

Appendix D Monmouth County Employee GHG Reduction Strategies

Other Methods for Reducing Employee Commute Emissions

The policy options discussed in this section were considered, but ultimately not recommended for implementation at this time due to feasibility issues. The options discussed in this section include parking pricing, flex time, reduced work week and telecommuting. While not considered realistic at this time, these options are used by other governmental agencies and are discussed in this report for information purposes and possible future consideration.

Parking Strategies

In addition to influencing how employees get to work, agencies can also review strategies to influence what employees do when they and their vehicles get to work. Parking strategies can offer additional incentives for employees who would not opt for taking an alternative mode of transportation to work. These types of incentives may not work at all of the office locations and should be reviewed by each office to see if their parking situation is right for each of the parking incentives proposed.

Parking Pricing

Parking pricing requires employee's to pay the full market price for a parking space. The high cost may be an incentive for employees to join a ridesharing program, such as carpooling or vanpooling. It is understood that there is ample public parking in the vicinity of many Monmouth County administrative buildings, so the implementation of such a program would not be practical or beneficial at this time. However, information on this program has been included to inform county officials of options used by others to reduce SOV trips while adding a small amount of money to county revenues.

The implementation of such a program is a powerful way to discourage SOV trips; however, it is most successful when other cheaper parking options are not available within close proximity to the employment location. Such a program is most successful when combined with ridesharing programs and/or transit subsidies. The VTPI estimates that the implementation of such an initiative reduces SOV trips by 10-30 percent.

The implementation of parking pricing encourages workers to explore alternative ways to commute rather than traveling alone. The parking prices – recommended to range from \$50-\$150 per month – must be considered in tandem with other ridesharing options such as shared parking and customized parking management strategies.

Shared parking offers discounted parking for people who share a parking space. Users would generally share the cost and days which they could use the space. Employees sharing a space would carpool, take transit, or telecommute on days when they were not able to park in the space. Some employees who currently drive may elect to take transit or to be picked up by another employee and split the cost of a shared space.

Pricing for shared parking should be a fraction of the cost of driving alone. It is recommended that shared parking spaces be offered at 30 – 50 percent of SOV parking. Parking options such as this should be implemented with parking pricing and customized parking management strategies. Money collected as part of this program could be used to pay for other parking management strategies and/or as part of a discount program for those riding transit.

After a review and feedback from the County, many of the parking options outlined above will not be feasible due to the County's current parking conditions. These conditions include an abundance of existing parking spaces, and additional free public parking throughout the township where the offices are located. In addition, the implementation of a pay for parking system could negatively impact the County's ability to attract and retain employees.

Flexitime and Staggered Work Hours (Hour-Switching)

Hour-switching strategies may be incorporated into an ETR program to reduce congestion at peak commuting times. Flexitime is defined as beginning and ending the work day at a different time each day with the length of the lunch break also varying by day. Staggered work hours are determined by employees and/or managerial staff who determine arrival and departure times. Employees must report at the same time each day and the hours when people work should overlap with other county employees to ensure a certain amount of interaction with and continuity between co-workers and staff.

There are numerous benefits associated with flexitime and staggered hours. Employees can take personal control over their work schedule, which may be particularly beneficial for someone needing child care. It allows employees to adjust their schedules while better meeting their personal needs and allowing them to work during hours when they are most productive. People may experience less stress and higher job satisfaction while also experiencing less traffic congestion and fewer delays and therefore resulting in less GHG emissions. Employer benefits include offering flexibility to workers who need different schedules and therefore an expansion of the job pool to people who fall within this category and an increase the ability to attract new employees. In addition, staggered or flex time may work well for employees who may be required to attend evening or weekend meetings. Flexitime can also serve as a cost-free perk for some employees, reduce tardiness and absences, decrease personnel turnover, and improve productivity.

The Telework Research Network, a telecommuting resource site, found that approximately 72 percent of employees said flexible work hours would cause them to choose one job opportunity over another.¹ Employees at the Seattle Housing Authority appreciate the opportunity for flexitime, compressed workweeks, and telecommuting.² The agency first offered flexitime in 1992 and is now used by more than 70 percent of staff.

¹ <http://www.successmagazine.com/providing-employee-perks-flexitime-and-telecommuting/PARAMS/article/1187/channel/22>

² http://www.commuterchallenge.org/cc/casestudies/cs_sha.html



Reduced Work Week

With the push to reduce energy consumption and greenhouse emissions, many companies and government agencies have been exploring alternative locations and hours for workers. One way by which to reduce company energy costs and vehicular movements, including SOV trips, to work locations is to reduce the work week to four ten hour work days. The reduction in just one day per week of SOV trips would considerably reduce greenhouse gas emissions.

The 2008 National Study of Employers – funded by the Alfred P. Sloan Foundation – found that 41 percent of employers allow employees to compress their work week by working longer hours over fewer days. Retention of employees in general was the number one reason cited for workplace flexibility, followed by helping employees manage work and family life.

The following identifies other positive effects associated with a compressed work week:

- Extended business hours for customers to transact County business;
- Reduced operational costs related to utilities, fuel, security, etc.;
- Reduced commuting time for employees;
- Reduced personal expenses for employees related to transportation, childcare, or other daily work-related expenses;
- Better recruitment and retention results;
- Increased employee morale, job satisfaction, and loyalty resulting from better work/life balance and more time for family;
- Increased productivity and customer service;
- Decreased absenteeism and use of sick leave;
- Decreased labor costs due to turnover; and
- Reduced greenhouse gas emissions and other air pollutants.

Due to the high cost of fuel and energy in 2008, the four-day work week gained popularity among local and state governments. In 2008, the majority of Utah's 17,000 state employees began a mandated four-day work week. After approximately 12 months, the program has been deemed highly successful. Findings show that the compressed work week resulted in a 13 percent reduction in energy use, a reduction in more than 12,000 metric tons per year in greenhouse gas emissions, and as much as \$6 million in gasoline savings. Approximately 82 percent of state employees said they would prefer to keep the new schedule than return to the older one.³ However, a more recent report found that cost savings were notably less than initially reported and some are arguing for the reinstatement of the five-day work week. Although recent audits conducted by Utah's Auditor shows facility energy savings for the Utah State Government was much lower savings than forecasted, the audit did present findings showing an increase in worker productivity and morale, reduced absenteeism as well as increased satisfaction from citizens who can now utilize state offices due to their new extended

³ <http://www.time.com/time/magazine/article/0,9171,1919162,00.html>



hours. Dan Jones & Associates found that 60 percent of Utahans preferred the four-day work week and approximately two-thirds said the state should stick with it.⁴

The reduced or compressed work week has been implemented by different agencies and businesses across the United States and internationally as well. This includes municipalities and agencies such as El Paso, Texas, Melbourne Beach, Florida, Winston-Salem, North Carolina, Effingham County, Georgia, Franklin (VA) City Public Schools and companies such as General Motors (at several plants). Additionally, other states that encourage flexible scheduling include: Colorado; Delaware; New Mexico; Oklahoma; Tennessee; Pennsylvania; Virginia; and Washington. The Wall Street Journal reports that the concept is spreading to California, West Virginia, Minnesota, and Georgia. A spokesperson for the National Association of State Personnel Directors states that a good number of states are encouraging their agencies and managers to offer a four-day work week whenever possible.

It is important to consider both the positives and negatives associated with the implementation of such a program. This program would need to be implemented in conjunction with other ridesharing initiatives for SOV trips to be reduced the other four days of the business week. However, the implementation of such a program regardless of whether employees change their commuting patterns would result in cost savings and reduction in GHG emissions.

Allowing for Telecommuting

Telecommuting is synonymous with working from home or other preferred location closer to the employee's residence. Depending on the nature of the work, employees can work from home for one or more days per week. This can increase productivity while reducing agency energy costs and vehicular trips, including SOV trips. Agency investment in such an initiative is often notably lower than generally anticipated.

The implementation of such an initiative can expand the labor market which would allow an agency to hire staff who live further away from county offices than would be desirable to commute every day. It also increases job opportunities for potential employees with physical limitations. For employees, they would likely benefit from reduced transportation times and costs as well as any frustration or anxiety that may be associated with their existing commute. Additionally, telecommuting can increase employee productivity, cut clothing and lunch expenses, and increase home safety.

To further promote telecommuting, agency officials would need to review the work activities of different departments to identify those for which the implementation of such a program may be feasible. Consider that it may be appropriate for some staff to telecommute while for others, such as front-of-the-house staff who have more interaction with the general public, it may be necessary for them to be in the office each day. Protocols should be established to be followed should such a program be implemented. Policies should be implemented that identify

⁴ <http://www.sltrib.com/sltrib/news/51007617-78/state-noel-offices-week.html.csp>

circumstances when telecommuting is and is not permissible, and appropriate communication levels with supervisors and other co-workers to inform them of one’s physical location, deadlines, and other work related matters.

It may be appropriate to test the program with a small number of employees to work out any kinks prior to launching the program for all participating. Telecommuting requires one to be in a physical location conducive to working and may take a certain amount of time for people to adjust, some longer than others. It would therefore be appropriate to have supervisors monitor staff progress to ensure that work is being completed in a timely fashion. Once employees have adjusted to their new work environment and schedule, the following benefits may be recognized by both employee and employer:

- Stress associated with commutes made between work and family may decrease because travel times will be considerably diminished. The reduction in stress would likely result in an increase in employee productivity.
- Flexible work locations would allow some employees who live further from extended family to travel and work from other locations while still spending time with these family members during non-work hours. This would also increase employee satisfaction and therefore productivity.
- Allowing people to work from off-site locations can help reduce job turn-over. This is beneficial to the employer since it decreases training requirements and a certain learning curve associated with the hiring of new staff.

The reduction in vehicle miles traveled with the implementation of this program would be considerable. The CAPP model assumes that approximately five percent of employees would telecommute on any given work day. Table 17 illustrates how the reduction in vehicular trips, including SOV trips, would reduce the amount of harmful GHG released into the atmosphere. This is based on a 13.2 mile average one-way commute based on findings from the August 2010 Monmouth County employee survey. Assuming that five percent of the 500 to 1,000 Monmouth County employees participating in the telecommuting program work from home or a preferred location on any given work day, these employees as a whole would save between \$22,658 and \$45,317 in gasoline alone. Vehicular miles traveled would be reduced by 158,400 to 316,800 annually.

3-Table 1: Environmental Offsets by Employees Telecommuting

Employees Offered Telecommuting Options	CO₂e (metric tons)	NOx (lbs)	SOx (lbs)	CO (lbs)	VOCs (lbs)	PM₁₀ (lbs)
500	76	24	2	5,436	570	12
750	114	36	2	8,153	855	18
1,000	151	48	3	10,871	1,140	23

Source: Climate and Air Pollution Planning Assistant – CAPP V1.5, ICLEI, Local Governments for Sustainability.