



	Name	Title	Date
Prepared By:	Kelly Maurer	Public Works Director	3/1/24
Reviewed By:	Kaylee Eyth	Public Works Special Projects Coordinator	3/15/24
Reviewed By:	Dan Santoro	Township Manager	4/23/24
Approved By:	Cranberry Township Board of Supervisors		5/2/24

Table of Contents

1. PURPOSE	2
2. STREETS AFFECTED	2
3. TRAFFIC OBJECTIVES.....	2
4. PROJECT REVIEW PROCEDURE.....	2
5. PERMANENT RADAR SPEED SIGN PLAN DEVELOPMENT FOR SELECTED TOP-RANKING PROJECTS	6
6. FUNDING	7
7. CONSTRUCTION.....	7
8. POST CONSTRUCTION EVALUATION	7



1. Purpose

Cranberry Township strengthens and protects its neighborhoods by improving the quality of life in residential areas. Traffic conditions on residential streets can greatly affect neighborhood livability. Specifically, speeding in neighborhoods can create safety concerns and conflicts between vehicles and pedestrians. The purpose of this process is to help minimize the potentially negative impacts of motorists travelling at high speeds through residential areas with pedestrian activity.

Citizen participation is an important part of all traffic calming projects. Under this process, the Cranberry Township Engineering Department and Public Works Traffic Division, will work with neighborhood HOA's to identify traffic speeding concerns in their neighborhoods and where installation of a Permanent Radar Speed Sign solution may be warranted and desired.

2. Streets Affected

All Township owned roads in Cranberry Township with or without HOA representation are included.

3. Traffic Objectives

Cranberry Township is committed to:

- a. Building and maintaining an interconnected, multi-modal transportation system.
- b. Improving the livability and safety of Cranberry Township's neighborhoods by mitigating the impacts of traffic and promoting safe conditions for residents, motorists, bicyclists, and pedestrians.
- c. Installing Permanent Radar Speed Signs on streets where their implementation will safely and effectively reduce traffic speeds or improve the safety of movements of pedestrians and bicyclists.
- d. Implementing Permanent Radar Speed Signs as a traffic calming measure when warranted and compatible with the character of the affected neighborhoods to improve public safety.
- e. Encouraging citizen involvement with planning for neighborhood traffic management.
- f. Influencing driver behavior through education.
- g. To achieve these objectives, the following procedures will be followed when considering requests for purchase and implementation of Permanent Radar Speed Signs on Cranberry Township owned roadway.

4. Project Review Procedure

- a. Request
 - i. A request for the installation of radar speed signs on a specific street or streets may be made several ways:



1. A homeowner's association, commercial property association, or a group of citizens where most homeowners on the affected street support the request (if a homeowner's association exists, the request must be submitted by the Association).
2. A recommendation to study is made by the Board of Supervisors or Planning Advisory Commission during the regular business of these public bodies.
3. The Cranberry Township Police Department or other Township Department recommends the addition of a street to the candidate project list based on related projects, enforcement efforts and/or citizen concerns; or
4. During the Township land development process, Township staff, the Planning Advisory Commission, or the Board of Supervisors may request or require that the land development Applicant include PERMANENT RADAR SPEED SIGN in the proposed land development project. The PERMANENT RADAR SPEED SIGN proposal may be reviewed using the criteria included herein.
 - ii. All requests must be made in writing. To the extent possible, each request should identify the street(s) or area of concern and describe the nature of the speeding impacts.
 - iii. All requests must be submitted with a letter of support from the applicable homeowner's association, commercial property association, or most homeowners on the street for which the project is proposed.

b. Preliminary Evaluation of All Projects

- i. When evaluating a PERMANENT RADAR SPEED SIGN request, the Township will consider the availability of Cranberry Township's resources and the following priority factors:
 1. Streets with heavy pedestrians and/or bicycle use.
 2. Streets that provide access to a public school or represent significant walk-to-school or bicycle-to-school routes.
 3. Streets that are heavily traveled by pedestrian and bicycle populations seeking access to a public park, senior center, public/government building, commercial area, or private facility (e.g., school, healthcare facility).
 4. Status of each street as emergency vehicle, bus, truck, or



bicycle route.

ii. The Township Public Works Traffic Division will visually inspect the street, review the Township ordinances to determine the established speed limit, and collect traffic volume and speed data. The data collection may include using temporary radar speed signs over a period of days. The following data may be collected:

1. Speed data to determine the 85th percentile speed as well as the median speed and average speed. The 85th percentile speed is the speed of 85% of the vehicles.
2. The volume of traffic for a typical day.
3. The speed and volume data will typically be in a form that enables specific times of day to be evaluated to determine peak hour traffic volume and to identify any specific times of day when traffic speeds are higher.
4. Determination if the street is a main emergency response route.
5. Vehicle classification data (cars, trucks, buses, motorcycles, etc.) may be collected if deemed necessary.
6. An evaluation of the roadway geometry to determine the location of sidewalks, to identify sight distance problems, and to identify any other conditions of concern for traffic safety.
7. A review of crash data for the prior three years to determine the total number of collisions and to identify any significant crash trends (i.e. type of collisions, locations, time of day, days of the week).

iii. Threshold Criteria

1. The primary purpose of the preliminary evaluation is to determine whether the speeding or traffic volume problem is significant enough to warrant a Permanent Radar Speed Sign. For streets to be considered the measured 85th percentile speed must be more than 10 mph higher than the posted speed limit OR the total traffic volume on the street must be greater than 1000 vehicles per day. If a street does not meet one of these criteria, the Township of Cranberry recognizes that a traffic impact may still exist on the street. However, relative to other streets in the



Township, the extent of the impact may not warrant the use of the Township's resources to be resolved by this program.

2. At times, the Township may receive more requests than can be adequately evaluated immediately. When this happens, using knowledge of the Township's streets and neighborhoods, and engineering judgment, the Township may choose to first study the streets which are likely to exhibit the most serious traffic concerns.

iv. Project Ranking Criteria

1. Each project submission that meets a threshold criterion will be evaluated based on the following criteria. Upon review, the Township may determine that no further action may be required under this policy.
2. Where the identified issue(s) can be readily and consistently addressed by the expanded enforcement of existing traffic and parking regulations and/or low-cost signage improvements, those may be implemented by the Township utilizing means outside the scope of this policy.

Criteria	Maximum Points	Comments
Volume	5	Point for each 200 vehicles per day over 1,000
Speeding	5	Points for each % of vehicles over 10 miles more than the posted speed limit
Sidewalks	5	Points if sidewalk on either side of street
Pedestrian Activity	5	Points given for each school, park, or other high pedestrian activity node
Crashes	5	Points for each crash on the street within the prior 12 months
School Crossing	5	Points if there is an official school crossing
Sidewalks	10	Points if there are no sidewalks on either side of the street
Subtotal		
Alternative Funding	10	Points if installation of traffic calming device is funded by sources other than Township funds. Funds need to be verified at the time of application. Projects that can be constructed

 <p>CRANBERRY • TOWNSHIP •</p>	<p>Cranberry Township Permanent Radar Speed Sign Installation Policy Public Works Department</p>	<p>Revision: DRAFT Effective Date: 05/02/24 Page 6 of 7</p>
--	---	--

		<p>with 50% of alternative funding will receive 10 points.</p>
Total		

3. To qualify for consideration under this policy, a project must receive at least one point in each of the volume and speeding categories.
 - c. Analysis Summary
 - d. Determination of Need
 - i. Based on the findings of the detailed analysis, the Township will determine if the conditions found warrant a permanent radar speed sign. There may be areas in which an increased police enforcement presence, improved signage and/or driver education will be sufficient to address the problems identified by neighborhood residents and confirmed to exist by detailed analysis. Township department staff will work with neighborhood representatives where a PERMANENT RADAR SPEED SIGN is determined not to be warranted to address their concerns through other means and no further review under this policy will be required. If PERMANENT RADAR SPEED SIGNS are deemed warranted, necessary and feasible, a PERMANENT RADAR SPEED SIGN Plan development process may be established for the top-ranking projects.

5. Permanent Radar Speed Sign Plan Development for Selected Top-Ranking Projects

- a. Permanent Radar Speed Signs
 - i. Cranberry Township utilizes radar speed signs that use radar technology to provide feedback to drivers about the speed they are travelling. The Township places these signs according to the appropriate policies and procedures. For streets to be considered for prioritization the measured 85th percentile speed must be more than 10 mph higher than the posted speed limit or when the 85th percentile speed is over 5 mph over the posted speed limit and the total traffic volume on the street is greater than 1000 vehicles per day.
- b. Location
 - i. The Township staff will work with the HOA to determine the design, location, and spacing of all traffic calming measures (devices, signs, markings). All traffic calming devices will be planned and designed in conformance with sound engineering practices and standards, including applicable PennDOT publications, and in consultation with other communities and/or consultants having



experience with their implementation and maintenance. All Permanent Radar Speed Signs are reviewed and permitted through PennDOT.

6. Funding

If installation of traffic calming device is funded in whole by sources other than Township funds, warranted Permanent Radar Speed Sign projects may proceed upon Township approval. Funds need to be verified at the time of application.

If installation of traffic calming measure is funded in part or in whole by the Township, the project may proceed upon availability of funds.

A Permanent Radar Speed Sign Agreement will be prepared between the Township and funding agency (HOA) detailing the proportion of payment and cost for each party. The anticipated arrangement for PERMANENT RADAR SPEED SIGN installation is a contribution of at least 50% paid by funds other than the Township (HOA, etc.).

Preventative Maintenance (PM) inspections and reactive maintenance will be completed by Cranberry Township per the Permanent Radar Speed Sign Agreement. Estimated life for Radar Speed Signs is 10 years and initial purchase and installation cost is estimated to be \$5,000 per sign (estimated \$2,500 contribution per sign by the HOA). Any future replacement will follow this same Process. A sample Permanent Radar Speed Sign Agreement is included as an Attachment.

7. Construction

Once a project is approved under this policy, the Public Works Department Traffic Division will complete the design and permitting. The final plans will be reviewed by the Public Safety, Engineering and Planning Departments. The Permanent Radar Speed Sign will be ordered and installed by Township traffic crews. The analysis, design and construction phases are estimated to take 3-6 months. Neighborhood residents will be responsible for installation and maintenance of any landscaping.

8. Post Construction Evaluation

PennDOT requires the Township to perform an evaluation of traffic speed data every six months to evaluate the effectiveness of a Permanent Radar Speed Sign.