

Piedmont Climate Action Plan Task Force
Meeting #4 - Tuesday, June 27th, 2017
Transportation Sector Review

1. Background

Transportation emissions consistently make up nearly half of Piedmont's total GHG emissions. Transforming this sector presents a substantial challenge, but the technology and strategies to eliminate emissions from the transportation sector already exist. Transportation GHG emissions are the result of travel that begins or ends in the City, or is associated with Piedmont residents' activity. This includes personal vehicle travel, commercial transport within the City, and Piedmont residents' use of public transportation, AC Transit and BART. Vehicle emissions are calculated through vehicle miles traveled (VMT) and on-road emissions factors (grams CO₂/mile).

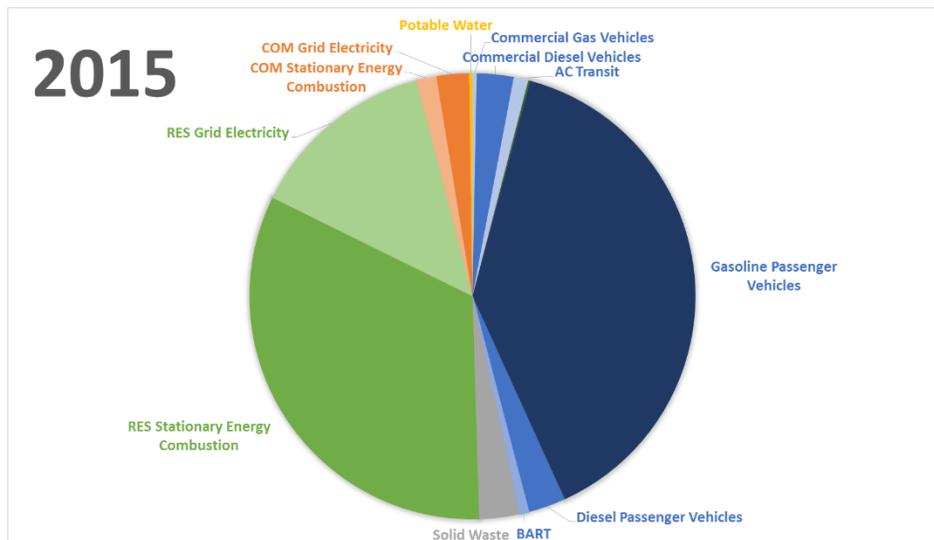


Figure 1. Piedmont's 2015 GHG Emissions by Sector

Piedmont's transportation emissions come predominantly from personal vehicle travel. While VMT has stayed relatively consistent in the past ten years, the fuel efficiency of vehicles has improved, leading to an overall decline in GHG emissions from personal vehicles. This trend is likely to continue, especially as fuel efficiency and adoption of zero-emissions vehicles (ZEVs) lowers the carbon intensity of personal vehicle travel.

2. Transportation Objectives and Measures

Personal vehicle travel, constituted 43% of total community emissions in 2015. These emissions come from miles Piedmont residents drive in gasoline and diesel cars. Therefore, accelerating the adoption of ZEVs in Piedmont is one of the most effective emissions reduction strategies.

Piedmont is a leader in electric vehicle adoption; an estimated 4% of vehicles in Piedmont are electric vehicles. This data comes from the California Clean Vehicle Rebate Project, which shows nine times more rebates were redeemed by Piedmont residents in 2015 than in 2011. The acceleration in ZEV purchasing will continue as more vehicle models enter the market. The City of Piedmont can encourage the adoption of ZEVs through infrastructure and code changes that increase the availability of ZEV charging.

All of Piedmont residents have access to public transit and the City can work to increase the comfort and accessibility of transit options. Switching from personal travel to public transit travel can reduce transit emissions dramatically. Traveling on a full transit bus requires only one third of the emissions of travelling by personal car.

Walking and biking is a zero emissions transit option that is often underutilized. About 33% of Piedmont's residential parcels are located within ¼ mile of the communities' two commercial centers on Grand Avenue and Highland Avenue and adjacent centers in Oakland. Although hilly, Piedmont is a dense, walkable city. To increase the number of trips made by walking and biking, the City can implement its Pedestrian and Bicycle Master Plan. Piedmont's Pedestrian and Bicycle Master Plan identified Piedmont's five main public schools as a key destination for transportation planning. To reduce emissions from school drop-off, the City can work to provide opportunities for safe bike and pedestrian transport to and from school.

To summarize, transportation sector objectives focus on: (1) reducing the carbon intensity of personal vehicles, (2) increasing the use of public transit, and (3) increasing the number of trips made by biking and walking.

3. Enclosures:

- Proposed Transportation Sector Measures, Objectives, and Actions