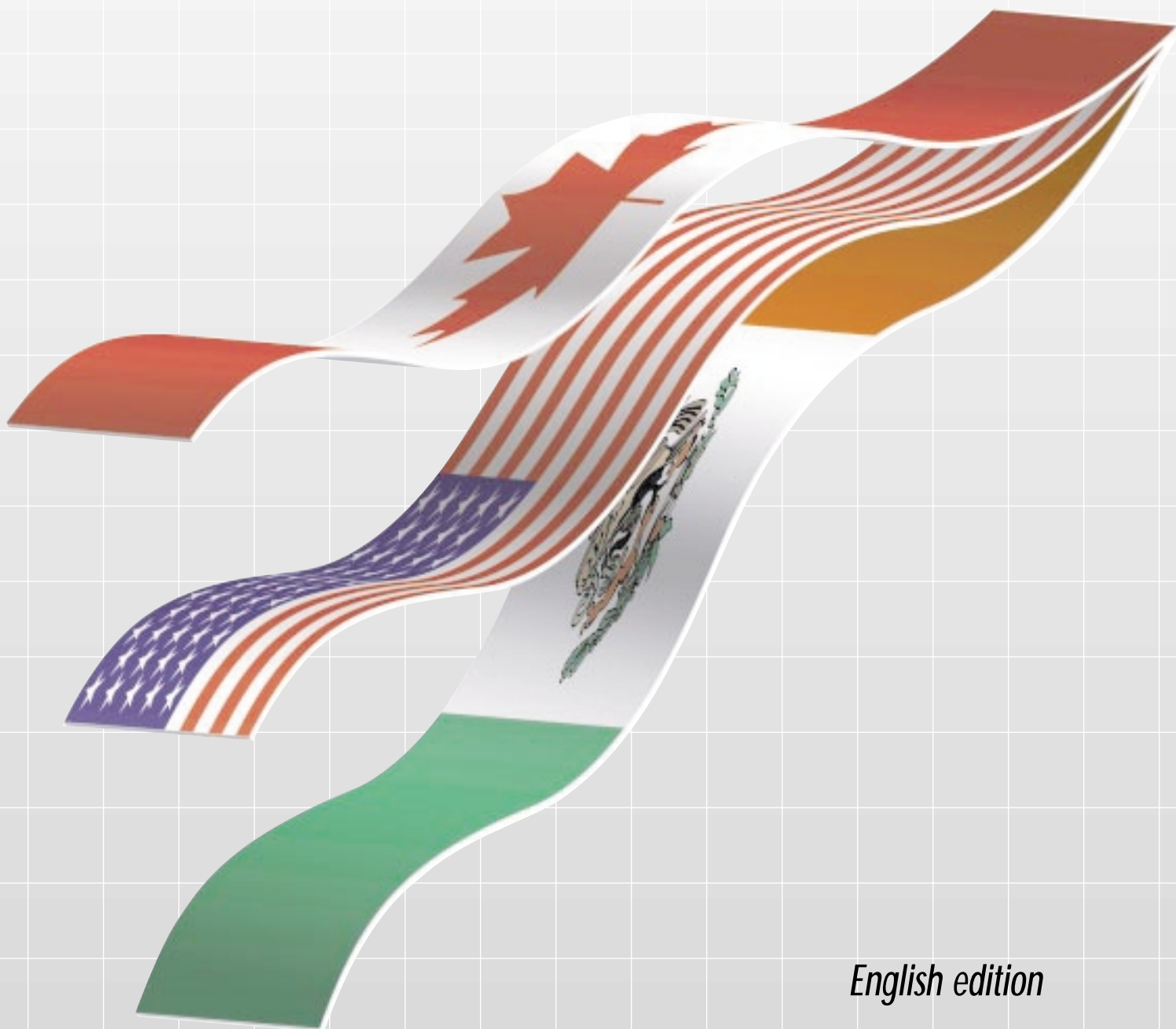


Statistiques
des transports
en Amérique
du Nord

North American
Transportation
in Figures

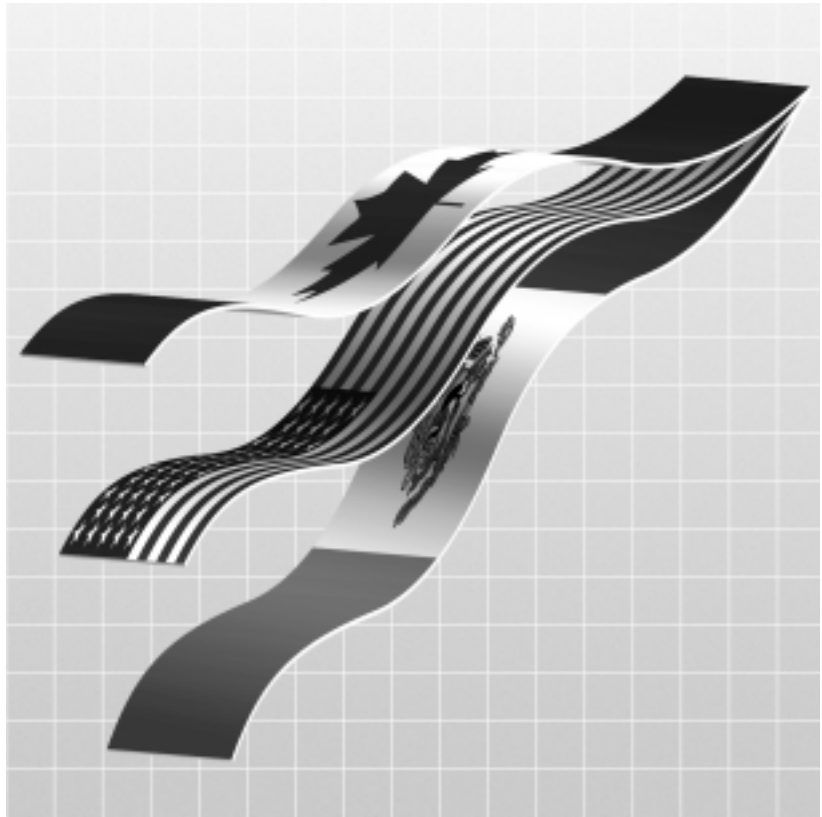
El Transporte
de América
del Norte
en Cifras



English edition

North American Transportation in Figures

BTS00-05



All material contained in this report is in the public domain and may be used and reprinted without special permission; citation as to source is required.

Recommended Citation

U.S. Department of Transportation, Bureau of Transportation Statistics, U.S. Department of Commerce, Census Bureau; Statistics Canada; Transport Canada; Instituto Mexicano del Transporte; Instituto Nacional de Estadística, Geografía e Informática; and Secretaría de Comunicaciones y Transportes, *North American Transportation in Figures*, BTS00-05, Washington, DC: 2000

To obtain copies of this report, users may contact any of the agencies listed below:

Canada

Statistics Canada
Dissemination Division
120 Parkdale Avenue
Ottawa, Ontario
K1A 0T6

Telephone: (1-800) 700-1033
(from within Canada
or the United States)
(613) 951-7277
(from within Canada
or the United States)

Fax: (1-800) 889-9734
(from within Canada
or the United States)
(613) 951-1584
(from within Canada
or the United States)

E-mail (product orders):
order@statcan.ca

Web site: www.statcan.ca

Mexico

Secretaría de Comunicaciones y Transportes
Dirección General de Planeación
Dirección de Información Programática
Av. Insurgentes Sur y Nebraska
No. 825, 1er piso
Col. Nápoles
Del. Benito Juárez
México, D.F.
CP 03810

Telephone: (5) 536-9189
(from within Mexico)

(5) 543-9831
(from within Mexico)

Fax: (5) 543-7283
(from within Mexico)

Web site: www.sct.gob.mx

Instituto Mexicano del Transporte
Carretera Querétaro-Galindo Km.12
76700 Sanfandila, Pedro Escobedo,
Querétaro, Qro.

Telephone: (4) 216-9777
(from within Mexico)

(4) 216-9646
(from within Mexico)

(4) 216-9597
(from within Mexico)

Fax: (4) 216-9671
(from within Mexico)

E-mail (product orders):
buzon@imt.mx
publicaciones@imt.mx

Web site: www.imt.mx

Instituto Nacional de Estadística,
Geografía e Informática
Dirección General de Difusión
Dirección de Atención a Usuarios y
Comercialización
Edificio Sede
Av. Héroe de Nacozari Sur No. 2301
Fracc. Jardines del Parque
20270, Aguascalientes, Ags.

Telephone: (4) 918-2998
(from within Mexico)

E-mail (product orders):
usuario@cis.inegi.gob.mx

Web site: www.inegi.gob.mx

United States

Customer Service
Bureau of Transportation Statistics
U.S. Department of Transportation
400 Seventh Street SW
Washington, DC 20590

Telephone: (202) 366-3282
(from within the United
States or Canada)

Fax: (202) 366-3640
(from within the United
States or Canada)

E-mail (product orders):
orders@bts.gov

Web site: www.bts.gov

U.S. Census Bureau
1201 E. 10th Street
Building 71 Publications
Jeffersonville, IN 47132

Telephone: (812) 218-3690

agency identification

Canada

Transport Canada

David M. Collenette,
Minister

Margaret Bloodworth,
Deputy Minister

Policy Group

Louis Ranger,
Assistant Deputy Minister

Roger Roy,
Director General,
Economic Analysis Directorate

Statistics Canada

Ivan P. Fellegi,
Chief Statistician

Ray Ryan,
Assistant Chief Statistician,
Business and Trade Statistics

George Andrusiak,
Director General,
Industry Statistics

Tricia Trépanier,
Director,
Transportation Division

Mexico

Secretaría de Comunicaciones y Transportes

Carlos Ruiz Sacristán,
Secretary

Aarón Dychter Poltolarek,
Sub-Secretary of Transportation

Manuel Rodríguez Morales,
Sub-Secretary for Infrastructure

General Coordination of Planning and SCT Centers

Juan Rodríguez Castañeda,
Coordinator General of Planning and Centers

Abraham Zamora Torres,
Director General of Planning

Adolfo Zagal Olivares,
Director of Program Information

Instituto Mexicano del Transporte

Alfonso Rico Rodríguez,
Director General

Roberto Aguerrebere Salido,
Coordinator of Transport Integration

Instituto Nacional de Estadística, Geografía e Informática

Antonio Puig Escudero,
President

Miguel Cervera Flores,
Director General of Statistics

Francisco Guillén,
Director General of National Accounts,
Socioeconomic Studies and Prices

Gabriel Maldonado Lee,
Director of Sector,
State and Regional Statistics

United States

U.S. Department of Transportation

Rodney E. Slater,
Secretary

Mortimer L. Downey,
Deputy Secretary

Bureau of Transportation Statistics

Ashish K. Sen,
Director

Richard R. Kowalewski,
Deputy Director

Susan J. Lapham,
Associate Director for Statistical Programs & Services

U.S. Department of Commerce

Norman Y. Mineta,
Secretary

Robert L. Mallett,
Deputy Secretary

U.S. Census Bureau

Kenneth Prewitt,
Director

William G. Barron,
Deputy Director

Paula J. Schneider,
Principal Associate Director for Programs

Frederick T. Knickerbocker, Associate Director for Economic Programs

Thomas L. Mesenbourg,
Assistant Director for Economic Programs

a c k n o w l e d g m e n t s

North American Transportation Statistics Project

A tricountry working group was responsible for this project. Agencies represented included Statistics Canada and Transport Canada from Canada; the Secretaría de Comunicaciones y Transportes, the Instituto Mexicano del Transporte and the Instituto Nacional de Estadística, Geografía e Informática (INEGI) from Mexico; and the Bureau of Transportation Statistics and the Census Bureau from the United States. The final product, however, would not have been possible without the many substantial contributions from people in each country who were not members of the working group, and who are represented by the supporting agencies and organizations listed below.

Coordination

Lisa Randall, Bureau of Transportation Statistics, U.S. Department of Transportation

North American Transportation Statistics Project Working Group Members

Roberto Aguerreberre Salido, Instituto Mexicano del Transporte

Jeff Allen, Statistics Canada

Miguel Angel Backhoff, Instituto Mexicano del Transporte

Irwin Bess, Statistics Canada

Ruth Bramblett, Census Bureau, U.S. Department of Commerce

Carol Brandt, Bureau of Transportation Statistics, U.S. Department of Transportation

Josefina Flores, Secretaría de Comunicaciones y Transportes

Alicia Guerrero, Instituto Nacional de Estadística, Geografía e Informática

Enrique Juárez, Secretaría de Comunicaciones y Transportes

Peter Kennedy, Transport Canada

John Lawson, Transport Canada

Felipe Leyva, Instituto Nacional de Estadística, Geografía e Informática

José Luis Bermúdez, Instituto Mexicano del Transporte

Victor Palacios Aguilar, Secretaría de Comunicaciones y Transportes

Gilles Paré, Statistics Canada

Brigitte Parent, Transport Canada

Lisa Randall, Bureau of Transportation Statistics, U.S. Department of Transportation

Oscar Rico, Instituto Mexicano del Transporte

Norman Tague, Maritime Administration, U.S. Department of Transportation

Rolf Schmitt, Bureau of Transportation Statistics, U.S. Department of Transportation

Garry Tulipan, Transport Canada

Thomas Zabelsky, Census Bureau, U.S. Department of Commerce

The contributions of the following people to this project are also gratefully acknowledged: *Felix Ammah-Tagoe, Audrey Buyrn, Bingsong Fang, Roberto Flores, Xiaoli Han, William Mallett, Erika McDonald and Tonia Rifaey.*

Supporting Agencies and Organizations

Canada

Canadian National Railways
Canadian Pacific Railway Company
Natural Resources Canada
NAV CANADA
Saint Lawrence Seaway Management Corporation
Transportation Association of Canada
Transportation Safety Board of Canada

Mexico

Banco de México, Dirección General de Investigación Económica
Secretaría de Comunicaciones y Transportes, Coordinación General de Puertos y Marina Mercante
Secretaría de Comunicaciones y Transportes, Ferrocarriles Nacionales de México
Secretaría de Turismo, Dirección General de Política Turística

United States

American Public Transit Association
Association of American Railroads
Department of Commerce, Bureau of Economic Analysis
Department of Defense, U.S. Army Corps of Engineers
Department of Energy, Energy Information Administration
Department of Energy, Oak Ridge National Laboratory

Department of Labor, Bureau of Labor Statistics

Department of Transportation, Federal Aviation Administration

Department of Transportation, Federal Highway Administration

Department of Transportation, Federal Railroad Administration

Department of Transportation, Federal Transit Administration

Department of Transportation, Maritime Administration

Department of Transportation, National Highway Traffic Safety Administration

Department of Transportation, Research and Special Projects Administration

Department of Transportation, U.S. Coast Guard

Environmental Protection Agency

National Railroad Passenger Corporation (Amtrak)

National Transportation Safety Board

Publication Support: *Walter C. Odom, Michael G. Garland, Gary Lauffer, Benjamin Cromer, Barbara Abbott, Gloria Davis, Kevin Proctor, and Laurene Qualls*, U.S. Census Bureau, U.S. Department of Commerce

Marsha Fenn and Chip Moore, Bureau of Transportation Statistics, U.S. Department of Transportation

Martha Courtney, MacroSys

Cover design: *Vincent Hughes*, Visualization

p r e f a c e

North American Transportation in Figures examines transportation and transportation-related passenger, freight, economic, safety, energy, environmental and demographic statistics relating to Canada, Mexico and the United States. This publication serves to increase awareness of transportation-related statistics currently available in each of the three countries, helps to assess comparability of the data, determines where information gaps exist and reveals which additional data are needed for a more complete picture of transportation in North America.

This project is a direct result of the North American Transportation Statistics Interchange, a tripartite initiative representing the transportation and statistical agencies of Canada, Mexico and the United States. Updates to this publication will continue on a periodic basis.

contents

Introduction	xix
---------------------------	-----

Section 1: Country Overview

Table 1-1. National Population and Labor Force	3
Figure 1-1a. Percent Share of North American Population: 1990, 1995 and 1996	4
Figure 1-1b. Percent Change in Population: 1990 to 1996	4
Figure 1-1c. Percent Share of North American Labor Force: 1990, 1995 and 1996	5
Figure 1-1d. Labor Force as a Percent of Total National Population: 1996	5
Table 1-1a. Top 25 Canadian Population Centers: 1996	6
Table 1-1b. Top 25 Mexican Population Centers: 1995	6
Table 1-1c. Top 25 U.S. Population Centers: 1996	7
Map 1. Top 25 Population Centers per Country: 1996	8
Table 1-2. Area	7
Table 1-3. Gross Domestic Product by Industry	9
Figure 1-3a. Percent Share of GDP Industry Category: 1996	10
Figure 1-3b. Percent Change in GDP Industry Category: 1990 to 1996	11
Figure 1-3c. Percent Share of Transportation Industry GDP by Subcategory: 1996	12

Section 2: Transportation and the Economy

Table 2-1. Gross Domestic Product (GDP) Attributed to Transportation-Related Final Demand	15
Table 2-2. Personal Consumption Expenditures on Transportation by Subcategory of Expenditure	17
Figure 2-2a. Percent Share of Personal Consumption Expenditures for Transportation by Major Subcategory: 1996	18
Figure 2-2b. Percent Change in Personal Consumption Expenditures for Transportation by Major Subcategory: 1990 to 1996	18
Table 2-3. Government Expenditures for Transportation by Mode	19
Table 2-4. Employment in Transportation and Related Industries	21
Table 2-5. Employment in Transportation-Related Occupations	23

Section 2: Transportation and the Economy – Continued

Table 2-6. Receipts and Payments Related to International Merchandise and Services Trade	25
Table 2-7a. Canada’s Receipts From and Payments to Mexico for Merchandise and Services Trade	27
Table 2-7b. Canada’s Receipts From and Payments to the United States for Merchandise and Services Trade	28
Table 2-8a. U.S. Receipts From and Payments to Canada for Merchandise and Services Trade	29
Table 2-8b. U.S. Receipts From and Payments to Mexico for Merchandise and Services Trade	30

Section 3: Transportation Safety

Table 3-1. Transportation Fatalities by Mode	33
Table 3-2. Transportation Injuries by Mode	35
Table 3-3. Motor Vehicle Fatality and Injury Rates	37
Figure 3-3. Road Fatality Rate per 10,000 Vehicles: 1990, 1995 and 1996	38
Table 3-4. Air Carrier Fatality and Injury Rates	39

Section 4: Transportation, Energy and the Environment

Table 4-1. Energy Consumption by the Transportation Sector	43
Figure 4-1. Transportation’s Percent Share of Total Energy Consumption: 1996	44
Table 4-2. Energy Consumption by Mode of Transportation	45
Table 4-3. Estimated Consumption of Alternative and Replacement Fuels for Road Motor Vehicles	47
Table 4-4. Average Price of Fossil Fuel to End-Users	48
Table 4-5. New Model Year Fuel Efficiency for Road Motor Vehicles	50
Table 4-6a. Federal Emission Control Requirements for Passenger Cars and Light Trucks: Model Year	51
Table 4-6b. Federal Emission Control Requirements for Heavy Trucks: Model Year	53

Section 5: Domestic Freight Activity

Table 5-1. Domestic Freight Activity by Mode (Metric Tons)	57
Table 5-2. Domestic Freight Activity by Mode (Metric Ton-Kilometers)	59
Figure 5-2a. Percent Modal Share, Excluding Pipelines, of Total Metric Ton-Kilometers: 1996	61
Figure 5-2b. Percent Modal Share, Including Pipelines, of Total Metric Ton-Kilometers: 1996	61
Table 5-3a. Top Canadian Domestic Freight Commodities by Mode: 1996	62
Table 5-3b. Top Mexican Domestic Freight Commodities by Mode: 1996	63
Table 5-3c. Top U.S. Domestic Freight Commodities by Mode: 1993	64
Table 5-4a. Top Canadian Domestic Freight Interprovincial Pairs by Mode: 1996	65
Map 2. Top Canadian Domestic Freight Interprovincial Pairs by Mode: 1996	66
Table 5-4b. Top U.S. Domestic Freight Interstate Pairs by Mode: 1993	67
Map 3. Top U.S. Domestic Freight Interstate Pairs by Mode: 1993	68
Table 5-5a. Top Canadian Domestic Freight Area Pairs by Mode: 1996	69
Table 5-5b. Top Mexican Domestic Freight Area Pairs by Mode: 1996	70
Map 4. Top Mexican Domestic Freight Area Pairs by Mode: 1996	71

Section 6: North American Merchandise Trade

Table 6-1a. Canadian Merchandise Trade With Mexico and the United States by Mode of Transportation (Value)	75
Table 6-1b. Mexican Merchandise Trade With Canada and the United States by Mode of Transportation (Value)	76
Table 6-1c. U.S. Merchandise Trade With Canada and Mexico by Mode of Transportation (Value)	78
Table 6-2a. Canadian Merchandise Trade With Mexico and the United States by Mode of Transportation (Metric Tons)	80
Table 6-2b. Mexican Merchandise Trade With Canada and the United States by Mode of Transportation (Metric Tons)	81
Table 6-2c. U.S. Merchandise Trade With Canada and Mexico by Mode of Transportation (Metric Tons)	83
Table 6-3a. Top Canadian Gateways for North American Merchandise Trade by Mode: 1996	85

Section 6: North American Merchandise Trade – Continued

Table 6-3b. Top Mexican Gateways for North American Merchandise Trade by Mode: 1996	87
Table 6-3c. Top U.S. Gateways for North American Merchandise Trade by Mode: 1996	88
Table 6-4a. Top Mexican Maritime Intransit Shipment Ports: January-June 1997	90
Table 6-4b. Top U.S. Maritime Intransit Shipment Ports: 1996	91
Table 6-5a. Top Land Freight Crossing Ports, Canadian-U.S. Border: 1996	92
Table 6-5b. Top Land Freight Crossing Ports, Mexican-U.S. Border: 1996	93
Map 5. Series of Maps Showing Border Crossing Facilities	94
Table 6-6a. Top Canadian Merchandise Trade Commodities by Mode With Mexico: 1996	99
Table 6-6b. Top Canadian Merchandise Trade Commodities by Mode With the United States: 1996	100
Table 6-7a. Top Mexican Merchandise Trade Commodities by Mode With Canada: 1996	101
Table 6-7b. Top Mexican Merchandise Trade Commodities by Mode With the United States: 1996	102
Table 6-8a. Top U.S. Merchandise Trade Commodities by Mode With Canada: 1996	103
Table 6-8b. Top U.S. Merchandise Trade Commodities by Mode With Mexico: 1996	104

Section 7: International Merchandise Trade Between North America and the Rest of the World

Table 7-1. International Merchandise Trade Between North America and the Rest of the World by Value	107
Table 7-2. International Merchandise Trade Between North America and the Rest of the World by Weight	109
Table 7-3a. Top Canadian International Merchandise Trade Gateways by Mode: 1996	111
Table 7-3b. Top U.S. International Merchandise Trade Gateways by Mode: 1996	113
Table 7-4a. Top Canadian International Trade Commodities by Value: 1996	114
Table 7-4b. Top Mexican International Trade Commodities by Value: 1996	115
Table 7-4c. Top U.S. International Trade Commodities by Value: 1996	116
Table 7-5a. Top Canadian International Trade Commodities by Weight: 1996	117
Table 7-5b. Top U.S. International Trade Commodities by Weight: 1996	118

Section 8: Domestic Passenger Travel

Table 8-1. Domestic Passenger Travel by Mode	121
Table 8-2a. Top Canadian Domestic Passenger Metropolitan Area Pairs by Mode: 1996	123
Map 6. Top Canadian Domestic Passenger Metropolitan Area Pairs by Mode: 1996	124
Table 8-2b. Top Mexican Domestic Passenger Metropolitan Area Pairs by Mode: 1996	123
Map 7. Top Mexican Domestic Passenger Metropolitan Area Pairs by Mode: 1996	125
Table 8-2c. Top U.S. Domestic Passenger Metropolitan Area Pairs by Mode: 1995	126
Map 8. Top U.S. Domestic Passenger Metropolitan Area Pairs by Mode: 1995	127

Section 9: North American Passenger Travel

Table 9-1a. Canada-Mexico/Mexico-Canada Travel by Mode of Transportation	131
Table 9-1b. Canada-United States/United States-Canada Travel by Mode of Transportation	132
Table 9-1c. Mexico-United States/United States-Mexico Travel by Mode of Transportation	134
Figure 9-1a. Percent Share of Total Travel Between Canada and Mexico: 1996	136
Figure 9-1b. Percent Share of Total Travel Between Canada and the United States: 1996	136
Figure 9-1c. Percent Share of Total Travel Between Mexico and the United States: 1996	136
Figure 9-1d. Same Day vs. Overnight Travel, Percent Share of Total Travel Between Canada and the United States: 1996	136
Figure 9-1e. Same Day vs. Overnight Travel, Percent Share of Total Travel Between Mexico and the United States: 1996	137
Figure 9-1f. Percent Modal Share of Canadian-U.S. Same Day Passenger Travel: 1996	137
Figure 9-1g. Percent Modal Share of Canadian-U.S. Overnight Passenger Travel: 1996	137
Figure 9-1h. Percent Modal Share of Mexican-U.S. Overnight Passenger Travel: 1996	137
Table 9-2a. Top Land Passenger Ports, Canadian-U.S. Border: 1996	138

Section 9: North American Passenger Travel – Continued

Table 9-2b. Top Land Passenger Ports, Mexican-U.S. Border: 1996 140

Table 9-3. Top North American Air Passenger City Pairs: 1996 141

Map 9. Top North American Air Passenger City Pairs: 1996 142

Table 9-4a. Canada-Mexico/Mexico-Canada Travel by Trip Purpose 143

Table 9-4b. Canada-United States/United States-Canada Travel by Trip Purpose 144

Table 9-5a. Canada-Mexico/Mexico-Canada Travel Characteristics: 1996 145

Table 9-5b. Canada-United States/United States-Canada Travel Characteristics: 1996 .. 147

Section 10: International Passenger Travel Between North America and the Rest of the World

Table 10-1. Passenger Travel Between North America and the Rest of the World by Mode of Transportation 151

Table 10-2. Top International Origins and Destinations Outside of North America: 1996 153

Table 10-3. Top International Air Gateways, Excluding North American Travel: 1996 154

Section 11: Transportation Infrastructure

Table 11-1. Domestic Physical System Extent 157

Figure 11-1a. Extent of Road Network (4 or More Lanes): 1990 and 1995 159

Figure 11-1b. Growth in Kilometers of Road (4 or More Lanes): 1990 to 1995 159

Table 11-2. Number of Airports 160

Table 11-2a. Top 20 Canadian Airports by Flight Operations: 1996 161

Table 11-2b. Top 20 Mexican Airports by Flight Operations: 1996 162

Table 11-2c. Top 20 U.S. Airports by Flight Operations: 1996 163

Table 11-3. Number of Water Ports and Facilities 165

Table 11-4a. Top 20 Canadian Water Ports by Tonnage (Domestic and International): 1996 166

Table 11-4b. Top 20 Mexican Water Ports by Tonnage (Domestic and International): 1996 167

Table 11-4c. Top 20 U.S. Water Ports by Tonnage (Domestic and International): 1996 168

Map 10. North American Water Ports, Top 20 by Tonnage for Each Country: 1996 164

Table 11-5. Toll Roads, Bridges and Tunnels 169

Section 12: Transportation Vehicles

Table 12-1. Number of Transportation Vehicles/Equipment	173
Figure 12-1a. Growth in Number of Total Road Vehicles: 1990 to 1996	177
Figure 12-1b. Total Road Vehicles per 1,000 Residents: 1996	177
Table 12-2. Vehicle-Kilometers by Mode	178

Appendix A: Overview of Transportation Statistics in Canada, Mexico and the United States	183
--	------------

Appendix B: Additional Sources and Technical Notes	217
---	------------

Appendix C: Reference Resources	331
--	------------

Source Acronyms	331
International Currency Exchange Rates	333
State and Provincial Abbreviations	334
Conversion Ratios for Metric-U.S. Measures	335
Land Port Names, Canadian-U.S. Border	336
Land Port Names, Mexican-U.S. Border	341
Harmonized Tariff Schedule for International Merchandise Trade	345

Appendix D: Tables in U.S. Measures	349
--	------------

I n t r o d u c t i o n

The rate of global economic growth and the integration of trade, finance and manufacturing have increased greatly over the last two decades. Transportation plays a vital role in the changing global economy, linking people and places, facilitating trade and tourism and encouraging economic competition and specialization. The North American¹ experience mirrors these worldwide trends. Reduced trade barriers and increasingly mobile populations have created a heightened need for information on transportation infrastructure and services within and across Canada, Mexico and the United States. Two major initiatives, the Canada-U.S. Free Trade Agreement (FTA)² and the subsequent North American Free Trade Agreement (NAFTA),³ were significant milestones in the liberalization of trade in goods and services between the three countries of this continent.

An effective, efficient and safe transportation system is critical to any nation's economic growth, the mobility of its citizens and its national security. Each day, governments, businesses and consumers make countless decisions about where to locate facilities and make investments, what to ship, which transportation mode to use and how and where to travel on business or for pleasure. Transportation provides the links between businesses, industries and consumers, and the merits of transportation go beyond the national borders of any one country. While the positive contributions of transportation to the national economies and to the daily life of people everywhere are quite important,

transportation also has some adverse impacts. Transportation uses significant amounts of energy, mostly derived from petroleum, and is also a major cause of death and injury every year. This report strives to present a balanced picture of the benefits transportation confers as well as the impacts it has.

The effectiveness and efficiency of national and North American transportation relies heavily on sound information. Within and across countries, comprehensive transportation information makes knowledgeable decisions possible, on personal, corporate and national policy levels. Accurate data, comparable across modes and countries, is important in order to make effective investments with scarce resources; to understand changes in dynamic transportation markets; to evaluate transportation benefits and impacts; and to support critical decision-making in the public and private sectors. In short, accurate, comprehensive and timely transportation-related information is a key component in business, government and personal decisionmaking.

A trilateral initiative, the North American Transportation Statistics Interchange (Interchange), first identified a need for a compendium of transportation and transportation-related data for Canada, Mexico and the United States. The Interchange is an initiative between the transportation and statistical agencies of Canada, Mexico and the United States, and provides a forum for the exchange of information and for the discussion of topics and issues related to transportation statistics in and among the participating countries. The first Interchange meeting

¹ For the purposes of this report, North America will refer to the countries of Canada, Mexico and the United States.

² The FTA entered into force on January 1, 1989.

³ NAFTA entered into force on January 1, 1994.

was held in November 1991, and regular meetings have been held since then.

In addition to promoting closer working ties between the transportation and statistical agencies of the three countries, the Interchange has led to a number of key projects, including: the joint Canadian and U.S. development of the Standard Classification of Transported Goods (SCTG), the resolution of data inconsistencies in transborder merchandise trade data and the exchange of ideas on the development of national reports. Trilateral cooperation between the three countries also led to the development of the North American Industrial Classification System (NAICS), provided for an exchange of ideas on how to improve and standardize the handling of transportation data in national economic accounts, and resulted in an agreement to jointly develop a project on North American transportation statistics. Since 1997, a tricountry working group has been coordinating the work of this later project. Participating agencies include Statistics Canada and Transport Canada from Canada; the Secretaría de Comunicaciones y Transportes (Ministry of Communications and Transportation), the Instituto Mexicano del Transporte (Mexican Institute of Transportation) and the Instituto Nacional de Estadística, Geografía e Informática (INEGI) (National Institute of Statistics, Geography and Informatics) from Mexico; and the Bureau of Transportation Statistics and the U.S. Census Bureau from the United States.

The North American Transportation Statistics project has had a number of key objectives. These are: (a) to identify key information that will help provide a comprehensive view of transportation in North America, (b) to characterize transportation activity and impacts across and between Canada, Mexico and

the United States, (c) to reveal specific data comparability differences within and across countries, (d) to identify data and information gaps and (e) to begin discussions for reducing comparability differences and data gaps through cooperative activities. This report, *North American Transportation in Figures*, is one of the outcomes of this project, and represents the second joint effort by the three countries to develop a statistical report related to transportation.⁴ It is expected that the information will be updated on a periodic basis, giving users a recognized source for transportation and other related data in a North American context.

North American Transportation in Figures provides a comprehensive overview of transportation statistics in North America. English, French and Spanish editions of the report are available. The report includes data for 1990, 1995 and 1996, the latest years for which comparable data are readily available. All of the value data are reported in current U.S. dollars. All measurement units are in metric.⁵ Users should note that, for the sake of greater comparability across the three countries, data categories and definitions were extensively reviewed and modified when necessary. Therefore, some of the data categories and definitions used in this report may not always correspond to those used in the specific national publications of Canada, Mexico and the United States. Users, who require data in original categories, currencies or measures, a complete time series or other

⁴ In December 1999, a brief summary report, *North American Transportation Highlights*, was published based on the work and data included in this report, *North American Transportation in Figures*.

⁵ Conversion ratios to U.S. measures are included in Appendix C. Appendix D reports data in U.S. measures for specific tables.

additional information, may contact the appropriate source agency in each country.

Each language edition of the report contains over 90 data tables, supported by graphs, figures, maps and a number of appendixes. Appendix A includes an overview of the transportation statistical system in each of the three countries, including information on specific agencies and their roles and responsibilities for transportation data. In most cases, Appendix A also provides web site addresses where additional detailed information is available for specific data sets and series. Appendix B provides additional technical notes for each of the data tables, and explains the differences in data sources, survey methodologies, collection approaches and definitions among the three countries. Information provided here supplements footnotes included on individual tables. Appendix C contains additional reference charts, including: the International Monetary Fund (IMF) exchange rates used, state and provincial abbreviations, U.S.-metric conversion ratios, land border crossing ports and the Harmonized Schedule for international merchandise trade at the two-digit level. Appendix D provides selected tables in U.S. measures.

North American Transportation in Figures contains twelve thematic sections. Section 1, Country Overview, sets the context of the report with an overview of each country: population, labor force, physical area and Gross Domestic Product (GDP). Section 2, Transportation and the Economy, draws a comprehensive picture of the impact that transportation has on the economic indicators of each country (including GDP), government expenditures for transportation, and transportation

employment. Section 3, Transportation Safety, provides critical information on fatalities and injuries by mode. Fatality and injury rates for road and air also are included. Section 4, Transportation, Energy and the Environment, responds to current energy and environmental concerns, and includes tables on energy consumption, fuel costs and emission control requirements. Section 5, Domestic Freight Activity, summarizes freight activity by mode, by major commodity and by major origin/destination pair. Sections 6 and 7 provide data on North American merchandise trade and international merchandise trade between North America and the rest of the world. For Section 6, each country decided to use its own merchandise trade data. Thus, there will be statistical differences when comparing, for example, Canada's data for trade with the United States and the United State's data for trade with Canada. Section 7 represents international merchandise trade for each country, excluding trade with the other North American countries. Sections 8, 9 and 10 provide data on domestic, North American and international passenger travel. Section 9 presents a picture of North American travel with information about the type of travel (overnight versus same-day), mode of transportation used and trip purpose. Section 10 provides data on international passenger travel between North America and the rest of the world. Section 11, concentrates on transportation infrastructure and its use in each country. Section 12, Transportation Vehicles, provides a detailed inventory of transportation vehicles and equipment and summarizes domestic movements, in terms of vehicle-kilometers, by mode.

A number of standard symbols were adopted for use on the statistical tables. These are as follows:

- C = Data are confidential
- N = Data are nonexistent
- NA = Not applicable
- NS = Not significant
- U = Data are unavailable
- e = Data are estimated
- p = Data are preliminary
- r = Data are revised

In addition, the unit “billions” in this edition equates to “thousand millions” in the Spanish edition, and one milliard in the French edition.

An electronic version of *North American Transportation in Figures*, including downloadable spreadsheet files, also will be available on the web sites of the agencies involved in the North American Transportation Statistics project. The specific agency addresses are as follows:

Canada

Statistics Canada
www.statcan.ca

Transport Canada
www.tc.gc.ca

Mexico

Instituto Mexicano del Transporte (Mexican Institute of Transportation)
www.imt.mx

Instituto Nacional de Estadística, Geografía e Informática (INEGI, National Institute of Statistics, Geography and Informatics)
www.inegi.gob.mx

Secretaría de Comunicaciones y Transportes (Ministry of Communications and Transport)
www.sct.gob.mx

United States

Bureau of Transportation Statistics,
U.S. Department of Transportation
www.bts.gov

U.S. Census Bureau,
U.S. Department of Commerce
www.census.gov