






A Healthy for a Healthy Region:


A Health Impact Assessment of Proposed MBTA Service Cuts and Fare Increases

Proposed changes to MBTA fares and services would carry significant human and financial costs, resulting in avoidable loss of life and hundreds of millions of dollars per year in lost time, wasted fuel, and preventable hospitalizations and accidents. Fare increases and service cuts to the MBTA system would result in costs that far exceed the budget shortfall the proposed changes seek to address:

PROJECTED 2012 MBTA DEFECIT: \$161 MILLION
YEARLY HEALTH COST: \$272.1 MILLION / \$386.9 MILLION

  COST OF ADDITIONAL TIME IN TRAFFIC
\$137.5 MILLION
\$186.0 MILLION

COST OF ADDITIONAL MORTALITY AND HOSPITALIZATIONS DUE TO AIR POLLUTION* 
\$1.5 MILLION
\$2.1 MILLION

 COST OF ADDITIONAL FUEL BURNED
\$22.7 MILLION
\$31.8 MILLION

PROPOSED FARE INCREASE AND SERVICE REDUCTION SCENARIOS:

SCENARIO ONE
 FARES WOULD INCREASE BY **43%** AND SERVICE REDUCTIONS WOULD AFFECT BETWEEN **38-48 MILLION** TRIPS PER YEAR

SCENARIO TWO
 FARES WOULD INCREASE BY **35%** AND SERVICE REDUCTIONS WOULD AFFECT BETWEEN **53-64 MILLION** TRIPS PER YEAR

  COST OF LIVES LOST DUE TO DECREASED PHYSICAL ACTIVITY
\$74.9 MILLION
\$116.5 MILLION

COST OF ADDITIONAL CAR CRASHES, INCLUDING CRASHES WITH BICYCLES AND PEDESTRIANS 
\$33.6 MILLION
\$48.8 MILLION

 COST OF CARBON EMISSIONS
\$1.9 MILLION
\$1.7 MILLION

*FOR ASTHMA, CHRONIC LUNG DISEASE, HEART ATTACKS, HEART DISEASE, AND MAJOR CARDIOVASCULAR EVENTS

Working under difficult fiscal and political constraints, MBTA has proposed two sets of fare increases and service cuts aimed at closing its projected deficit of \$161 million this year. Under Scenario 1, fares would increase by 43% and service reductions would affect between 34–48 million trips each year. Under Scenario 2, fares would increase by 35% and service reductions would affect between 53–64 million trips each year. The Central Transportation Planning Staff (CTPS) estimated the regional impacts of each proposal on vehicle miles travelled, time spent driving, ridership loss, and air quality.

As transit ridership drops, more residents will commute by car, increasing how long it takes all drivers to get around in the region. As a result, current drivers will spend an **additional 18,500 and 25,100 hours per year driving**, respectively. In addition, Scenario 1 would result in preventable accidents, hospitalizations, and roughly **10 avoidable deaths** per year; Scenario 2 would produce about **15 avoidable deaths** per year. These are conservative estimates that only account for automobile accidents, the loss of routine physical activity performed by transit users to reach bus and T service each day, and the health effects of several well-studied air pollutants.

Daily transit use, estimated to burn roughly 8,000 calories per rider per year, is an important source of physical activity. We estimate that approximately **30,000 people would shift from transit use to driving** under Scenario 1, and **49,000 people** under Scenario 2, resulting in over **70 and 120 new cases of obesity per year**, respectively.

In addition to **direct** health impacts, the proposed changes would reduce access to health care resources. Roughly **550 transit-dependent households would be isolated from basic health care resources** under Scenario 1, and an estimated **2,200 transit-dependent households would lose access** under Scenario 2. Under the proposed service changes, this affected population would have to pay for or borrow a car to reach any basic health care facility.

Carbon dioxide emissions due additional personal automobile use and increased congestion will increase by **over 58,000 metric tons of CO₂ emissions per year** under Scenario 1, which is roughly the equivalent of consuming 134,900 barrels of oil in one year, and **over 52,000 additional metric tons of CO₂ emissions per year** under Scenario 2.

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