



Chapter 4 – Transportation and Fuels

MPT transportation and fuel use involves the fleet vehicles employed in park and facility maintenance, driving to and from meetings, and employee commuting.

MPT has more than 100 fleet vehicles and more than 110 pieces of equipment. This includes nine pool vehicles available for employees to check out for business purposes. Metro Parks has hundreds of full-time, part-time and seasonal staff members, and most drive alone to work and to meetings and tasks throughout the day.



4.1 Fleet and equipment efficiency

Current Practices: Currently MPT has both hybrid and fully electric vehicles in its fleet. The fleet replacement plan calls for vehicles to be replaced on an eight-to-10-year schedule, though budget constraints sometimes postpone replacement. Staff members look for options to increase efficiency when choosing vehicles suitable for tasks, which often require heavy-duty trucks and equipment.

MPT hosts public electric vehicle charging stations at several locations including the MPT headquarters building, STAR center and PDZA. These are open to the public and to staff, in addition to charging MPT vehicles.

Of the total amount of fuel used by MPT, Parks and Natural Resources uses the most unleaded gasoline, 71 percent, and diesel, 75 percent, to maintain parks district wide (see Figure 4.1 and 4.2). Northwest Trek uses 93 percent of the propane to operate trams on tours of the 435-acre, free-range area. Overall, fuel use has been fairly consistent for all types of fuel at all facilities. Electric equipment such as gators are used by many staff, depending on the type of area, since they are only appropriate for some locations.

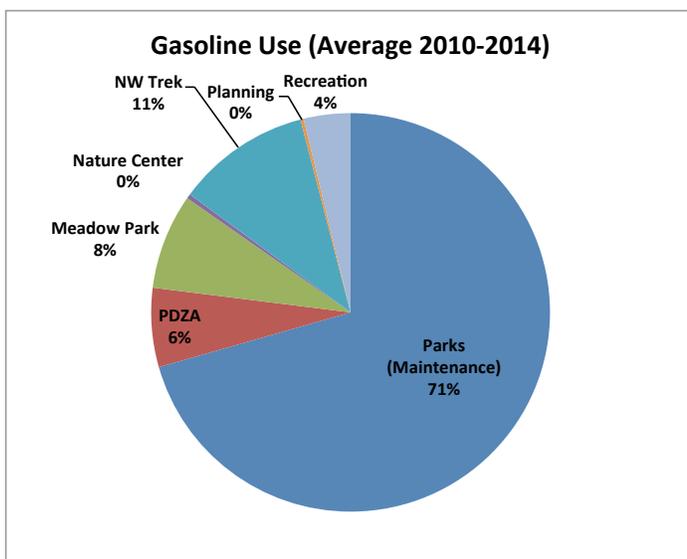


Figure 4.1. Average use of unleaded gasoline from 2010-2014, by department.

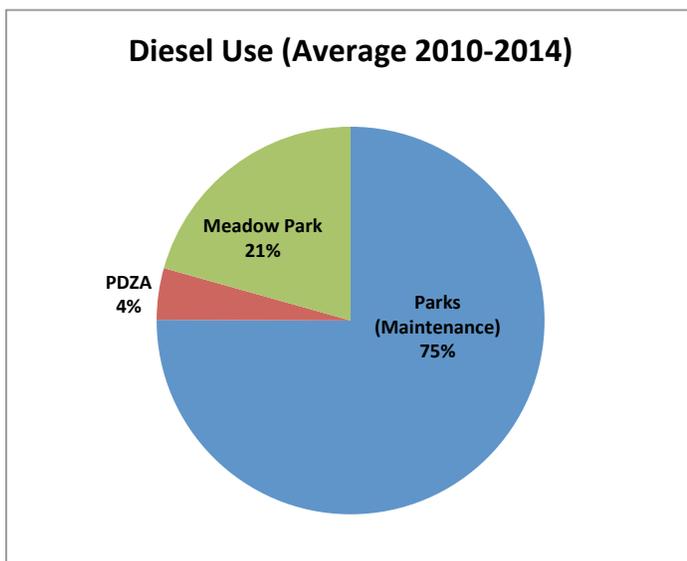


Figure 4.2. Average consumption of diesel fuel from 2010-2014, by department.

Baseline: MPT has 10 hybrid or electric vehicles. That is 11 percent of the fleet. The average fuel efficiency of vehicles in 2015 is 19.2 miles per gallon (mpg).¹⁰

Fuel Type	Baseline (Average 2010-2014, in gallons)
Unleaded Gasoline	47,433
Diesel	14,069
Propane	18,519
Biodiesel	3,991

Figure 4.3. Baselines for fuels.

Targets: Increase percentage of hybrid and electric vehicles in the fleet. Increase overall average fuel efficiency of fleet.

Recommendations: Work with employees who regularly drive fleet vehicles to find ways they can combine and/or reduce their trips. Consider stricter tracking and reporting measures for fleet mileage and use, including using software to track vehicles.¹¹ With the replacement of every vehicle, evaluate options relating to fuel efficiency and purchase hybrid, electric or compressed natural gas (CNG) vehicles when appropriate. Consult with staff members to determine the feasibility of purchasing more efficient and/or electric equipment when its use is feasible without impairing the performance of equipment.

4.2 Pool vehicles and driving to meetings

Current Practices: Metro Parks has several pool vehicles that employees in a few departments can check out for business use. All are hybrid or electric vehicles. There isn't much incentive to use pool vehicles instead of personal vehicles, Getting reimbursed for the mileage is often more convenient than scheduling the use of a pool vehicle. Overall mileage reimbursements are not currently tracked at MPT. Employees keep track of their mileage and turn in a form to their supervisor monthly.

Because MPT employees are based in various locations, staff members drive from one place to another for meetings, to deliver paperwork, or to visit a park or facility. Staff members do not regularly use phone or video conferences. Face-to-face meetings are preferred as part of the culture at MPT.

Baseline: Number of miles driven by pool vehicles and miles reimbursed – to be set in 2016.

Targets: Reduce the number of miles reimbursed while increasing the number of trips in pool vehicles by employees.

By reducing the number of miles driven in personal cars and reimbursed, and instead encouraging employees to use fuel-efficient pool vehicles, MPT has great opportunity for cost savings. The reimbursement rate for use of personal vehicles is currently \$.55 per mile, as compared with \$.03 per mile to fuel an electric Nissan Leaf.

¹⁰ Based on 84 cars, pickup trucks and SUVs. Heavy vehicles, mowers and micro-trucks were not included due to lack of fuel economy information.

¹¹ MPT owns automatic vehicle locating software but it has been difficult to use and is only on a limited number of vehicles.

Recommendations:

- Increase use of pool vehicles
 - » Make reserving them easier. MPT needs to create a culture where taking a pool vehicle is the norm. Every employee that has the option of using pool vehicle needs to be reminded of this opportunity and educated on how to reserve one. If necessary, this could become a districtwide policy rather than an option. Common responses from the Employee Sustainability Survey about barriers to using a pool vehicle were that reserving a pool vehicle was not convenient, it was not something they remembered was an option, they hadn't been offered the option, or there weren't enough pool vehicles available.
 - » Limit mileage reimbursement. This will reduce the carbon footprint from business travel and has the potential to save the District money. Begin by tracking reimbursement in January 2016. After a year, set a goal to reduce number of miles reimbursed. At that point, consider requiring employees to demonstrate why they prefer reimbursement to use of a pool vehicle. If possible, expand the opportunity to those who don't currently have the option of using pool vehicles.
- Limit driving for business whenever possible, especially for meetings. Options include encouraging regular phone or video conference calls, ensuring that employees carpool to meetings, or reminding employees to schedule meetings at times where trips can be combined, such as first thing in the morning or at the end of the day. Another option could be to introduce meeting-free days once weekly. This could not only reduce the amount of trips taken but may also increase productivity by allowing employees to focus on their tasks without the interruption of meetings.

4.3 Commute trip reduction

Current Practices: How employees get to work not something MPT can control, but MPT can do many things to encourage alternative methods of transportation.

According to a survey conducted in summer 2015, approximately 80 percent of MPT employees ride alone in a vehicle to get to work each day. Almost 10 percent say their primary commute method is carpooling, and fewer than 5 percent report biking or walking to work most of the time. Only 1 percent say they primarily use public transit as their main way of commuting (see Figure 4.4). The average commute for an MPT employee is 13 miles, and the range extends from less than 1 mile to more than 50.

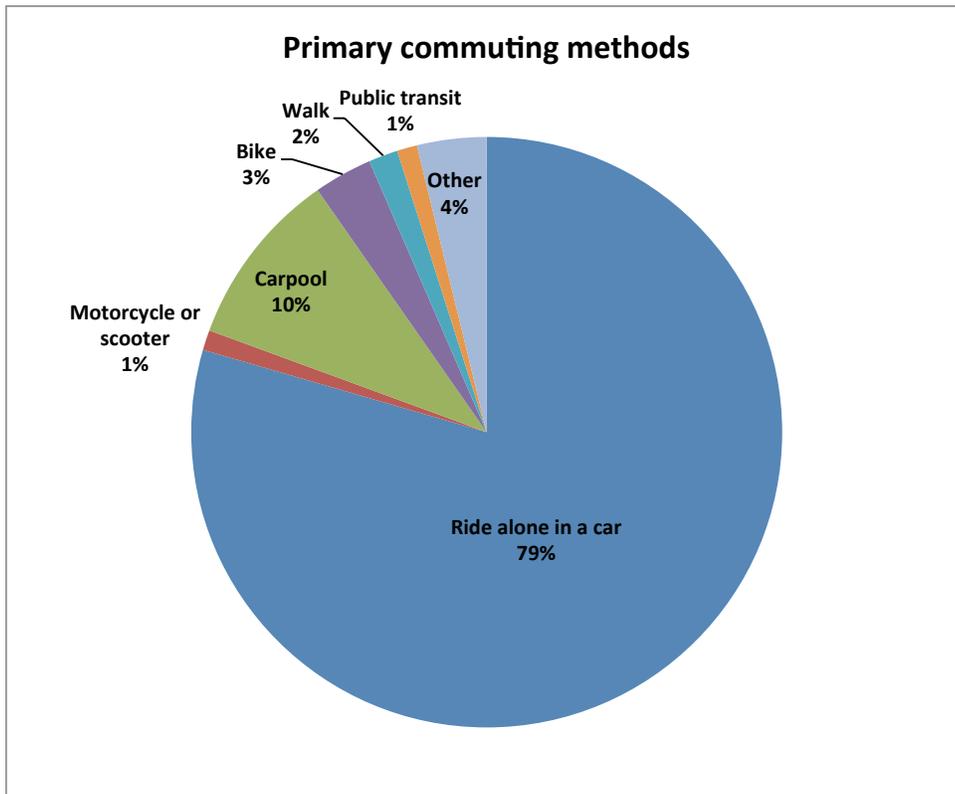


Figure 4.4. From the 2015 MPT commute survey (185 responses).

Thirty percent of respondents said they sometimes take a secondary method to get to work. The most common responses were carpooling, 32 percent; bicycling, 23 percent; driving alone in a car, 19 percent; and using transit or working from home, both 12 percent. Of those who use a secondary commuting method, most reporting using it 10 percent or less of the time (see Figure 4.5).

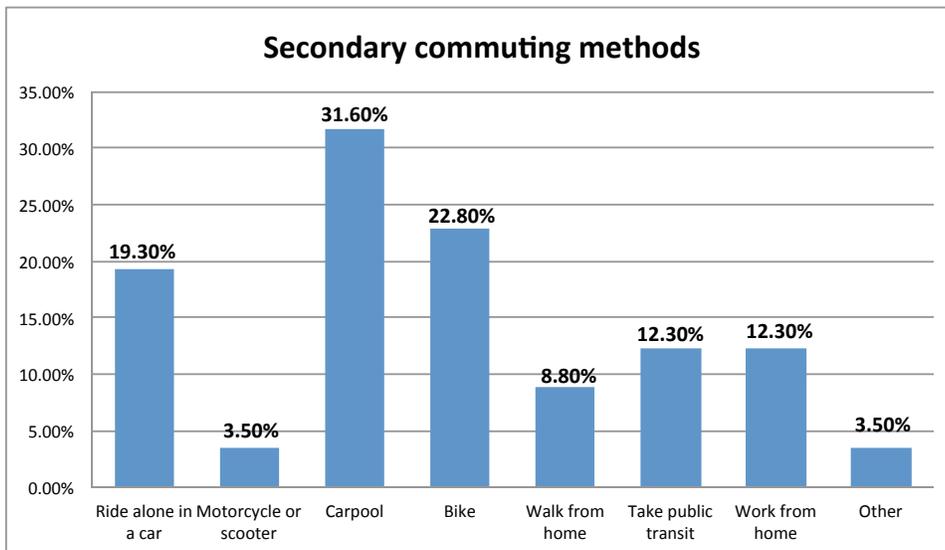


Figure 4.5. From the 2015 MPT commute survey (57 responses). Respondents had the option of choosing more than one.

Currently, an employee acts as MPT’s Employee Transportation Coordinator in addition to her actual position. As part of Pierce Trips, a regional commute-trip reduction program, regular emails go out to all MPT employees to remind them to try using alternative transportation and to log trips in order to win rewards. MPT does not currently offer free or discounted ORCA regional transit passes to employees. All MPT work places offer free and convenient parking, which does not help to discourage employees from driving alone.

Baseline: Seventy-nine percent of MPT staff say their primary way of getting to work is driving alone in car. Of those who sometimes choose a secondary method, 50 percent say they use it regularly or often, excluding those who drive alone. The average number of trips recorded on Pierce Trips over the last four years was 2,286, with an average of 42 employees recording their trips.

Targets: Reduce the carbon footprint from employee commuting by encouraging employees to take alternative methods of transportation to work. Decrease the percentage of MPT staff members who primarily commute alone in a vehicle from 79 percent to 75 percent. Increase the percentage who regularly or often use a secondary method other than driving alone from 50 percent to 60 percent. Increase the annual number of Pierce Trips recorded to 2,500. Boost the number of employees annually using Pierce Trips to 60.

Recommendations: Encourage commute trip reduction by reducing barriers to alternative methods of transportation. When asked what method of commuting they would be willing to try, almost 35 percent responded work from home; more than 30 percent chose carpool; 16 percent, bicycle; and 16 percent, bus or train. Respondents were allowed to choose more than one (See Figure 4.6).

“Which alternative method of commuting are you most likely to try? Choose up to 2.	Percentage
Work from home (for jobs that can be done remotely)	34.60%
Carpool	30.80%
Riding my bike	21.40%
None, under no circumstances am I interested in alternative commuting methods	15.90%
Taking the bus or the train	15.90%
Not applicable: I already use an alternative method of getting to work sometimes or all the time	14.30%
Vanpool	8.20%
Walking	5.50%

Figure 4.6. From the summer 2015 employee commute survey (182 responses).

Barriers vary depending on where employees live, schedules and flexibility, and other demands, such as children or second jobs. The most commonly reported barriers were too far to bike or walk, 40 percent; the inconvenience and time constraints of transit, 36 percent; and desire for the freedom of having their own car, 32 percent. Other common responses were the need to use a personal car for work, 27 percent, and the lack of a bus or train station near home, 24 percent.

When asked what MPT could do to remove barriers, the most popular responses were work from home, 34 percent, and a free or discounted ORCA pass, 26 percent. (See Figure 4.7.)

“Is there something that MPT can do to help remove one or more of these barriers? Please choose up to 3.”	Percentage
Ability to work from home	34.2%
Free or discounted ORCA transit pass	25.8%
It is out of MPT’s control	22.5%
Easier access to a pool vehicle that I could borrow for work purposes	17.5%
A shower to use at work if I walk or bike	15.0%
A guaranteed ride home in case of an emergency and I don’t have my car	15.0%
More information about who I could carpool with	15.0%
A more flexible schedule	14.2%
More information about how to use the transit system	11.7%
None of these things – I’m not interested	7.5%
A safer place to store my bike.	4.2%
More information about how to bike on the streets	4.2%

Figure 4.7. From the summer 2015 employee commute survey (120 responses).

Recommended Actions:

- Working from home: Work with supervisors to find the best way to identify those who can work from home and encourage them to do so by providing remote access to the network and webmail.
- Carpool or vanpool: Make it easier for staff to establish carpools or vanpools. Provide help with vanpool registration and a zip-code map of the homes of interested staff members. Of the survey respondents who identified barriers, 11 percent said they need help finding a carpool partner. A revamped intranet could facilitate that. Promote bicycling: Improve facilities for employees who cycle or want to. This could include secure, covered bike parking, showers, or lockers.
- Transit: Join ORCA’s “Business Choice” program to provide subsidized bus passes. The money loaded on cards never expires and is transferrable if employees leave MPT. Each ORCA card costs \$5.00.
- Consider subsidizing the cost of charging employee-owned electric vehicles at work locations that already have an EV charging station.