

INTRODUCTION AND ACKNOWLEDGEMENTS



Introduction

This is the second *How Smooth Are New York City's Streets?* report by the Fund for the City of New York's Center on Municipal Government Performance. It describes the smoothness of New York City's streets and how many major jolts per mile riders encounter on them. It provides comparisons between the latest survey, which was conducted in the fall of 1999, with conditions we found two years earlier. Our earlier report¹ provides considerable detail about the background of this work and the methodology employed. We summarize, but do not repeat all of the information again here. Much of that information is accessible on our website: www.fcny.org.

Why we are measuring the surfaces of the city's streets

We started measuring the smoothness of the city's streets in 1997 after learning through focus group research that one way people rate the performance of their city government in general is by how well the city's streets are maintained. To many people, street maintenance is a most visible example of local government performance. People thought the city could do a better job. The presence or absence of roughness and bumps on the streets was key to their assessments. The public and government did not have objective information on this subject. We fill that information gap in these reports.

Although it was initially surprising to us that an early project of the Center on Municipal Government Performance would be to measure and report on the smoothness of city streets, the pervasiveness of people's comments reminded us that roadway maintenance has been a fundamental responsibility of government going far back into the history of cities. For example, frescoes dating from the 14th Century on the walls of Sienna, Italy's city hall depict "The Effects of Good and Bad Government." Good government is shown as being just to its people and having navigable streets. Bad government is otherwise.

There are other compelling reasons to work toward smoother streets. Bumpy, uneven streets precipitate pedestrian and vehicular accidents, impede traffic flow, cause driver fatigue, cause damage to vehicles and shorten their life.

How we are measuring the city's streets

The findings presented in this report, and in the first report, are the result of carefully designed surveys to provide reliable information to the public and government on this topic. We initially learned about how the public rates government performance when we listened to New Yorkers from various parts of the city in focus group sessions. Later on, we took members of focus groups on rides over city streets to determine what degrees of roughness they considered acceptable.

The surveys cover approximately 670 miles of the city's streets, measuring randomly selected groups of adjoining blocks in all 59 community districts throughout the city, simulating the way a driver would ride

¹ Copies of the first *How Smooth are New York City's Streets?* are available from the Fund for the City of New York, Center on Municipal Government Performance.

along the city's streets. The surface of the streets were measured by laser-scanning devices, known as profilometers, which are attached to a test car and produce objective, reliable and accurate measurements about variations on the surface of the streets. Profilometer readings are then converted into standard roughness and bump indices, using methods developed and employed in studies sponsored by the World Bank. Details about our methodology appear in the Technical Appendix.

The two indicators of street smoothness

In the first report, we introduced two measures of street smoothness that the public uses to rate the streets: a **Smoothness Score** and a **Jolt Score**.

- The **Smoothness Score** is the percentage of blocks rated "acceptable." It measures the roughness/smoothness of the surface of the street over a certain distance. It takes into account all variations in the surface and will report roughness for all reasons, including an overall "washboard effect." Smoothness Scores are weighted by length so that comparable results are produced.
- The **Jolt Score** is the number of significant jolts encountered per mile. It is a count of street irregularities, be they from holes, ridges, uneven repairs, bumps, plates, utility covers, etc. that produce a certain, severe jolt when a car encounters it.

The broader purpose of this work

As an organization created to help improve the quality of life in New York City and concerned about the need for the public and government to communicate effectively with one another, the Fund for the City of New York, through its Center on Municipal Government Performance, is creating ways in which the public's views of government performance can be incorporated into measurements that can be discussed and tracked by the public and government. We hope that our work will encourage government to include the public's perspectives into its planning and reporting. And we hope that, in this case, government will inform the public about matters that are relevant to improving the streets. We think that the public then will be served by being better able to understand, assess, and, when they feel it necessary, influence the way government is performing.

In the 1970s, long before other cities considered producing and disseminating information about the way its agencies function, New York City led the way by enacting in its Charter the requirement that two Mayor's Management reports be issued every year, detailing, among other things, actual performance and performance goals and measures for each city agency. Semi-annual reports have been prepared and submitted to the City Council and made available to the public ever since. The reports contain narrative, graphics, operating statistics and budget information that can be useful to city managers and of interest to the general public.

Building on this singular achievement, we think that the next generation of performance measures must also include the public's perspectives whenever possible. The public must be informed of how the data are collected, be involved in the collection of data themselves, or be otherwise assured of the relevancy and accuracy of the data.

When people and government have reliable, relevant, information they both can trust about city government's activities, they can enter into informed dialogues, which we hope will dissipate distrust and cynicism. Our further hope is that understanding, mutual respect and improved performance will follow.

Acknowledgements

Several organizations and their leaders and many individuals have been vital to the success of this project.

The Fund for the City of New York, historically, has introduced innovations on the subject of measuring government performance. Dr. Mary McCormick, the Fund's president, has been a constant source of encouragement to the Center on Municipal Government Performance over the past five years in its efforts to create measures of government performance that reflect the public's point of view. Her interest in and suggestions about new possibilities for communities and government to benefit from the technology that we are introducing invigorate our work. The remarkable climate the Fund provides under her leadership supports and sustains the development and implementation of all the new approaches the Center is undertaking. The Fund's Board of Directors continues to be actively and enthusiastically interested in this work and generous in its support.

The Alfred P. Sloan Foundation and its president, Dr. Ralph E. Gomory, have gone well beyond the life-sustaining role of funding the Center on Municipal Government Performance. Dr. Gomory's interest and determination to establish responsible independent institutions to report to the public about government performance manifest itself in steady encouragement of our work and lively intellectual engagement. Dr. Ted Greenwood, the Alfred P. Sloan Foundation's Project Director assigned to work with us as the Center progresses, continues to be an important source of support to us at all times and eagerly and enthusiastically helps us look for promising opportunities where our work can help other localities.

The Galaxy Corporation and its project manager, Vice President Chuck Teubert, originally undertook the measuring of the smoothness of New York City's streets for us when no other organization would attempt it. They continue to seize the challenge. Galaxy and the Fund view their efforts as research that can help other municipalities as well. Mingyao Dong once again worked with Chuck during the data processing stage, providing analytic and computer support required to check the enormous amount of data their profilometers gathered.

Dr. Martin Frankel was, once again, our advisor and consultant on all matters concerning sample selection and statistical interpretation. He held Galaxy and the Center to rigorous standards so that the public and government officials can have confidence that the findings are trustworthy.

Chauffeurs Unlimited and its president Dan Ross provided us with safe, knowledgeable drivers who maneuvered the test car artfully through well over 700 miles of city streets.

Joseph Sadler of Sadler Technology Group worked with us to produce even more efficient routing so that we could complete the survey faster this time.

Michael Hertz, who designed and produced the first set of maps that tell the public about our findings, and his associate, Peter Joseph, have done it again. The maps in our first report are being used in graduate school classes as examples of how to effectively display complex information.

Ned Steele of Ned Steele Communications has been most helpful and tireless in suggesting ways to

communicate our results to the public in a clear manner -- an objective we pursue intently.

Verna Vasquez, Associate Director of the Center on Municipal Government Performance, volunteered to take on the enormous task of Project Director for this survey. She reviewed findings and procedures from the previous survey, improved the routing protocols, arranged for the recruitment and training of navigators and drivers, set and monitored daily assignments during the survey itself, monitored and reviewed all of Galaxy's data and transmissions to us, worked with Dr. Frankel on all statistical matters, and with Mike Hertz and Peter Joseph on creating the maps. She produced the tables and displays of findings that appear in this report. She also oversees the implementation of our new website (www.fcny.org/cmgp/streetsmoothness). Her careful, skillful work, technical abilities, professionalism and selfless dedication to this project and others make her an essential part of the Center's work and made this survey and report possible.

We hired George Fox as a navigator as he was about to graduate from New York University. He became our "star" navigator, working the early morning shift most of the time, but was willing and available at all times including the midnight to 7 A.M. shifts in midtown Manhattan. Beyond that, he demonstrated superb understanding of the project itself and represented the Center in the car, ensuring that the routes were followed and that safety and other standards were adhered to. I am happy to say that he has become a full-time member of the Center's staff.

Ezra Polonsky, a recent program associate of the Center, has been helpful in the production of this report in several ways. We have benefited from his technical and analytic abilities as he scrutinized the technical appendix, checked data, and assisted in the conversion of this written report to our website. Although Patrick Fagan's responsibilities are with another program run by the Center on Municipal Government Performance, he gave us the very good idea about how to display jolt and smoothness scores on the borough and community district pages. Priya George is the most recent member of the Center's staff. But we immediately drafted her skills to help produce and check the community district pages.

This survey and report builds on the work of many others who helped us start this first-of-its-kind series of publicly accessible reports on city street smoothness. We named them in our earlier report and again acknowledge their vital contribution today.

City officials in the Mayor's Office and in the Department of Transportation have discussed this project with us from its inception over five years ago. We appreciate not only their cooperation, but their openness to consider new ways to assess some government services.

We continue to call ourselves, and to be called, Road Worriers. We are happy to see that there seem to be signs of some improvement on city streets since we started these surveys. We hope that this is the beginning of a trend and that by the next survey, there will be even further, targeted improvement. We will worry less when the public congratulates government on work well done.

Barbara J. Cohn
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