# Benefits of Lower Maximum Speeds

In Ashland, Oregon

FINANCIAL IMPLICATIONS OF A REDUCTION IN SPEED LIMITS

#### **Benefits of Slower Speeds**

- Reduced incidence and severity of motor vehicle collisions
  - Improved safety especially for people walking and bicycling
    - Increased mode share of bicycling and walking
    - Reduced vehicle miles of travel
    - Lower road maintenance costs
    - Improved human health
    - Improved social equity
- Reduced consumption of gasoline and expenditures by Ashland households on transportation
- Reduced carbon emissions

### Death, Injury and Property damage savings would be approximately \$764,212 annually

- 1. Fatalities would decrease from 2 every 5 years to 1.1 every 5 years saving \$298,620 annually.
- 2. Severe Class A injury collisions would decrease from 11 to 7.7 per five years saving \$63,493 annually
- 3. Moderate Class B injury collisions would decrease from 95 to 74 per five years saving \$105,640 annually
- 4. Minor injury collisions would decrease from 255 to 204 per five years saving \$232,560 annually
- 5. Property damage savings would be approximately \$63,900 annually.

### Decreased Vehicle Miles of Travel (VMT) savings would be approximately \$305,554 in fuel savings <u>annually</u>.

These savings result from more Ashland residents choosing to walk or bicycle because the streets, at lower speeds, are safer. They make the choice not to drive and save the money they'd otherwise spend on motor vehicle fuels.

### Estimated social cost savings with decreased CO<sub>2</sub> emissions are approximately \$133,758 <u>annually</u>.

- Gallons of fuel saved by a 5% reduction in VMT is 117,974 gallons.
- CO<sub>2</sub> emissions are 20 lbs. per gallon of gasoline. This would be 1,070 metric tons of CO<sub>2</sub> reduction.
- Midpoint estimates of social cost of CO<sub>2</sub> emissions per metric ton are approximately \$125 per metric ton.
- Estimated social benefit from reducing CO<sub>2</sub> emissions is \$133,758

The  $\underline{CO}_2$  reductions that are forecast to occur with lower maximum speeds are equivalent to:

- 836 or 12 percent of Ashland households, who heat water with natural gas, changing out their existing water heater to a heat pump water heater at an approximate cost of \$2,507,958 or,
- 710 or 10 percent of Ashland households, who heat with natural gas, to convert their natural gas furnace to a heat pump at an approximate cost of \$4,260,053

Increased walking and cycling associated with a decrease in vehicular speeds will lead to health benefits such as decreases in obesity and diabetes, and benefits in cardiovascular health.

## Total Cost savings to the Ashland Community are estimated to be \$1,203,524 <u>annually</u>.

- 1. Death, Injury and Property damage savings would be approximately \$764,212 annually
- 2. Decreased Vehicle Miles of Travel (VMT) savings would be approximately \$305,554 in fuel savings annually
- 3. Reduced  $CO_2$  emissions reductions, as measured by social cost savings, are approximately \$133,758 annually.

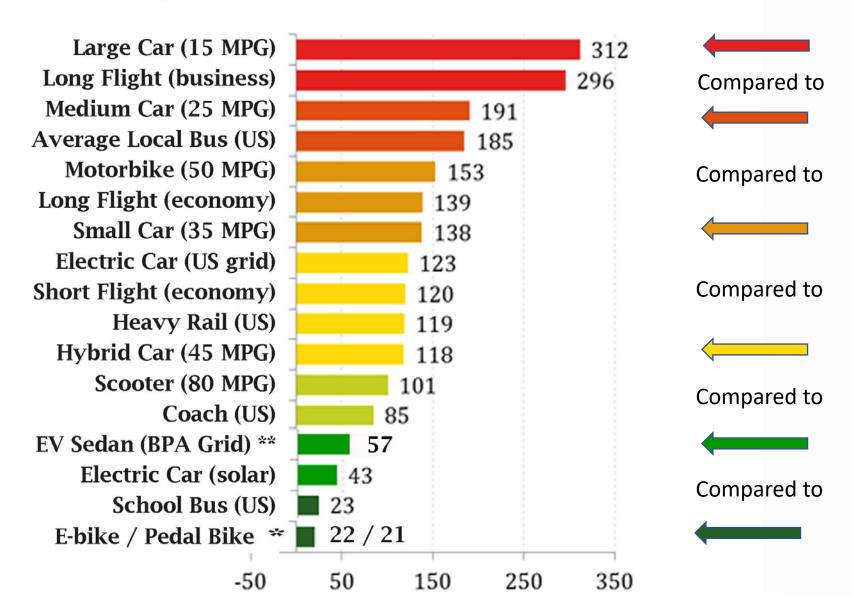
TOTAL \$1,203,524

**Implementation cost** (for new speed limit signs and speed studies) is estimated at \$100,000. A one time expenditure!

Reducing maximum speeds is one part of a greater transportation safety effort that will include traffic calming, education, enforcement, outreach, and infrastructure improvements which, together, will serve to make walking and biking equally safe to that of motor vehicle travel.

#### **Carbon Intensity of Travel**

Measured in grams of CO2 equivalents per passenger kilometer



#### **Climate Policy Committee - MOTION**

#### **CPC Action:**

The Work Group recommends that the CPC approve the following motion:

I move that the CPC recommend that the City Council:

- i. Direct the Public Works Department to pursue reducing maximum speeds within the City to the maximum extent allowed by Oregon Revised Statute 810.180, and
- ii. Request that the Southern Oregon legislative delegation ensure that Ashland is included among the jurisdictions which would be empowered, as Portland currently is, to set speed limits on roadways under the City's jurisdiction pursuant to a reintroduced HB 4103 (2020 legislative number).