?

- Engage early and frequently with your electric company.
- Collaborate with your electric company to prepare charging facilities.⁸¹
- Manage charging schedule to optimize the grid and minimize costs.⁸¹
- Develop a fleet charging profile to manage when buses charge, the power level, and charge time.⁸¹
- Engage with the various departments in the transit agency required for a ZEB fleet transition.⁸¹
- Develop a ZEB Rollout Plan that includes information about facilities, charging, resiliency, workforce development, and services in DACs before purchasing vehicles.



ELECTRIC TRANSIT BUS

A breakdown per bus in an electric bus fleet



What are some strategies to increase adoption in DACs?

- Prioritize implementing ZEBs in DACs for early and consistent access to a mode that reduces air pollution.⁸²
- Plan ZEB routes with special consideration of the transportation needs of DACs.⁸²
- Design a local workforce development program to support daily operations such as ZEB drivers, repair, maintenance, and operations staff.⁸²
- When building out charging and refueling infrastructure for ZEB fleets, account for the potential impact of environmental hazards and power disruptions on DACs.⁸²



ELECTRIC TRANSIT BUS

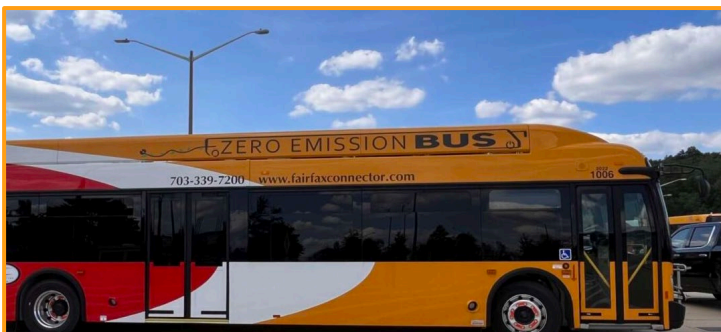
Offerings around the world



DC Circulator | Washington D.C.
2018 – ongoing⁸³
<https://bit.ly/3xjONFs>
Image Source - (DC Circulator, n.d.)



AVTA | Palmdale, Lancaster, Northern LA
2014 – ongoing⁸⁴
<https://bit.ly/3vzuNMQ>
Image Source - (AVTA, n.d.)



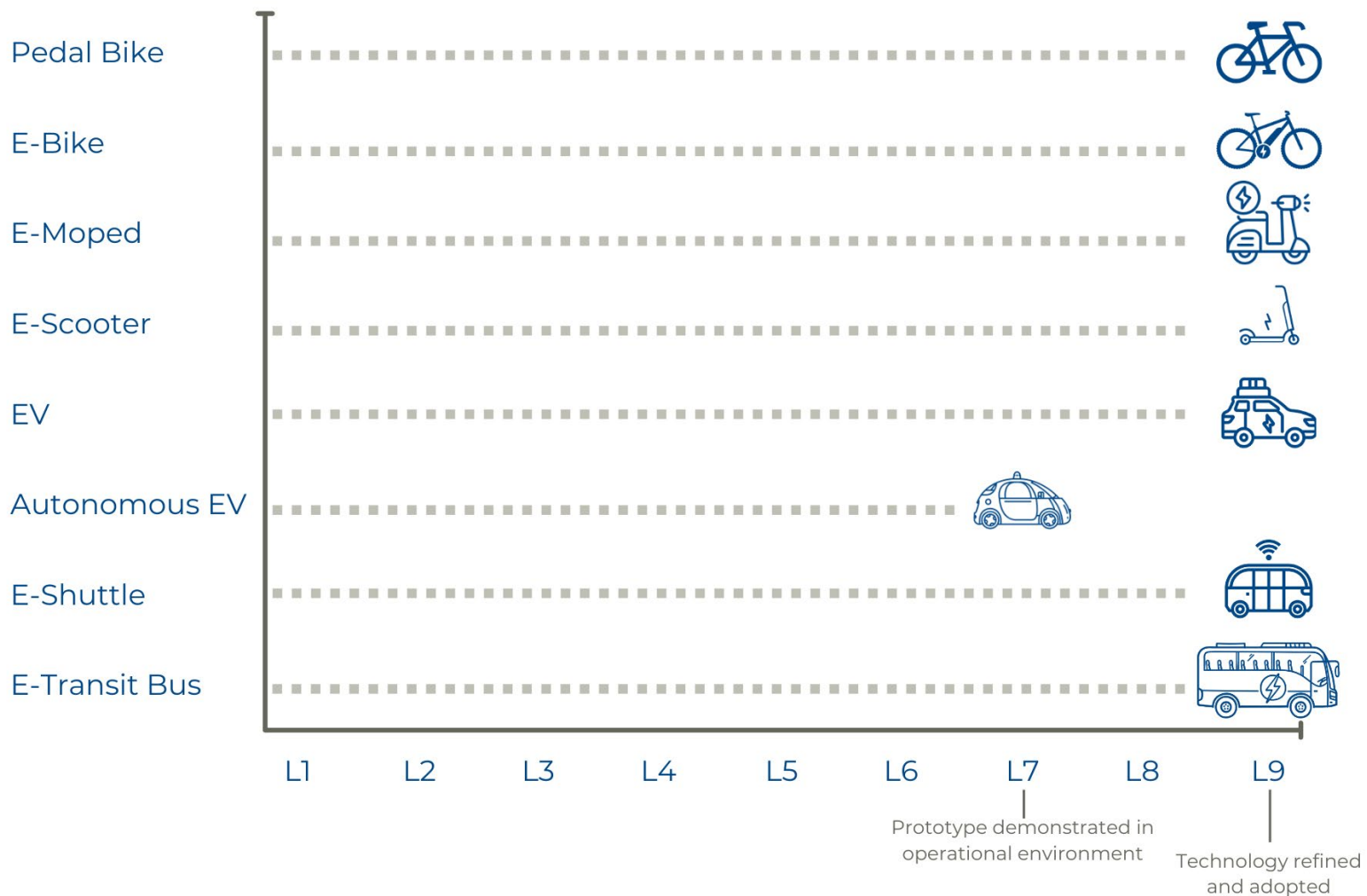
Fairfax Connector | Fairfax, VA
2023 – ongoing⁸⁵
<https://bit.ly/3TsbAiZ>
Image Source - (FCDOT, n.d.)



Metro | St. Louis, MO
2021 – ongoing⁸⁶
<https://bit.ly/49bxLVC>
Image Source - (Metro St. Louis, n.d.)

TECHNOLOGY READINESS LEVELS

Comparing levels of maturity for innovative modes





AVAILABLE FUNDING

Funding available to support IM modes



AVAILABLE FUNDING

Available federal funding opportunities

Formula Grant Programs

1. [Congestion Mitigation and Air Quality Improvement Program \(CMAQ\)](#) – Under the Infrastructure Investment and Jobs Act (IIJA), shared micromobility, including bike sharing and shared scooter systems, can be funded
2. [Surface Transportation Block Grant \(STBG\) Program: Transportation Alternatives \(TA\) Set-aside](#) – Shared micromobility capital expenses are eligible
3. [Urbanized Area Formula Grant \(Section 5307\)](#) – Subsidies for eligible public transit agencies to use for capital equipment (buses, equipment, structures, etc.), planning, job access and reverse commute projects, mobility management, and some limited operating expenses

Competitive Grant Programs

1. Environmental Protection Agency (EPA)
 - [Community Change Grants Program](#), [Clean Heavy Duty Vehicles Program](#), and [Diesel Emissions Reduction Act \(DERA\): National Grants](#), and [Climate Pollution Reduction Grant Program](#)
2. U.S. Department of Transportation (US DOT)
 - [Safe Streets for All \(SS4A\) Program](#), [Rebuilding American Infrastructure with Sustainability and Equity \(RAISE\)](#), [Infrastructure for Rebuilding America \(INFRA\)](#) and [National Infrastructure Project Assistance \(MEGA\)](#) programs
3. Federal Transit Administration (FTA)
 - [Low or No Emission Vehicle Program](#), [Buses and Bus Facilities Program](#), and [Innovative Coordinated Access and Mobility \(ICAM\) Program](#)



AVAILABLE FUNDING

Research and track funding opportunities

Databases, Portals, and Information Centers

1. [Funding Finder](#) for medium-and heavy-duty vehicle and infrastructure programs in CA, MI, NY, OR, WA
2. [U.S. Department of Energy \(DOE\) announcement board](#) for open clean energy infrastructure programs and funding
3. [EPA announcement board](#) for grant and rebate opportunities related to air quality, transportation, climate change, indoor air and other related topics
4. [US DOT discretionary grants dashboard](#) searchable database of federal grant opportunities that can help communities meet their transportation infrastructure needs
5. [US DOT Navigator](#) for federal grant application resources
6. [Alternative Fuels Data Center](#) find federal and state laws and incentives for alternative fuels and vehicles, air quality, fuel efficiency, and other transportation-related topics





LEVERS YOU CAN PULL

As a transit practitioner at a city, state, or federal level, here are levers you can pull to support implementation of IM options in your community.



LEVERS YOU CAN PULL

Bring these IM options to your community by pulling one or more of these levers

1

Align Institutional Goals and Objectives with IM

Incorporate the value of IM and gain leadership endorsement by setting clear objectives for IM in business development plans.

2

Conduct Needs Assessments and Collect Data

Understand the needs of your community and clearly define the problem the transit agency is looking to solve.
Partner with local CBOs to conduct transportation needs assessment.

3

Create an Exciting Operating Environment

Remove barriers and create a welcoming environment for IM companies to operate, innovate, assimilate, and grow with existing transit services.

4

Develop Innovative Policies and Regulations

Champion for new or reform old policies and regulations that spur changes in the built environment that support IM operations, protect & connect infrastructure, & complement transit network.

5

Apply for IM Funding Opportunities

Pursue funding opportunities that can be used to address the problem(s) you have defined and the implementation of IM options in your community.





ACTIVITY

A group activity for the exploration phase.



GROUP ACTIVITY FOR EXPLORATION PHASE

Review these steps and answers these questions in the exploration phase of a mobility program



Prompts to Guide a Team Discussion & Decision-Making

Step 1 – Identify and understand your end user and project ridership levels

- Who will be using this mobility program and why?
- Where are DACs in the service area and what are their mobility goals, frustrations, and needs?
- Has the Community Engagement Plan been designed for a community-led mobility needs assessment?

Step 2 – Select the IM mode and establish mobility goals

- Which IM mode and what system type have you selected (e.g., station-based, dockless, P2P carshare, etc.)?
- Which strategies and methods will your team implement for an equitable mobility service (e.g., payment schemes for unbanked population, infrastructure upgrades in DACs, and pricing on a sliding scale)?
- How will you develop an evaluation criteria to measure performance and inform improvements?

Step 3 - Determine your service area

- How will this service complement existing public transit and active transportation modes?
- Have you considered the topography of this service area?
- How will extreme weather conditions be accounted for?
- Have you met with the utility company to discuss planning and coordination?

Step 4 – Conduct precedent research

- Where has this mode been implemented and what were their challenges, barriers, and success factors?
- Would speaking with Project Managers of these programs be useful?

Step 5 - Determine your business model

- What is your budget breakdown between capital, operating, repair, maintenance, staff, and overhead costs?
- How are you prepared for the factors will impact your revenue (e.g., maintenance, repairs, charging, & miscellaneous costs; marketing; customer support; IT support; and seasonality)?
- Who are potential partners and what role will they play in a PPP (e.g., service provider, operator, software provider, public transportation, utilities company)?



FLIPBOOK FEEDBACK FORM

We would love to get your feedback!



FLIPBOOK FEEDBACK FORM

Click on the link below to share your feedback on the Flipbook

Please take this 5-minute **survey to provide your feedback** on the Flipbook. The Project Team will use this information for future iterations of the Flipbook and to explore opportunities to collaborate.





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As a transit practitioner at a city, state, or federal level, here are levers you can pull to support implementation of IM options in your community.



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