



Clean Transportation and Sustainable Development

PROGRAMS INCLUDED

- 1 Light and Commuter Rail
- 2 Clean Vehicles
- 3 Low Carbon Buses
- 4 Transit-Oriented Development
- 5 Active Mobility
- 6 Ferry Expansion and Electrification
- 7 East-West Rail

DESCRIPTION

Clean Transportation and Sustainable Development investments expand and improve Massachusetts' transit infrastructure and housing stock in order to reduce transportation emissions. This includes light and commuter rail expansion, transit-oriented housing development, and a buildout of the state's electric car, bus, and ferry fleets and their charging infrastructure.

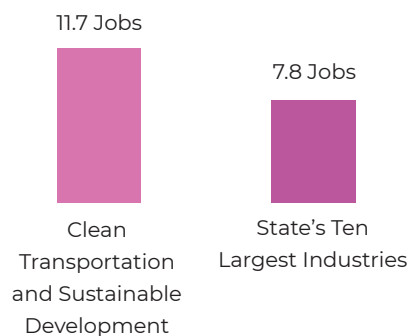
BENEFITS

The initial investment into clean transportation and housing creates a significant number of construction, architecture, and operations jobs to build and run the infrastructure. As the transportation system electrifies and expands public transit, it also provides significant benefits to the public in the form of fuel savings, congestion reduction, cleaner air, safer roads, and healthier lifestyles.

RESULTS

Supports **50 percent more jobs per dollar than the state's ten largest industries**. Additionally, **every dollar invested saves the Commonwealth \$2.61** in fuel savings, reduced traffic, and improved public health.

JOBS PER MILLION INVESTED



INVESTMENT SCALE

High \$\$\$

DEPLOYMENT SPEED

Mixed

BENEFITS PER MILLION INVESTED



Fuel Cost Savings

\$249,600

Avoided gasoline and diesel costs



Physical Activity Health Benefits

\$1,757,100

Saved lives and avoided illnesses from increased walking and cycling



Travel Time Savings

\$388,900

Time saved from lower traffic congestion or faster travel alternatives



Traffic Accidents Avoided

\$105,900

Avoided traffic accident fatalities or injuries



Air Pollution Health Benefits

\$107,700

Saved lives and avoided illnesses from improved air quality

Total
\$2,609,100





Light and Commuter Rail



INVESTMENT SCALE

High \$\$\$

DEPLOYMENT SPEED

Slow

DESCRIPTION

Light and Commuter Rail extends existing light and commuter rail service, builds new rail lines, and connects existing service lines at strategic locations in the state. Light and Commuter Rail projects increase rail system coverage, capacity, and ridership in Massachusetts.

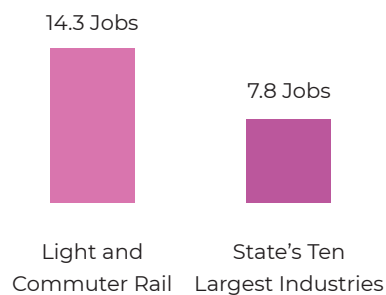
BENEFITS

The initial investment in light rail creates substantial construction and engineering work. As the state's public transportation systems expand and become more efficient, they also provide significant benefits to the public in the form of fuel savings, congestion reduction, cleaner air, safer roads, and healthier lifestyles.

RESULTS

Each dollar invested **supports nearly twice as many jobs as a dollar invested in the state's ten largest industries.** Additionally, every dollar invested in Light and Commuter Rail saves the Commonwealth \$1.10 in fuel savings, travel time savings, and public health benefits.

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Construction Laborers
- 2 Carpenters
- 3 Electricians
- 4 First-Line Construction Supervisors
- 5 General and Operations Managers

BENEFITS PER MILLION INVESTED



Fuel Cost Savings
\$62,800

Gasoline and diesel costs avoided by reducing vehicle reliance



Physical Activity Health Benefits
\$861,300

Saved lives and avoided illnesses from increased walking and cycling



Travel Time Savings
\$132,200

Travel time savings from lower traffic congestion and faster public transit



Traffic Accidents Avoided
\$36,000

Avoided traffic accident fatalities or injuries



Air Pollution Health Benefits
\$12,600

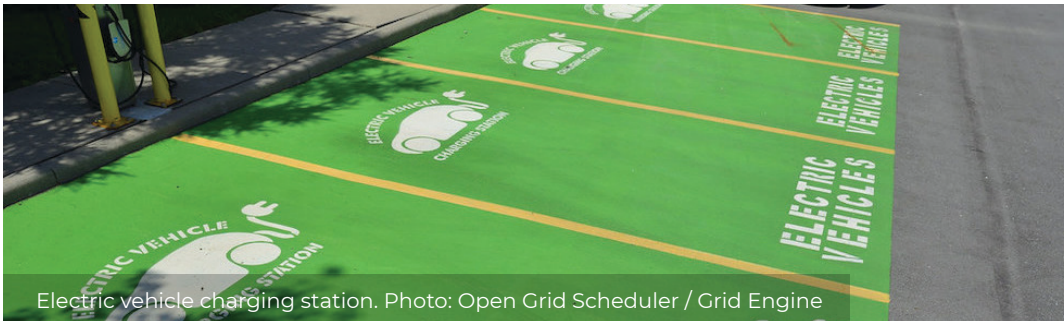
Saved lives and avoided illnesses from improved air quality

Total
\$1,104,800





Clean Vehicles



INVESTMENT SCALE

Moderate \$\$\$

DEPLOYMENT SPEED

Fast

DESCRIPTION

Clean Vehicles provides financial assistance to increase the adoption of zero-emission vehicles (ZEV) and low-emission vehicles (LEV) in the state for low-income individuals. *Clean Vehicles* also installs workplace and public electric vehicle charging stations to expand Massachusetts' public charging network.

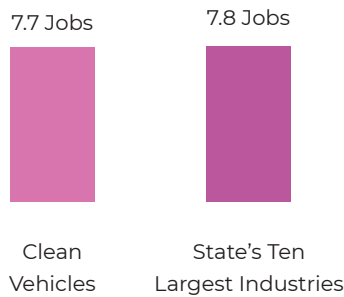
BENEFITS

This program spurs the electric vehicle industry in Massachusetts, creating jobs in EV manufacturing, retail, and maintenance. The program also provides cost savings for households in the form of avoided fuel and maintenance costs associated with internal combustion engines, as well as public health benefits for the community through cleaner air.

RESULTS

Supports 7.7 jobs per million dollars invested, compared to 7.8 jobs per million dollars invested in the state's top ten industries. Adopting zero- and low-emission vehicles results in \$288,000 in fuel savings and improved public health per million dollars invested.

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Individual and Family Services
- 2 Retail Salespersons
- 3 General and Operations Managers
- 4 Auto Technicians and Mechanics
- 5 Office Administrators

BENEFITS PER MILLION INVESTED



Fuel Cost Savings

\$134,500

Gasoline and diesel costs avoided by using hybrid or electric personal vehicles



Air Pollution Health Benefits

\$153,600

Saved lives and avoided illnesses from improved air quality

Total
\$288,000





Low Carbon Buses



INVESTMENT SCALE

Moderate \$\$\$

DEPLOYMENT SPEED

Fast

DESCRIPTION

Low Carbon Buses provides funding for local and state transit agencies to establish new or expanded bus service and to replace or expand their existing fleets with battery-electric buses (BEBs) to increase low- and zero-emission heavy-duty use in public transit. Low Carbon Buses also installs battery electric bus (BEB) charging stations at bus depots.

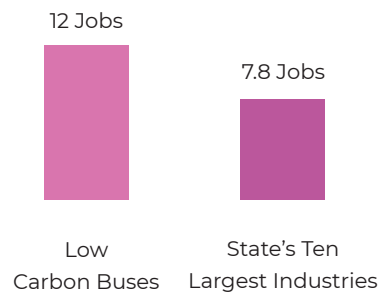
BENEFITS

Expanding and electrifying bus service in the Commonwealth unlocks quality workforce opportunities in the fields of construction, engineering, and public transportation. These investments also create long-term job benefits by providing transportation and fuel cost savings for transit operators and new transit riders. Electrified buses deliver significant public health measures when they replace polluting diesel-powered buses, create convenient healthy alternatives to personal vehicles, and reduce overall traffic.

RESULTS

Each dollar invested **supports 55 percent more jobs than a dollar invested in the state's ten largest industries.** Additionally, every dollar invested in Low Carbon Buses **saves \$5.16 in fuel savings, congestion reduction, and improved public health.**

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Transit and Intercity Vehicle Drivers
- 2 General and Operations Managers
- 3 Bus and Truck Mechanics
- 4 Office Administrators
- 5 Customer Service Representatives

BENEFITS PER MILLION INVESTED



Fuel Cost Savings
\$1,119,500

Gasoline and diesel costs avoided by reducing vehicle reliance



Physical Activity Health Benefits
\$1,521,000

Saved lives and avoided illnesses from increased walking and cycling



Travel Time Savings
\$1,626,800

Travel time savings from lower traffic congestion and improved bus service



Traffic Accidents Avoided
\$443,000

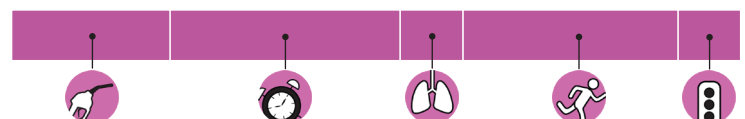
Avoided traffic accident fatalities or injuries



Air Pollution Health Benefits
\$444,500

Saved lives and avoided illnesses from improved air quality

Total
\$5,155,100





Transit-Oriented Development



Broadway Bridge construction. Photo: MassDOT

INVESTMENT SCALE

High \$\$\$

DEPLOYMENT SPEED

Slow

DESCRIPTION

Transit-Oriented Development provides funding for development and land-use projects that increase the supply of affordable housing near jobs, retail centers, transportation options, and other key amenities. This includes transit-oriented development of affordable housing and transportation-related infrastructure, as well as connectivity projects that increase transit access to existing affordable housing.

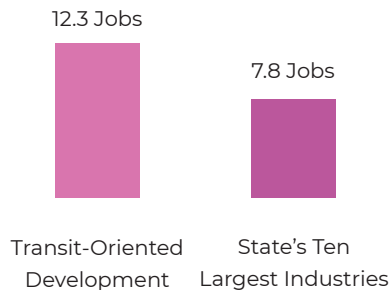
BENEFITS

Affordable housing must be near convenient transportation options in order to allow families to thrive in place. Investing in transit-oriented development creates significant construction and contractor work opportunities, and provides long-term fuel cost savings for the state by increasing the viability of transit rather than personal vehicles, which reduces road pollution, reduces traffic accidents, and encourages healthy lifestyles.

RESULTS

Each dollar invested **supports 60 percent more jobs** than a dollar invested in Massachusetts' ten largest industries. Further decreases personal vehicle use, **creating \$802,000 in cost savings, congestion reduction, and public health benefits** per million dollars invested.

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Construction Laborers
- 2 Carpenters
- 3 Electricians
- 4 First-Line Construction Supervisors
- 5 Plumbers, Pipefitters, Steamfitters

BENEFITS PER MILLION INVESTED



Fuel Cost Savings
\$185,800

Gasoline and diesel costs avoided by reducing vehicle reliance



Air Pollution Health Benefits
\$85,900

Saved lives and avoided illnesses from improved air quality



Travel Time Savings
\$416,700

Travel time savings from lower traffic congestion and improved public transit access



Traffic Accidents Avoided
\$113,500

Avoided traffic accident fatalities or injuries

Total
\$801,900





Active Mobility



Commuter biking into Boston from Somerville. Photo: Livable Streets Alliance

INVESTMENT SCALE

Low \$\$\$

DEPLOYMENT SPEED

Moderate

DESCRIPTION

Active Mobility supports the construction of new or improved pedestrian and bicycle infrastructure, such as sidewalks, complete streets, bike lanes, and shared-use paths.

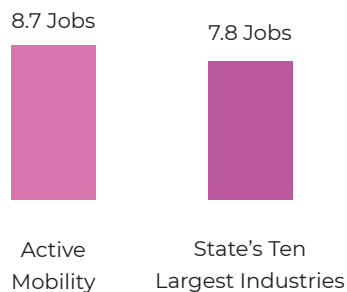
BENEFITS

Makes it safer, easier, and more attractive for residents to walk and bike in Massachusetts. Investing in active mobility infrastructure creates significant construction and contractor work opportunities, and provides long-term fuel cost savings. By increasing the viability of biking and walking rather than personal vehicles, Active Mobility alleviates road congestion, reduces traffic accidents, and encourages healthy lifestyles.

RESULTS

Supports 8.7 jobs per million dollars invested, compared to 7.8 jobs per million dollars invested in the state's ten largest industries. Additionally, **every dollar invested saves the Commonwealth \$7.20 in fuel costs, congestion, and public health costs.**

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Construction Laborers
- 2 Carpenters
- 3 Electricians
- 4 First-Line Construction Supervisors
- 5 Retail Salespersons

BENEFITS PER MILLION INVESTED





Ferry Expansion and Electrification



Boston Harbor Ferry. Photo: Martin Beecroft

INVESTMENT SCALE

Low \$\$\$

DEPLOYMENT SPEED

Moderate to Fast

DESCRIPTION

Ferry Expansion and Electrification expands ferry service in Boston Harbor and between the Cape and Islands and builds out the state's fleet with hybrid-electric ferries. The program also makes upgrades to docks and ferry terminals along these routes.

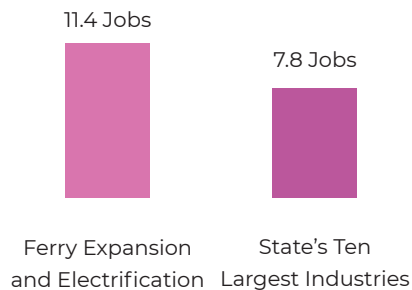
BENEFITS

Expanding and electrifying ferry service unlocks quality workforce opportunities in the fields of construction, carpentry, and metal fabrication. These investments also create long-term job benefits by lowering transportation-related costs for users of the new ferry service and fuel costs for transit operators. Electrified ferries deliver significant public health benefits when they replace polluting diesel-powered ferries, create convenient healthy alternatives to personal vehicles, and reduce overall traffic.

RESULTS

Each dollar invested **supports 50 percent more jobs than a dollar invested in the state's ten largest industries.** Additionally, every dollar invested **saves \$5.92 in fuel, traffic congestion, and public health costs.**

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Construction Laborers
- 2 Electricians
- 3 Carpenters
- 4 First-Line Construction Supervisors
- 5 Plumbers, Pipefitters, Steamfitters

BENEFITS PER MILLION INVESTED





East-West Rail (High Speed Rail)



INVESTMENT SCALE

High \$\$\$

DEPLOYMENT SPEED

Slow

DESCRIPTION

The East-West Rail connects Western Massachusetts communities with central and eastern cities via fast, frequent, and affordable passenger rail service. This rail service would increase transit connectivity across the state, enhance mobility, and reduce highway congestion.

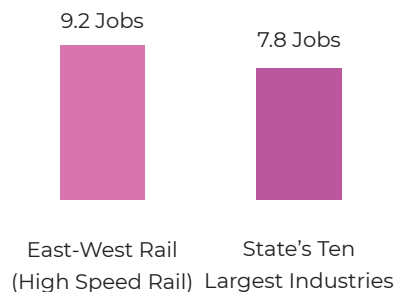
BENEFITS

An efficient, reliable high speed rail service connecting Springfield and Pittsfield with Worcester through to Boston would create substantial social and economic benefits. Investing in this long-anticipated rail service will create workforce opportunities in construction, engineering, and public transportation. The program also provides significant benefits to the public in the form of congestion reduction, cleaner air, safer roads, and healthier lifestyles.

RESULTS

Supports 9.2 jobs per million dollars invested, compared to 7.8 jobs per million dollars invested in the state's ten largest industries. Mode switching from driving to using East-West Rail unlocks \$288,300 in cost savings, traffic reduction, and public health benefits per million dollars invested.

JOBS PER MILLION INVESTED



TOP OCCUPATIONS

- 1 Construction Laborers
- 2 Carpenters
- 3 Electricians
- 4 First-Line Construction Supervisors
- 5 General and Operations Managers

BENEFITS PER MILLION INVESTED

