PROPOSED HIGH STREET TRAFFIC CALMING PLAN

Pottstown Borough has conducted two studies in recent years to revitalize its downtown area and make its main street, High Street, safer and more attractive for pedestrians.

Both the Pottstown Downtown Comprehensive Plan of 1994 and the Community and Economic Development Plan of 2000 recommended narrowing High Street to one moving lane of traffic in each direction to increase the ease of browsing and cross shopping in downtown Pottstown, including experimenting with on-street parking patterns.

These goals fit well with PennDOT goals, as expressed in its January 2001 Pennsylvania s Traffic Calming Handbook and its 1996 Statewide Bicycle & Pedestrian Master Plan.

The traffic calming handbook encourages local municipalities to use street design to slow down traffic speeds in order that neighborhoods throughout Pennsylvania will be able to enjoy safer streets that are shared by motorists, pedestrians, and bicyclists alike.

According to the PennDOT manual, Traffic Calming Measures may be appropriate on stateowned roads such as

1. Arterial roads within downtown districts or commercial areas (with posted speeds of 40 mph or less).

In addition, PennDOT's Statewide Bicycle & Pedestrian Master Plan of May 1996 has adopted the twin goals of:

- 1. Doubling the percentage of trips made by foot or bicycle
- 2. Reducing the number of injuries and fatalities suffered by bicycles and pedestrians by 10 percent.

During the last year, the Pottstown Planning Commission and the Montgomery County Planning Commission reviewed numerous street configurations for High Street with the following goals in mind:

- 1. Narrow High Street to make it more attractive to pedestrians
- 2. Slow down traffic
- 3. Make it easier for pedestrians to cross the street
- 4. Promote bicycle use and safety
- 5. Reduce the potential for accidents
- 6. Increase on-street parking

The planning commissions reviewed more than a score of possible lane configurations based on actual practices throughout the United States and Europe. At a meeting on November 11, 2000, the planning commissions shared photographs of numerous lane configurations with District 6 assistant traffic engineer Dutch Eichorn and discussed possible scenarios for High Street.

As a result of those meetings, the Pottstown Planning Commission adopted Pottstown s High Street angle parking plan. The plan was presented in detail to the Pottstown Downtown Improvement District Authority, representing downtown merchants, and at a public hearing to which all affected High Street property owners received a written invitation. The proposed plan has received the written endorsement of both the Pottstown Downtown Improvement District Authority and the Tri-County Chamber of Commerce.

The plan, was adopted by Pottstown Council on April 9, 2001. It would include the area of High Street from Manatawny Street to Madison Street.

CURRENT CONFIGURATION OF HIGH STREET IS :

Two 8 foot parallel parking lanes

Two 10.5 foot traffic lanes in each direction

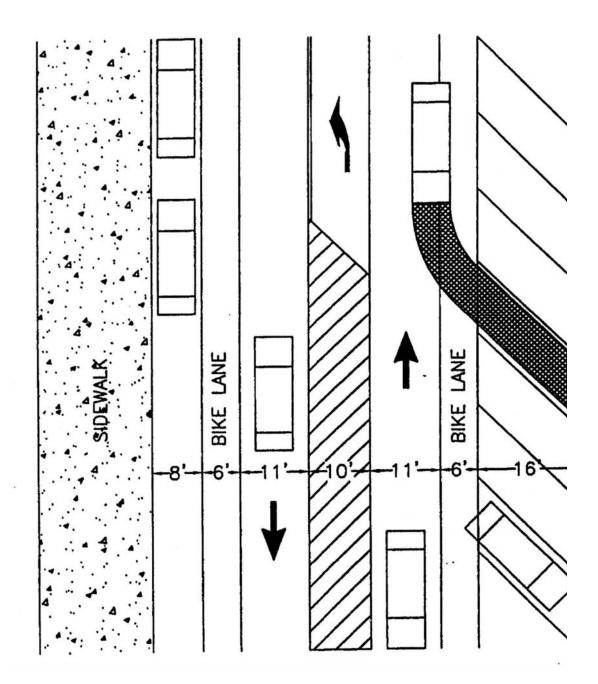
Turning lane of 10 feet



PROPOSED HIGH STREET CONFIGURATION:

- 1. 11 foot eastbound travel lane
- 2. 11 foot westbound travel lane
- 3. 10 foot turning lane
- 4. 6 foot eastbound bike/multi-purpose lane
- 5. 6 foot westbound bike/multipurpose lane
- 6. 8 foot parallel parking lane on south side
- 7. 18 foot back-in angle parking on northside.

(Diagram on following page)



ADVANTAGES OF PROPOSED HIGH STREET CONFIGURATION:

- 1. Bike/multi-purpose lane narrows the street because it is not wide enough to be used as a travel lane.
- 2. Research shows that narrowing the street encourages motorists to slow down.
- 3. Bike/multi-purpose lane promotes bicycle safety.
- 4. Bike/multi-purpose lane provides a safe space for people who are parking to back up without interrupting the flow of traffic.
- 5. Bike/multi-purpose lane provides a safe space for delivery trucks to load/unload without interrupting the flow of traffic
- 6. Bike/multi-purpose lane provides motorists who are pulling out of a parking space with a 6-foot safety margin to see clearly before entering the lane of moving traffic.
- 7. Total number of parking spaces will increase.
- 8. Back-in angle parking is much easier to use than parallel parking. It requires only the first, easy part of the parallel parking maneuver backing in.
- 9. Back-in angle parking is much safer than head-in angle parking, because it eliminates backing in to a lane of moving traffic.
- 10. Back-in angle parking makes it possible to place a bike lane adjacent to angle parking without compromising safety. Calculations by John Nawn, Pottstown traffic consultant, P.E., PTOE, show that a motorist in a back-angle parking space, even if parked next to a van that fully obstructs the view, can still look 13.5 feet up the bicycle lane, providing enough time for a bicyclist traveling 10 miles per hour to stop even on a wet pavement.
- 11. According to a five-year accident history of High Street from PennDOT, angle collisions occurred 44% of the time, making them by far the most frequent type of accident. Adding a bike/multi-purpose lane will reduce this by increasing the driver s visibility when pulling out of a parking space into the traffic lane.
- 12. PennDOT Publication 201, specifically 67 PA Code Chapter 201.22, was clearly written with pull-in angle parking in mind, not back-in angle parking, because there is no back-in angle parking elsewhere in Pennsylvania.
- 13. For purpose of safety and traffic flow, back-in angle parking has the same characteristics parallel parking, not pull-in angle parking.

BACK-IN ANGLE PARKING IS MUCH EASIER THAN THE PARALLEL PARKING ALREADY USED ON HIGH STREET.



WITH BACK-IN ANGLE PARKING YOU ARE NOW DONE



With parallel parking you must now go out and back until you can maneuver your car close to the curb.



Most vehicles do not have enough overhang to hit trees or poles. This car's right rear wheel is against the curb, and there is still more than two feet between the bumper and tree.



Bollards of concrete filled lead, painted black, already protect the Levitz clock. Bollards can be used in the few places where objects are at risk of being hit.

BACK-IN PARKING IS ALREADY COMMON IN PARKING LOTS WHERE IT IS NOT REQUIRED OR EVEN ENCOURAGED



Grigg Athletic Field, behind Pottstown Middle School



Pottstown Middle School parking lot



Left and below, Pottstown High School parking lot





PennDOT S 1996 STATEWIDE BICYCLE/PEDESTRIAN MASTER PLAN SAYS THAT ALL ROADWAYS SHOULD BE BICYCLE COMPATIBLE AND SETS TWO GOALS:

Half of all trips in the downtown areas of small cities should be made by foot or bicycle

One in five commuting trips in small cities will be made by foot or bicycle

Current percentage of work trips by foot or bicycle in Pennsylvania:
Big cities
Small cities
Suburban areas
College towns (Lock Haven, State College, Indiana) 44%
Source: PennDOT Bicycle/pedestrian Master Plan

Current percentage of work trips by foot or bicycle in Europe:

Netherlands	. 48%
Germany	. 36%
France	. 35%
Switzerland	. 39%
England and Wales	. 20%
Sweden	. 49%
Italy	. 33%
Denmark	. 41%



John Sewell, former mayor of Toronto, rides his bike to work on nice days.



One third of all trips in Holland are taken by bicycle.

ADVANTAGES OF WALKING/BICYCLING

1. Walking and bicycling are excellent exercise, which promotes good health.

Currently 55% of Americans are overweight. Obesity is second only to smoking as the leading cause of premature death in America.

Currently, only 1 in 5 Americans are physically active for at least a half-hour per day. Walking for a half-hour per day significantly lowers the risk of heart attacks.

The Center for Disease Control wants the percentage of nonmotorized trips to double from 7% today to 14% in 10 years.

- 2. Walking is the least expensive method of transportation. Bicycling is the second least expensive method of transportation. Both add life to our streets.
- 3. Walking and bicycling reduce the need for parking lots. They take up very little space.
- 4. Walking and bicycling do not cause air pollution as cars do.
- 5. Walking and bicycling are much safer than cars, which kill 40,000 Americans per year.





People on bicycles take up a lot less room than people in cars.







1. Wilmington, Delaware

Contact person:	Thomas Warrington
	Department of Public Works
	900 E 11 th ST
	Wilmington, DE 19802
	302.571.4233

The City of Wilmington, Delaware, has six blocks of 60 and 90-degree back-in angle parking dating back about 50 years. By city ordinance, Wilmington requires all angle parking to be back-in because of the safety factor.

For 60-degree angle parking, regulations require 19 feet out from the curb for parking spaces, to allow for vehicles with extended cabs, plus a minimum of 11 feet for a travel lane, for a total of 30 feet for traffic going in one direction.

The highest average daily traffic for any block with angle parking is the 1000 block of Market Street, with an ADT of 6,500 vehicles.

Wilmington has not experienced any significant problems with accidents or impediments to travel flow with angle parking.

(See attached letter from Thomas Warrington.)



2. Seattle, Washington

Contact person: Bill Jack Seattle Transportation Municipal Building, Room 410 600 Fourth Avenue Seattle, WA 98104 206.684.8329.

The City of Seattle, Washington, has about 280 blocks of angle parking spaces, most of which are back-in. Seattle also has pull-in angle parking, but prefers back-in angle parking because it is safer, especially for pedestrians.

North Queen Anne Street, shown above, is one of the higher volume traffic streets, with about 6,500 ADT.

Seattle has had back-in angle parking for more than 30 years.

(See attached letter from Bill Jack.)



3. Washington, D.C.

Contact person: Rashid Sleemi 202.671.1573

Washington, D.C. has six blocks of back-in angle parking going back 15 to 20 years.

The busiest thoroughfare is the 2400 block of 18th Street NW, which has an ADT of 9,200. The street has two lanes of traffic going in each direction with no maneuver lane in front of the parking spaces.

Other areas with back-in angle parking are several blocks on Water Street, NW, a low volume traffic area, and Vermont Avenue, NW, between 14th and Q streets, with an ADT of *5*,000.

Although no traffic records are available, Mr. Sleemi reports the perception is that back-in angle parking does not create any traffic hazards.



4. Indianapolis, Indiana

Contact person:	John Burkhardt
	Administrator, Traffic Division
	1725 S. West Street
	Indianapolis, IN 46225
	317. 327.2903

Indianapolis has one block of back-in angle parking, along the federal courthouse on New York Avenue, going back at least 15 years.

New York Avenue is a one-way street consisting of a north parallel parking lane, three traffic lanes, a right turn lane, and angle parking. The right turn lane is directly adjacent to the angle parking. Average daily traffic is 13,800.

The latest traffic records, for the years 1999-2000, reflect there were a total of two accidents over two years at the nearest intersection. They do not know if those accidents had anything to do with the angle parking.