

New York City
Department of Transportation

**Downtown Brooklyn
Traffic Calming Project**

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**FINAL REPORT –
APPENDIX A2**

CONTENTS

	Page
1. INTRODUCTION	2
2. TRAFFIC CALMING MYTHS	3
2.1 Traffic calming can effectively be achieved simply by installing more STOP signs.	3
2.2 Traffic calming can effectively be achieved simply by installing more traffic signals.	3
2.3 Reducing posted speed limits will always lower traffic speeds.	3
2.4 The purpose of traffic calming is to remove traffic from streets.	3
2.5 All streets have the same function.	4
2.6 All traffic is through traffic.	4
2.7 Motorized traffic is automatically bad.	4
2.8 Traffic problems at a specific location can always be solved by a treatment at that location.	4
2.9 Streets that carry large volumes of traffic must be unpleasant places.	4
2.10 Traffic Calming can solve all traffic-related problems.	4
2.11 Traffic operations are optimized by maximizing road space.	5

1. INTRODUCTION

This section discusses some common myths surrounding traffic calming. This section is intended to be a companion to *Appendix A1: Project Approach and Background*.

2. TRAFFIC CALMING MYTHS

2.1 Traffic calming can effectively be achieved simply by installing more STOP signs.

STOP signs serve a specific purpose. The federal Manual on Uniform Traffic Control Devices (MUTCD), published by the Federal Highway Administration, describes the situations where STOP signs are warranted. The MUTCD states explicitly that STOP signs are not to be used for speed control.

Further, the proliferation of inappropriate STOP signs can have undesirable impacts:

- Unnecessary inconvenience and delay.
- Decrease in compliance as drivers frequently encounter unwarranted stop signs.
- Potential increases in traffic noise and air pollution.

2.2 Traffic calming can effectively be achieved simply by installing more traffic signals.

When justified and designed properly, traffic signals can have several important benefits, such as assignment of right-of-way, interruption of flow to allow movement by cross street traffic and pedestrians, increased traffic capacity, and reduction of certain types of accident. However, traffic signals do not, in all cases, increase safety and reduce delays and should only be installed after a thorough study of traffic and roadway conditions. Specific traffic signal warrants have been established in the MUTCD.

- Inappropriate or unwarranted signals can have the following negative results:
- Unnecessary inconvenience and delay.
- Decrease in compliance if drivers disregard indications at unnecessary signals.
- Reassignment of traffic to less appropriate routes.

2.3 Reducing posted speed limits will always lower traffic speeds.

In order to be effective, posted speeds must be consistent with the physical conditions on the roadway. Simply lowering the posted speed limit will have little or no effect if drivers can comfortably drive on a street at higher rates of speed. If drivers do not consider speed regulations to be reasonable, limits will be disobeyed.

2.4 The purpose of traffic calming is to remove traffic from streets.

Traffic calming is not normally aimed at removing roadway traffic, but rather managing the traffic more effectively to reduce its impacts on other street users. This may consist of altering driver behavior (e.g. increasing caution and awareness, reducing speeds), providing facilities for non-motorized users or redistributing traffic to more appropriate routes. While a specific objective of a traffic calming plan may be to reduce traffic volumes on one street segment, this would be achieved by encouraging drivers to use other streets rather than reducing overall traffic volumes.

2.5 All streets have the same function.

Streets serve different needs. The types of trips, traffic volumes and amount of access to adjacent properties characterize the functional classification of a street. Roadway classifications are defined by the degree to which they cater for the conflicting functions of property access and travel mobility. For example, a freeway provides the highest level of mobility and the lowest level of access to adjacent property. A local street, in contrast, provides a high degree of access and the lowest level of mobility. Roadways can be further classified by the adjacent land uses, such as residential, retail, rural, etc. One major objective of traffic calming is to reinforce the proper roadway hierarchy.

2.6 All traffic is through traffic.

It is tempting to assume that all traffic on a street that travels the length of a block without stopping is through traffic (that is, traffic that is travelling all the way through a larger area). In many cases, vehicles that seem to have no business in a local area are really travelling to or from part of that local area. Through traffic is a problem in many places, but it is not safe to assume that all traffic on a street is part of that problem.

2.7 Motorized traffic is automatically bad.

While motorized traffic can have several adverse effects on the local and global environments, it is not accurate to immediately discount all traffic as undesirable. Despite the high density, mixed land uses, and numerous transit connections in Downtown Brooklyn, motorized vehicles will continue to serve a crucial role in the movement of people, goods and services.

2.8 Traffic problems at a specific location can always be solved by a treatment at that location.

Some traffic-related problems can be addressed successfully where they occur. Local street design, for instance, may contribute to speeding problems and amendments to that street design may successfully solve these problems.

But many traffic-related problems reflect larger traffic patterns: through traffic on one street may reflect congestion on another street, intrusion of heavy vehicles into a residential street may reflect an inappropriate traffic management measure in an adjacent street.

Accordingly, an approach based on local and isolated treatment of perceived traffic problems is likely to be ineffective in many locations and may end up creating new problems to replace the existing problems solved. It is therefore imperative that an area-wide approach be taken to management and traffic calming.

2.9 Streets that carry large volumes of traffic must be unpleasant places.

It is possible to mitigate the negative impacts of high traffic volumes and create streets that are also quality public spaces. This is evidenced by many of the world's great boulevards.

2.10 Traffic Calming can solve all traffic-related problems.

Traffic calming is not a panacea for all traffic problems. Traffic calming can have real, noticeable impacts on the street environment, but it is important not to have unrealistic expectations. Traffic calming devices may help reduce speeds, improve pedestrian safety, or

redistribute traffic from one street to another, but will not radically change traffic conditions in a large area. It will not create large-scale changes in social behavior or bring about major reductions in overall traffic volumes.

2.11 Traffic operations are optimized by maximizing road space.

Because cars and other road-based vehicles take up space, it is tempting to assume that a wide road or intersection has greater traffic-carrying capacity than a narrow road or intersection and that traffic operations are therefore automatically improved by providing as much road space as possible.

Where road capacity constrains traffic operations, widening roads may yield an improvement. However, this is not always the case. Where road capacity does not constrain traffic operations – and this is the case in many residential streets – maximizing the amount of road space available to traffic offers little benefit in many cases. Indeed, where excess road space is provided without adequate lane marking and way finding, traffic operations and safety can be impaired through inadequate traffic discipline.

This is good news for Traffic Calming, as it means that in some cases it is possible to use some communal space within a road reserve for users other than car occupants without necessarily adversely affecting traffic operations.