

1999/ 2000 Interprovincial Roadside Truck Survey in the National Capital Region



- Establish a comprehensive database of information
- Provide a basis for future studies and analysis
- Does not address specific transportation issues



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Un Comité technique conjoint sur la planification des systèmes de transport

1999/ 2000 Interprovincial
Roadside Truck Survey
in the National Capital Region

Background Data

Annual Counts (Classification & Occupancy)

People and vehicles
Field Observations 7 am to 7 pm

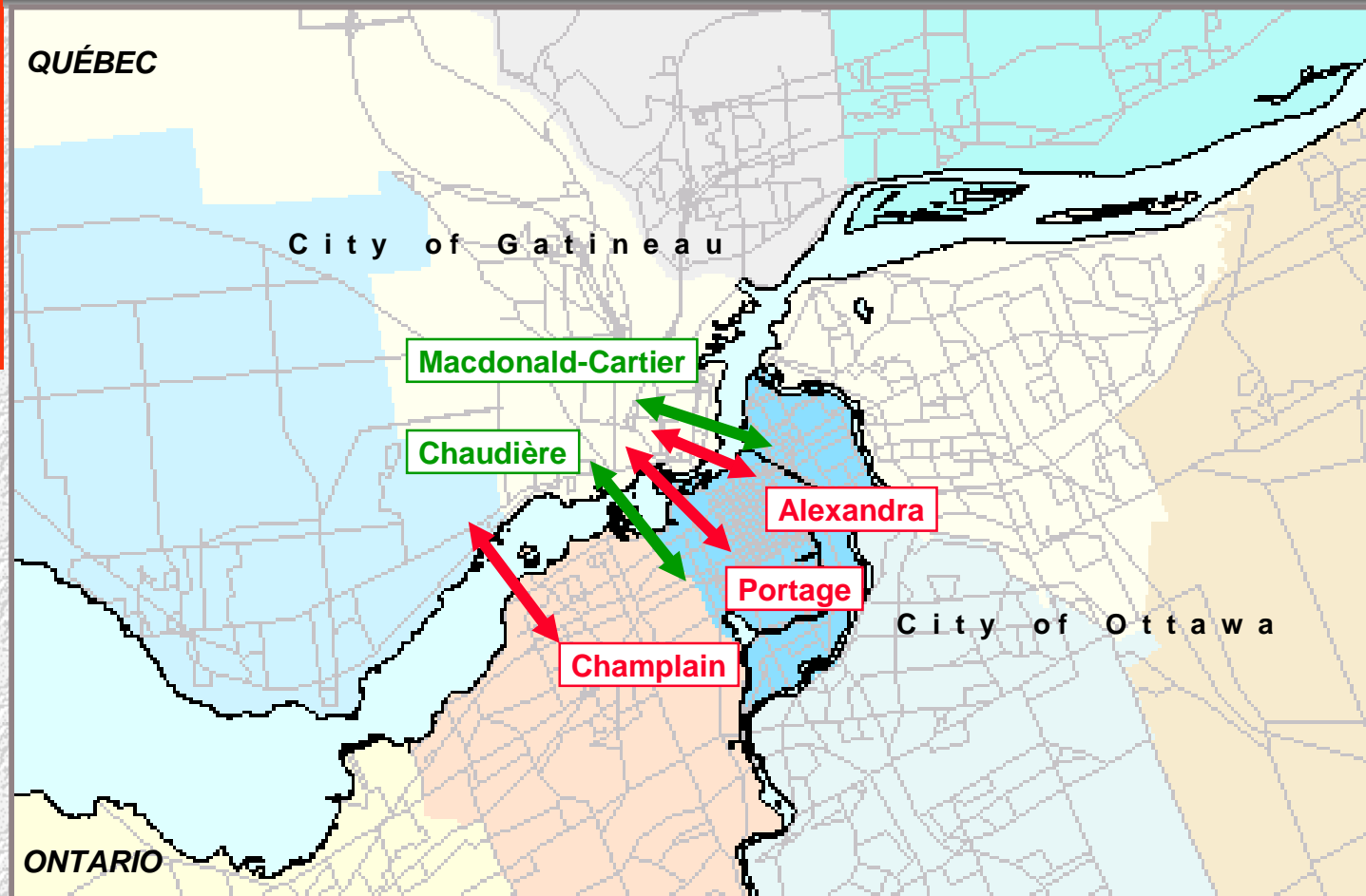
Truck Counts

Full Classification – By Axles
- Autumn 2000 07:00 to 07:00

Roadside Driver Interviews

Origin - Destination Information
- Autumn 2000 07:00 to 07:00

Interprovincial Bridges



Survey Station Set-up

Autumn '2000



Driver Interviews (Northbound)

September 6th and 7th

Driver Interviews (Southbound)

September 7th and 8th

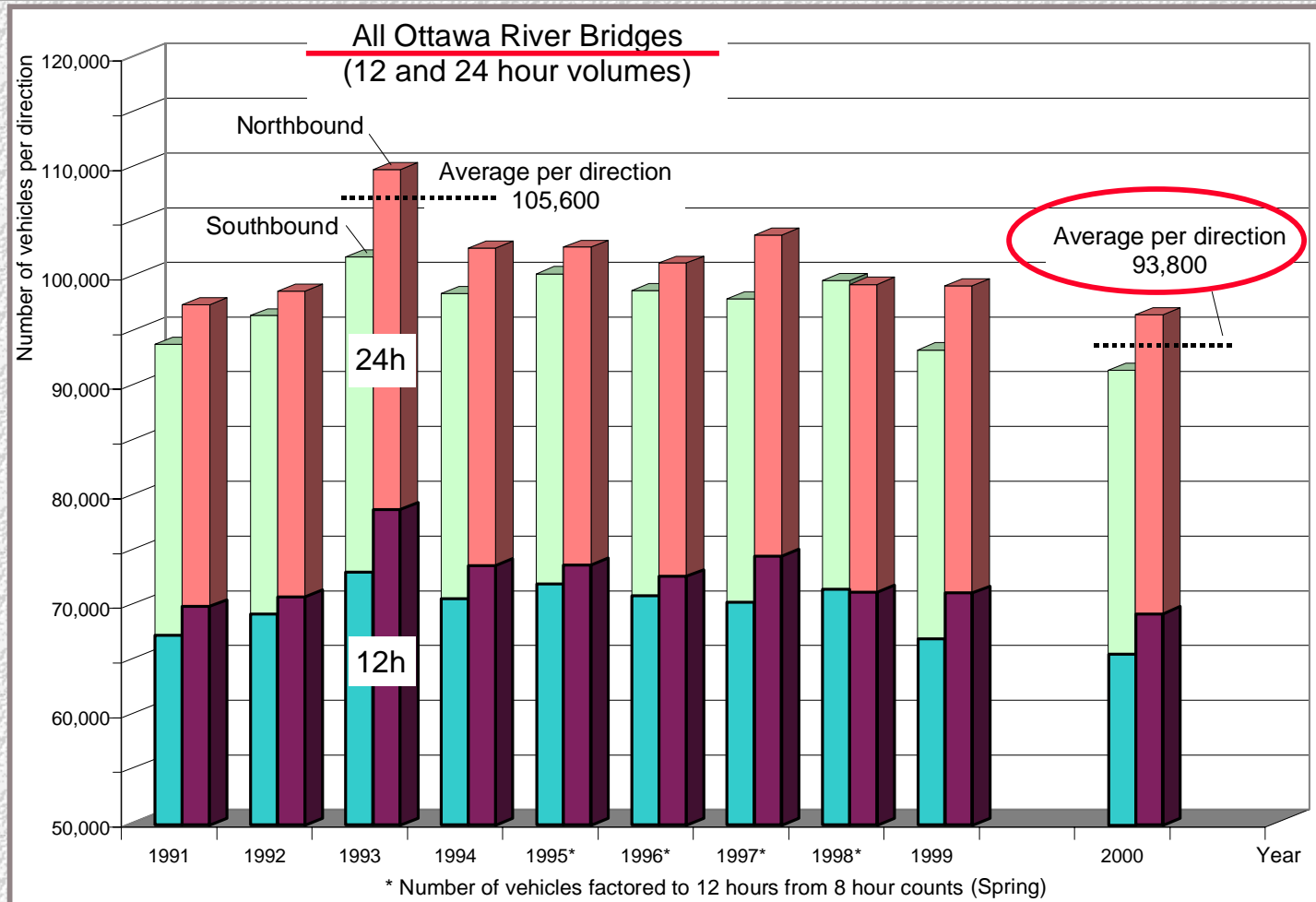
Counts (Both directions)

September 6th to 8th

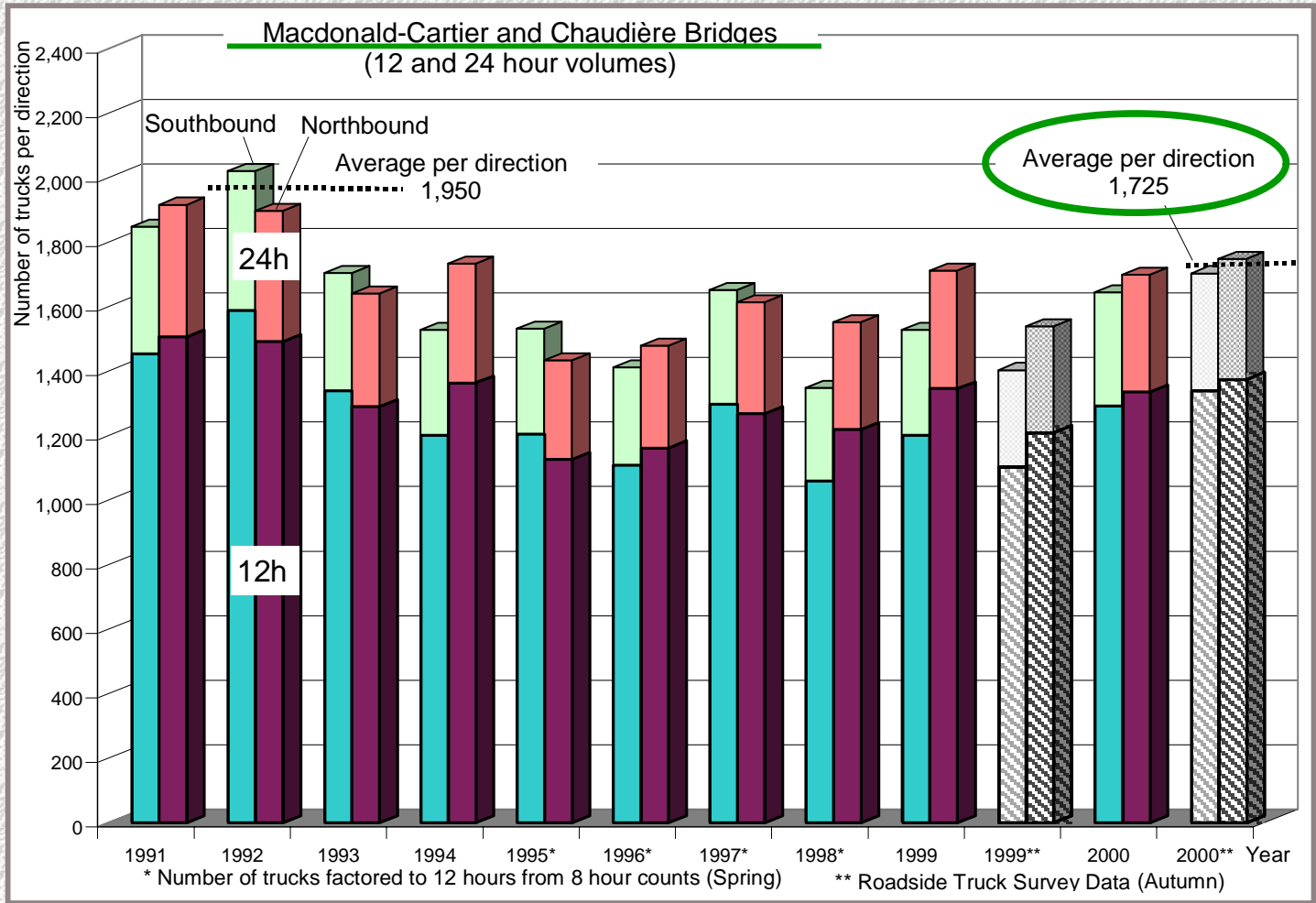
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Historical Vehicle Volumes (1991-2000)



Historical Truck Volumes (1991-2000)



Two Way Truck Traffic Volumes

(Current and Historical)

INFORMATION SOURCE	NUMBER OF TRUCKS CROSSING THE OTTAWA RIVER*		
	24 HOURS	MORNING COMMUTER PEAK HOUR	AFTERNOON COMMUTER PEAK HOUR
2000 SURVEY, AUTUMN	3,450	205	170
2000 ANNUAL SURVEY, SPRING	3,335	215	170
5 YEAR AVERAGE (1996-2000)	3,120	235	180
10 YEAR AVERAGE (1991-2000)	3,285	250	210

* Ottawa River Crossing includes the Macdonald-Cartier and Chaudière Bridges

Classification of Vehicle Types

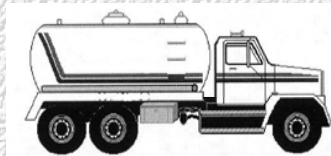
Autumn '2000

2 Axle Trucks



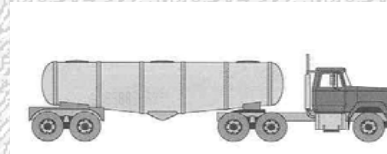
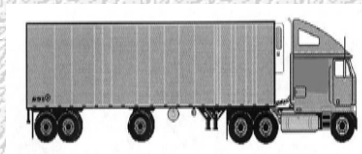
Some Noise and Vibration Issues

3+ Axle Trucks



More Noise and Vibration Issues

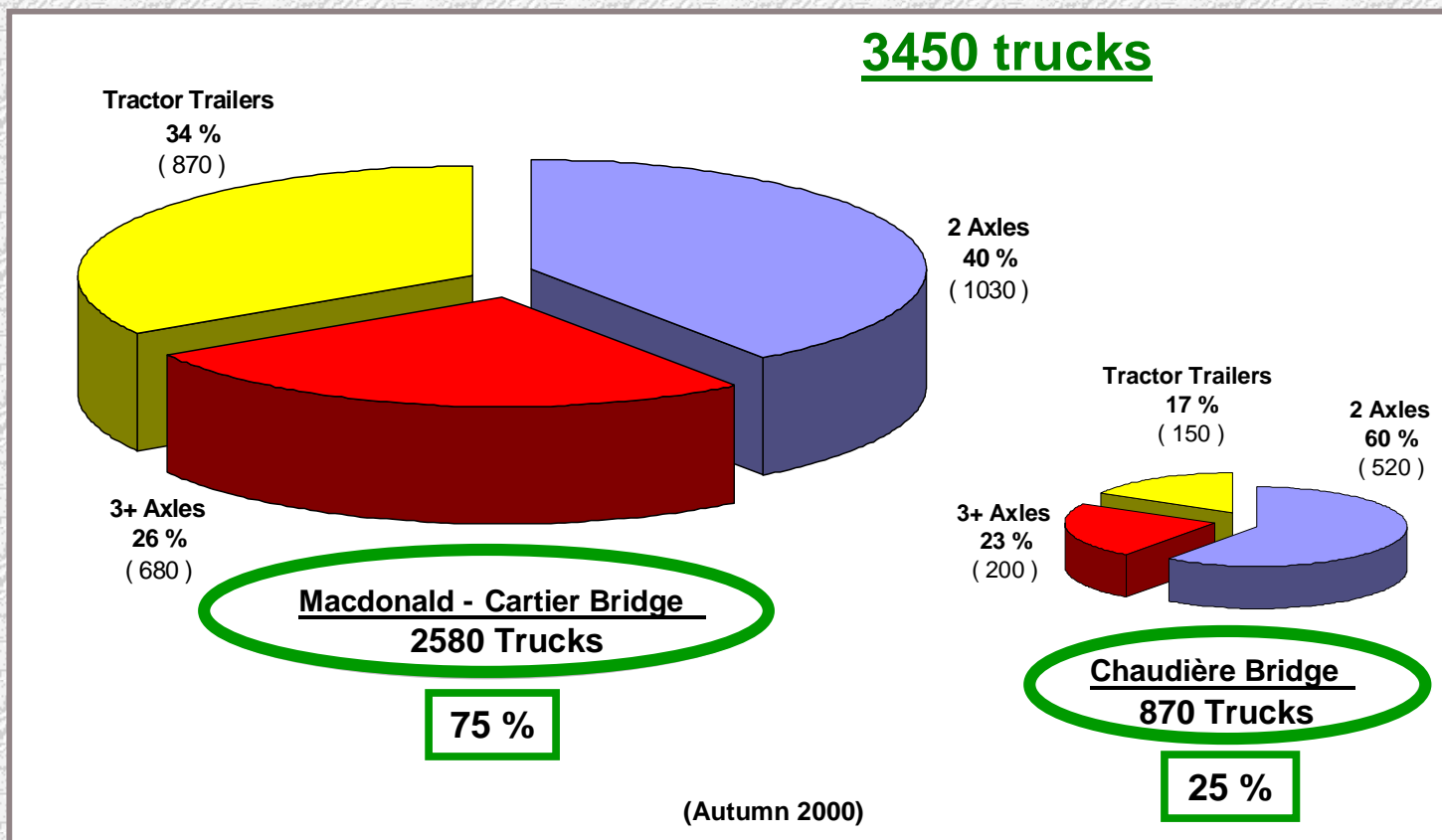
Tractor Trailers



Both environmental and operational considerations

Daily Truck Volumes

By bridge and classification



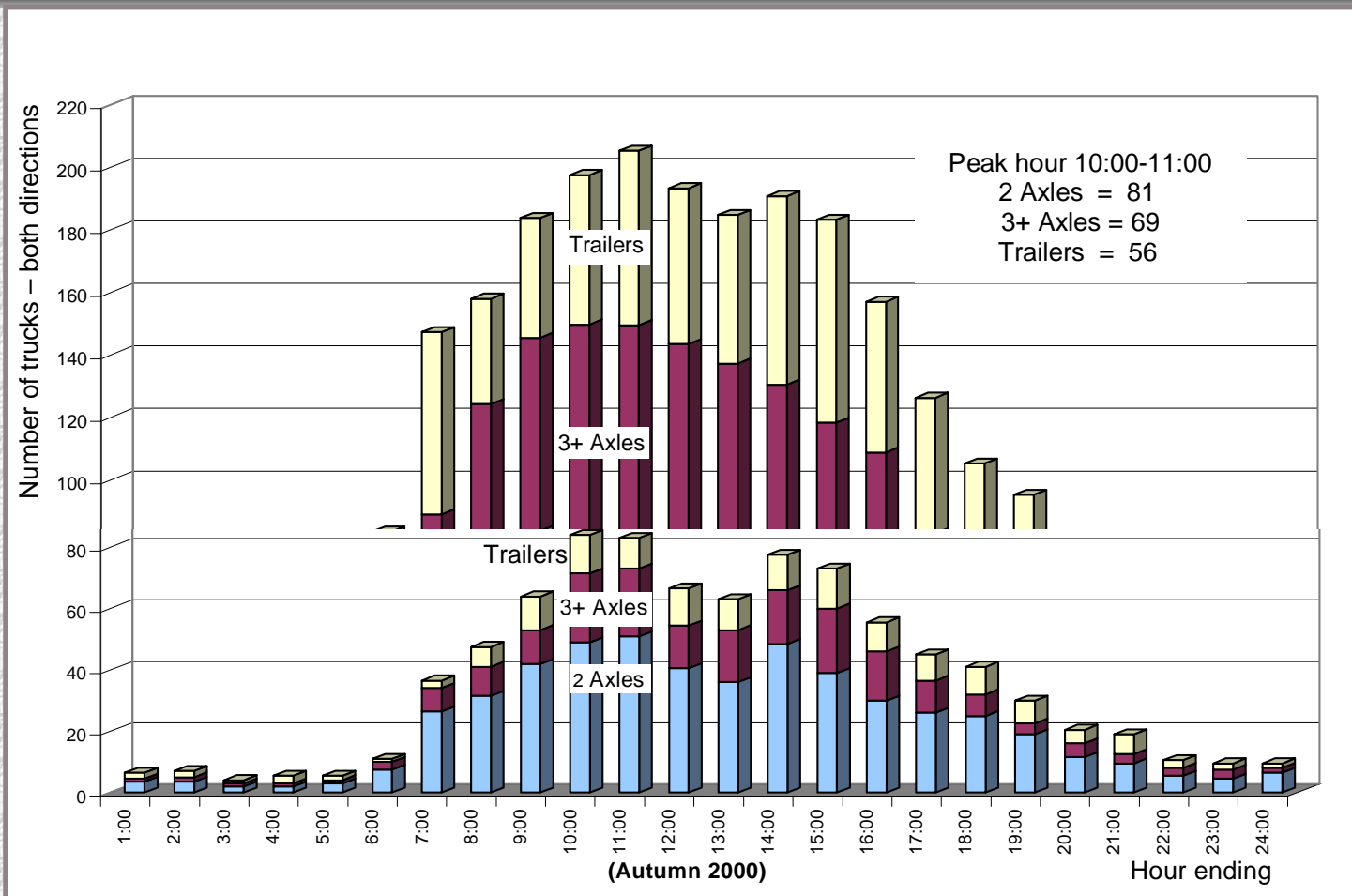
Classification of Trucks



Hourly Distribution of Trucks

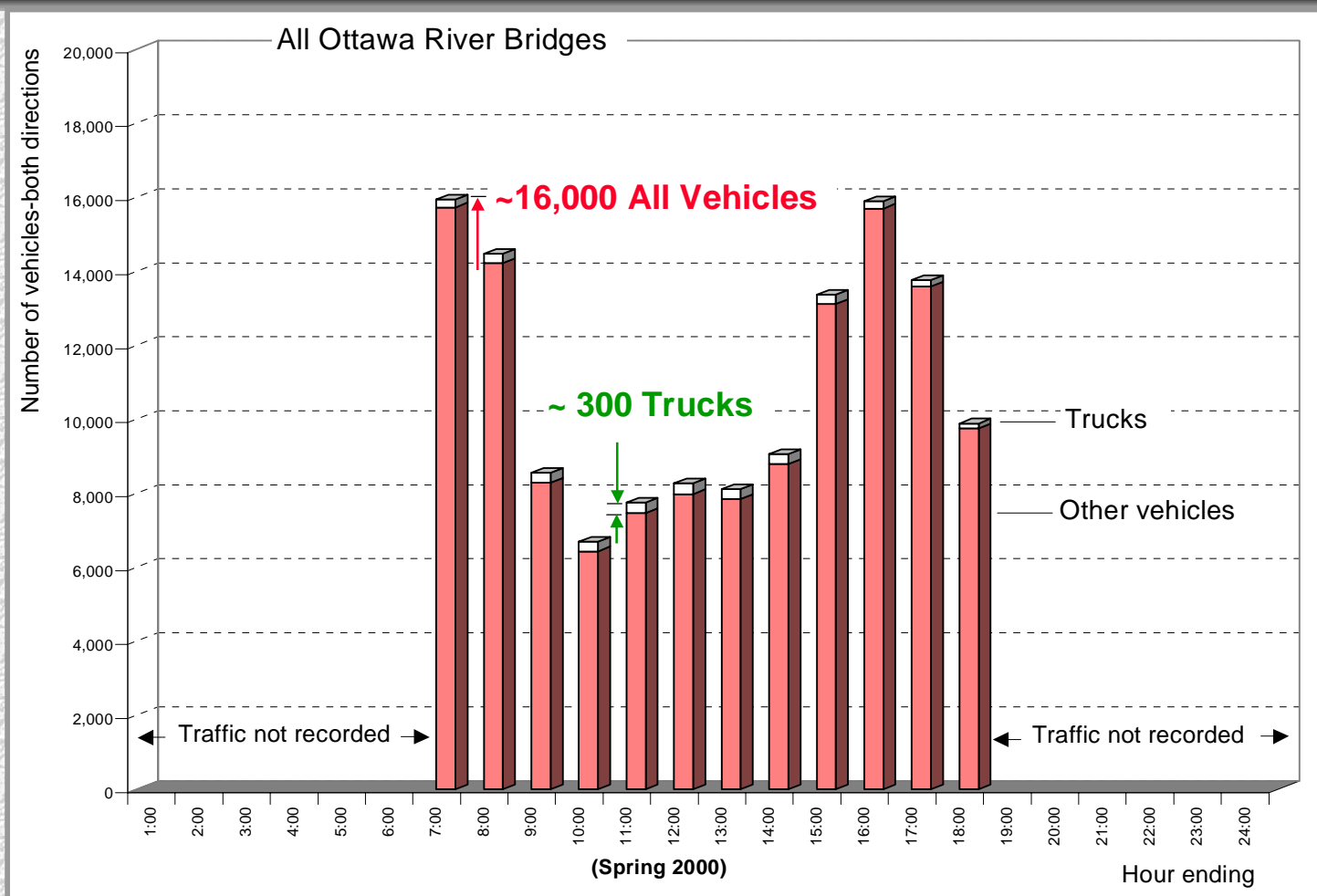
MacDonald-Cartier Bridge (Both directions)

Chaudière Bridge (Both directions)



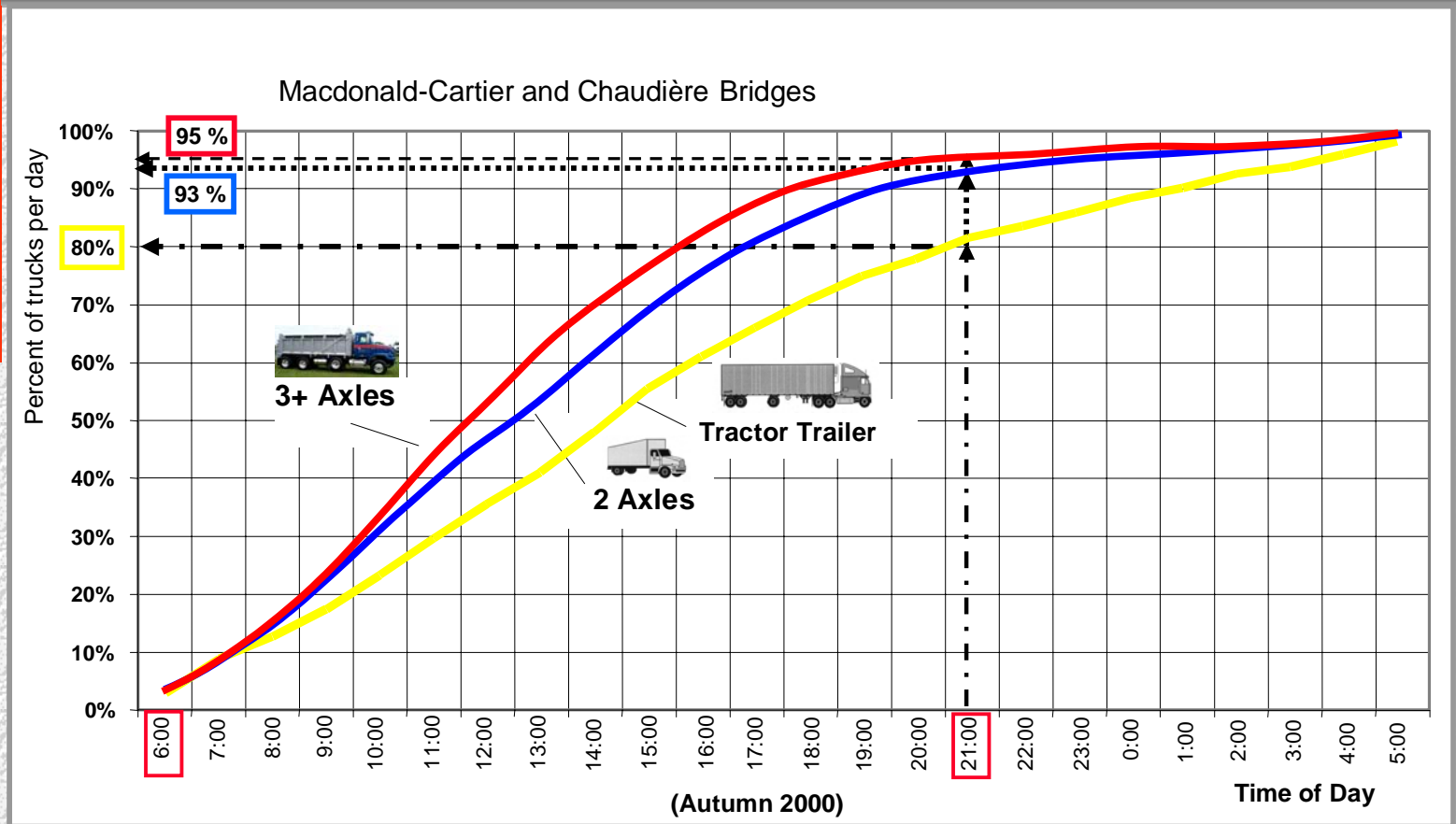
Hourly Vehicle Traffic Volumes

All Ottawa River Bridges (Both directions)



Cumulative Truck Traffic

By Truck Type – (6am-6am)



Survey Expansion Factors

Methodology

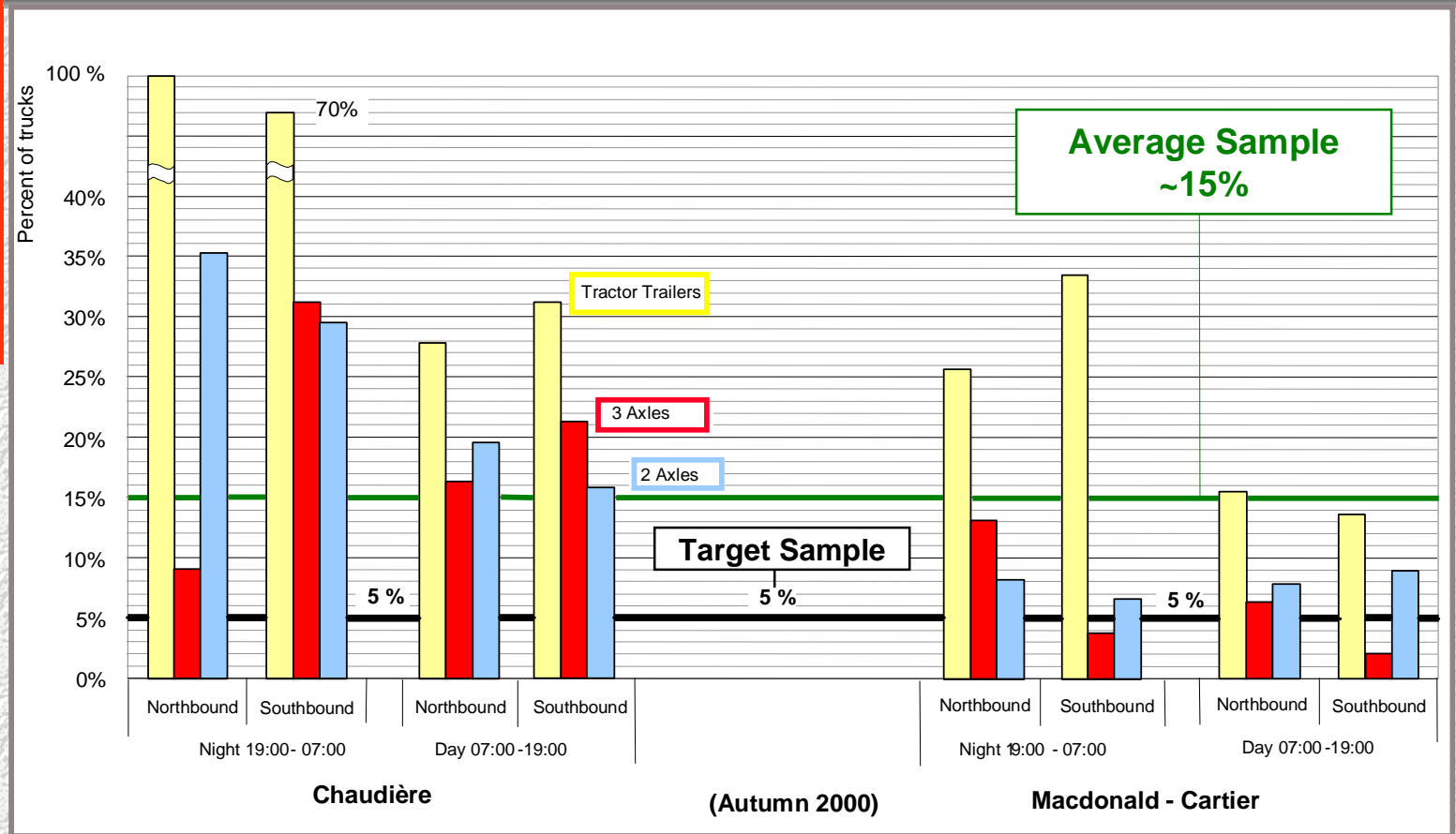
- **By Bridge**
 - *Chaudière and MacDonald-Cartier*

- **By Direction**
 - *Northbound and Southbound*

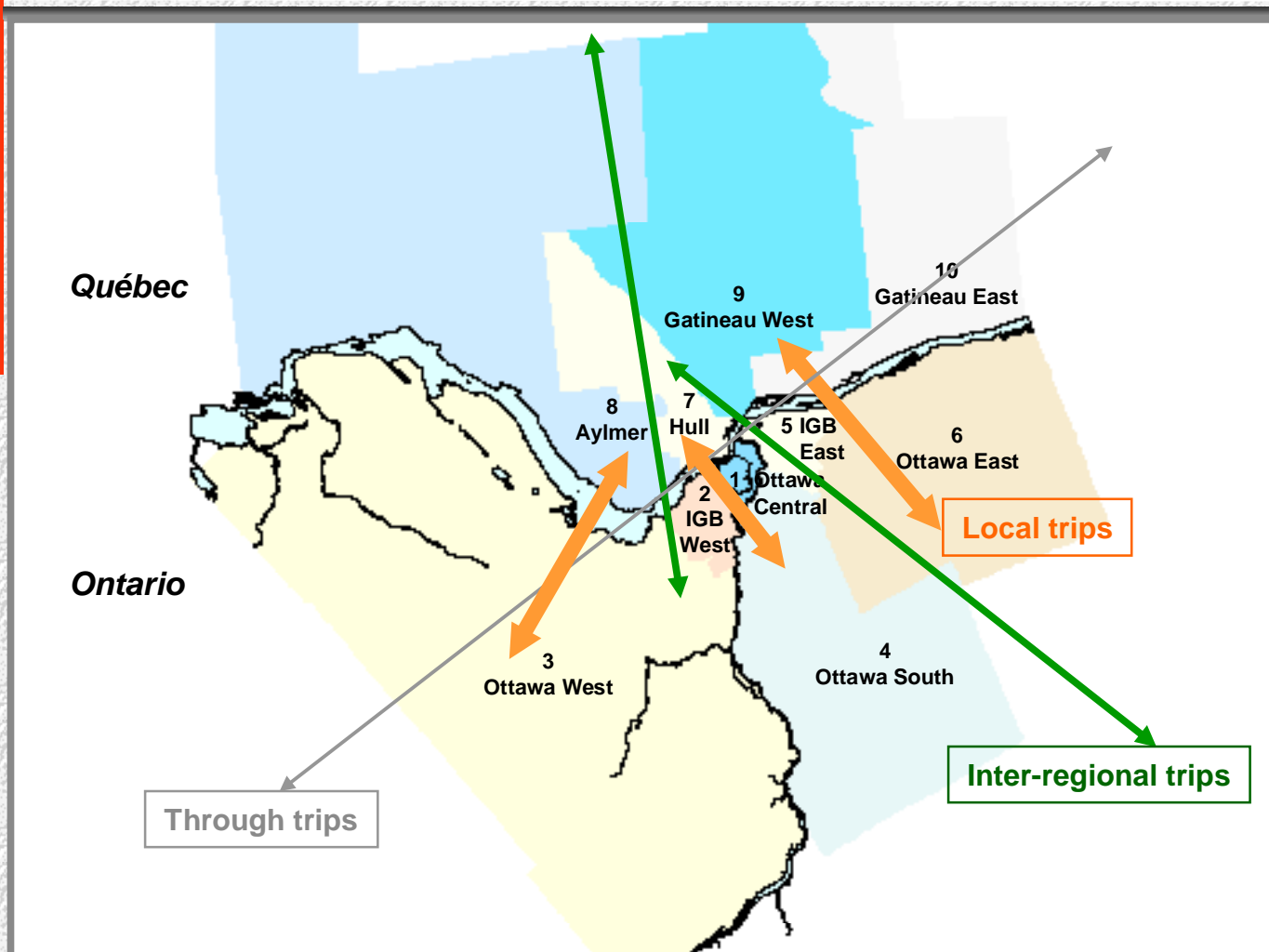
- **By Vehicle Type**
 - *2 Axle, 3+ Axle and Tractor Trailer*

- **By Time Period**
 - *Day (07:00-19:00)*
 - *Night (19:00-07:00)*

Sample Size By Bridge and Time of Day

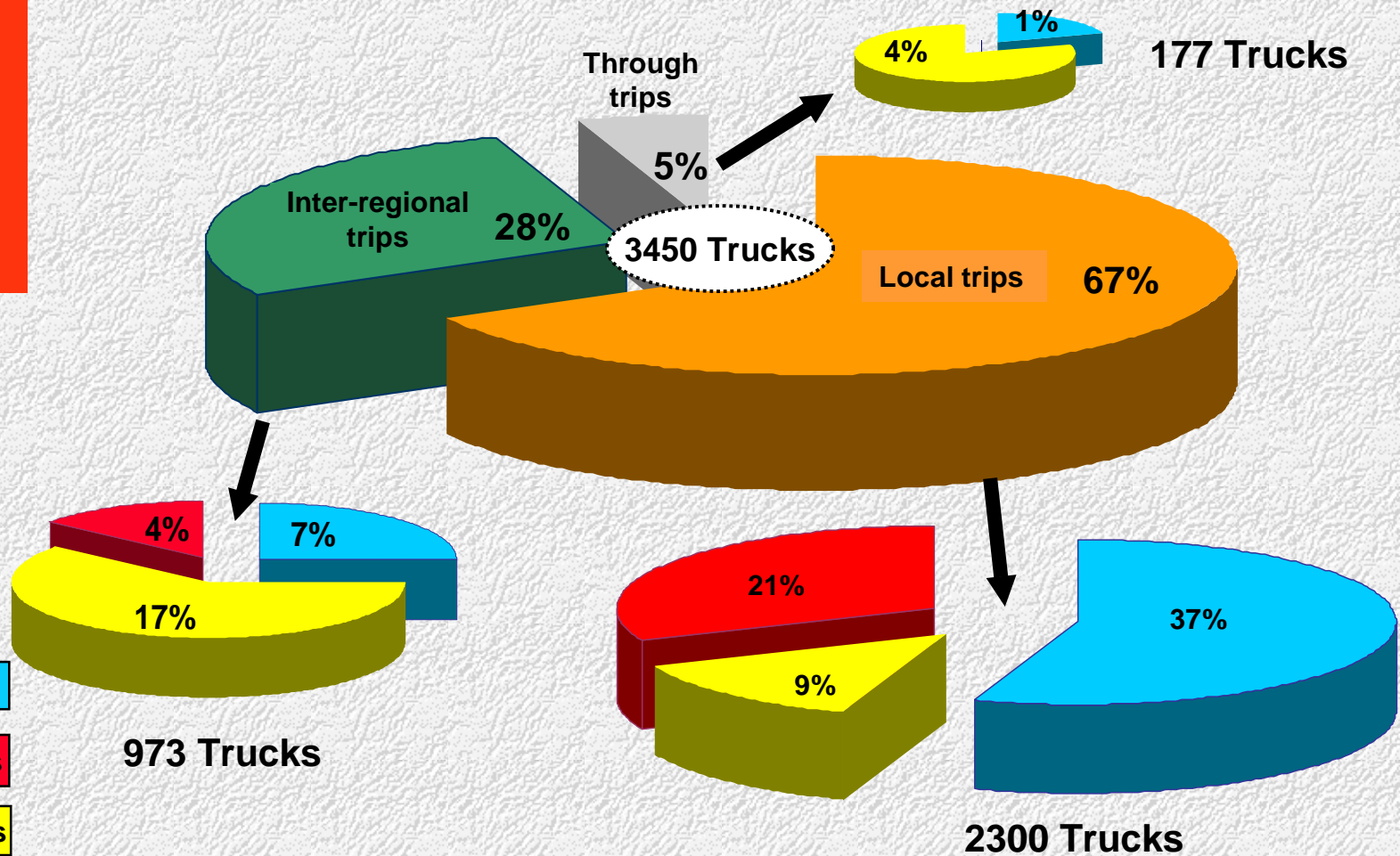


Truck trip types (10 District System)



Trip Characteristics and Patterns

Autumn '2000 (Chaudière and MacDonald-Cartier Bridge)



2 Axle Trucks

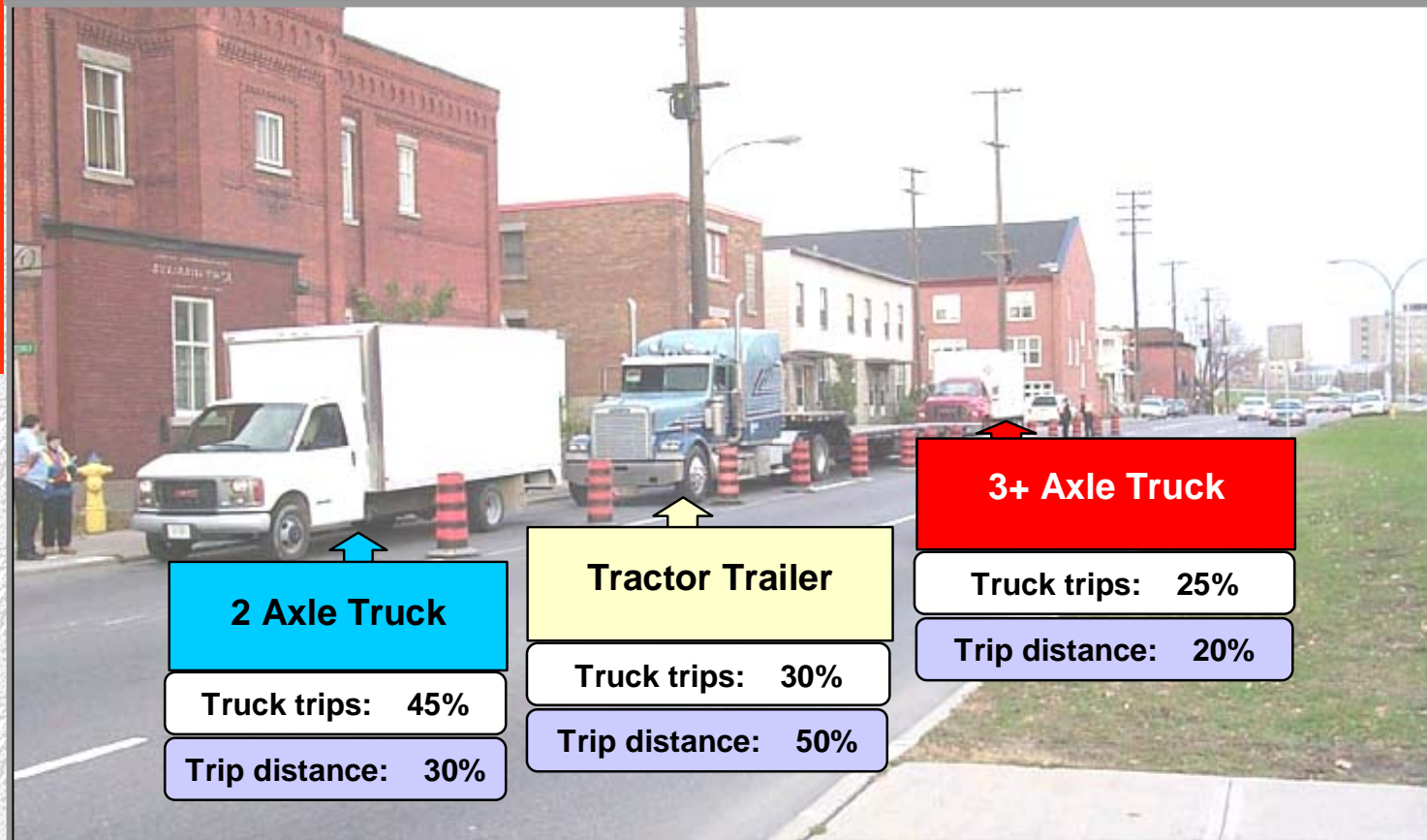
3+ Axle Trucks

Tractor Trailers

TRADS

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Truck Trip Composition and Trip Distance



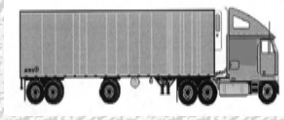
Daily Commodity Flow



2 AXLE TRUCKS

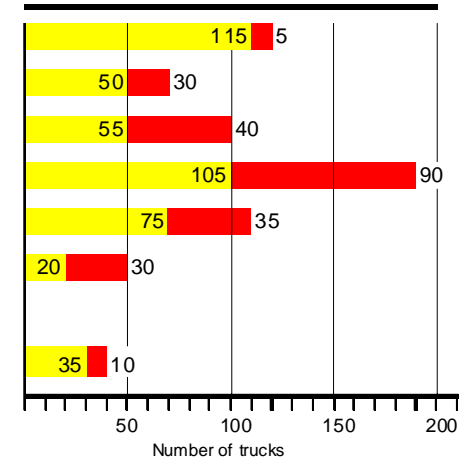
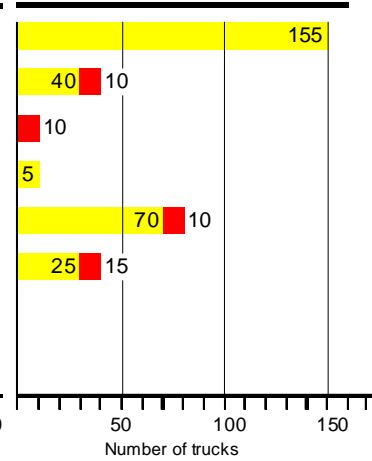
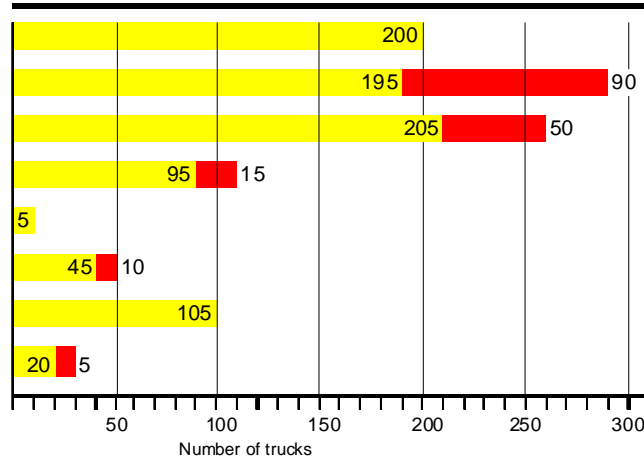


3+ AXLE TRUCKS



TRACTOR TRAILERS

- 1 = Construction Materials
- 2 = Food and Beverage
- 3 = General Merchandise
- 4 = Paper & Paper Products
- 5 = Wood & Wood Products
- 6 = Petroleum/Chemicals
- 7 = Business Supplies
- 8 = Auto /Vehicles & Parts

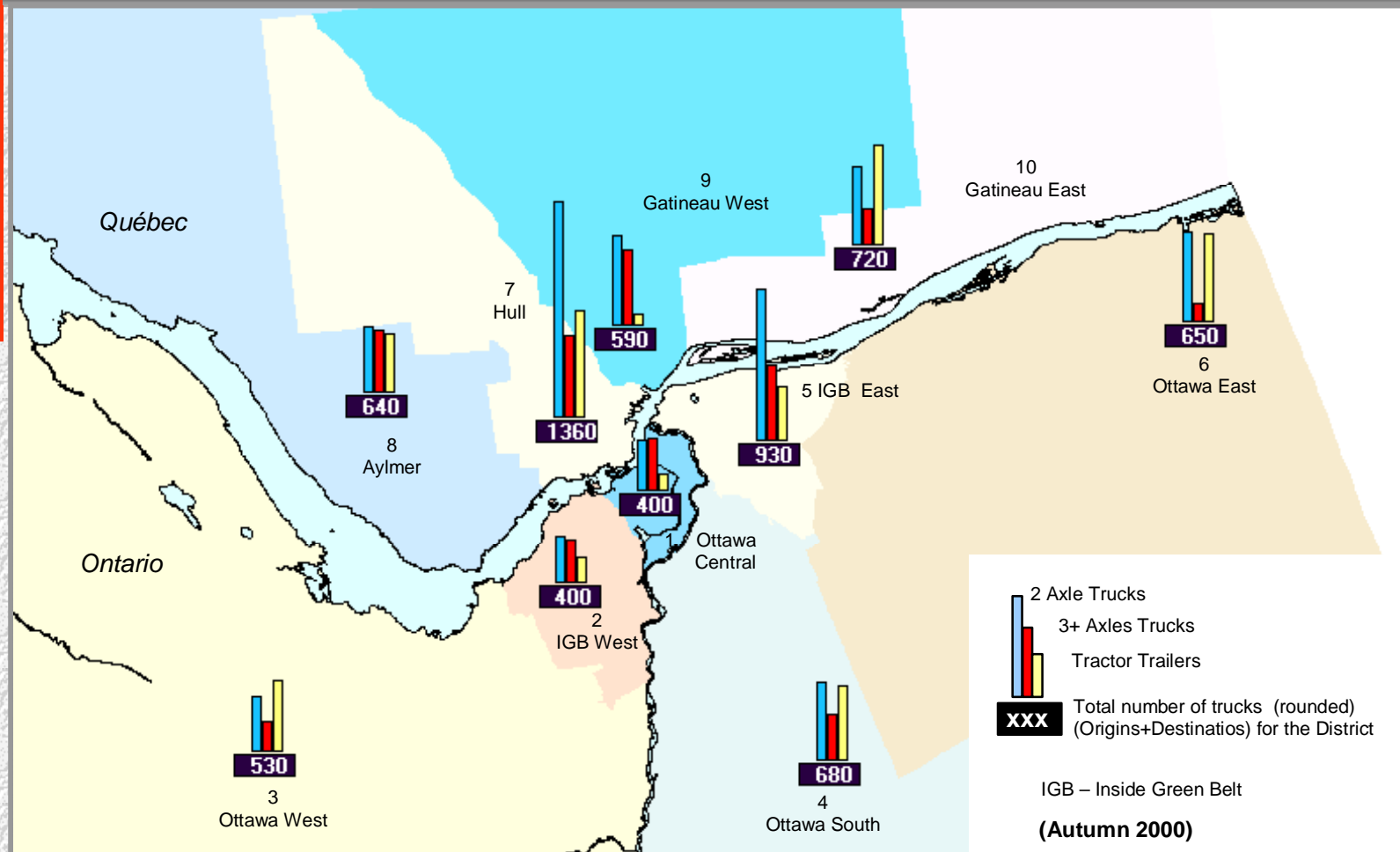


	Day	Night	(24H)	Day	Night	(24H)	Day	Night	(24H)
Trucks with Commodities	870	170	1040	295	45	340	455	240	695
Trucks without Commodities	385	125	510	465	75	540	240	85	325
Total Trucks	1255	295	1550	760	120	880	695	325	1020

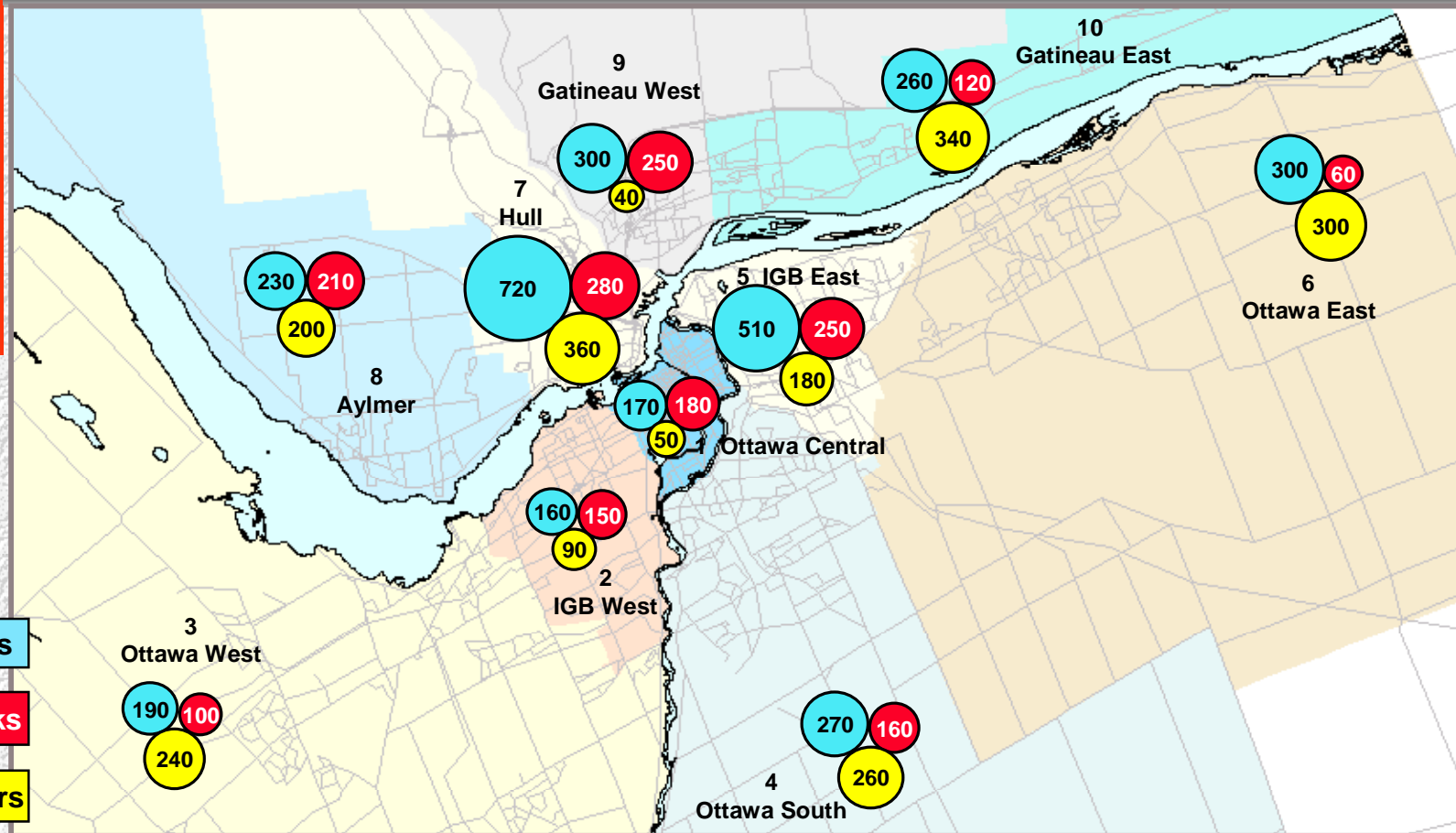


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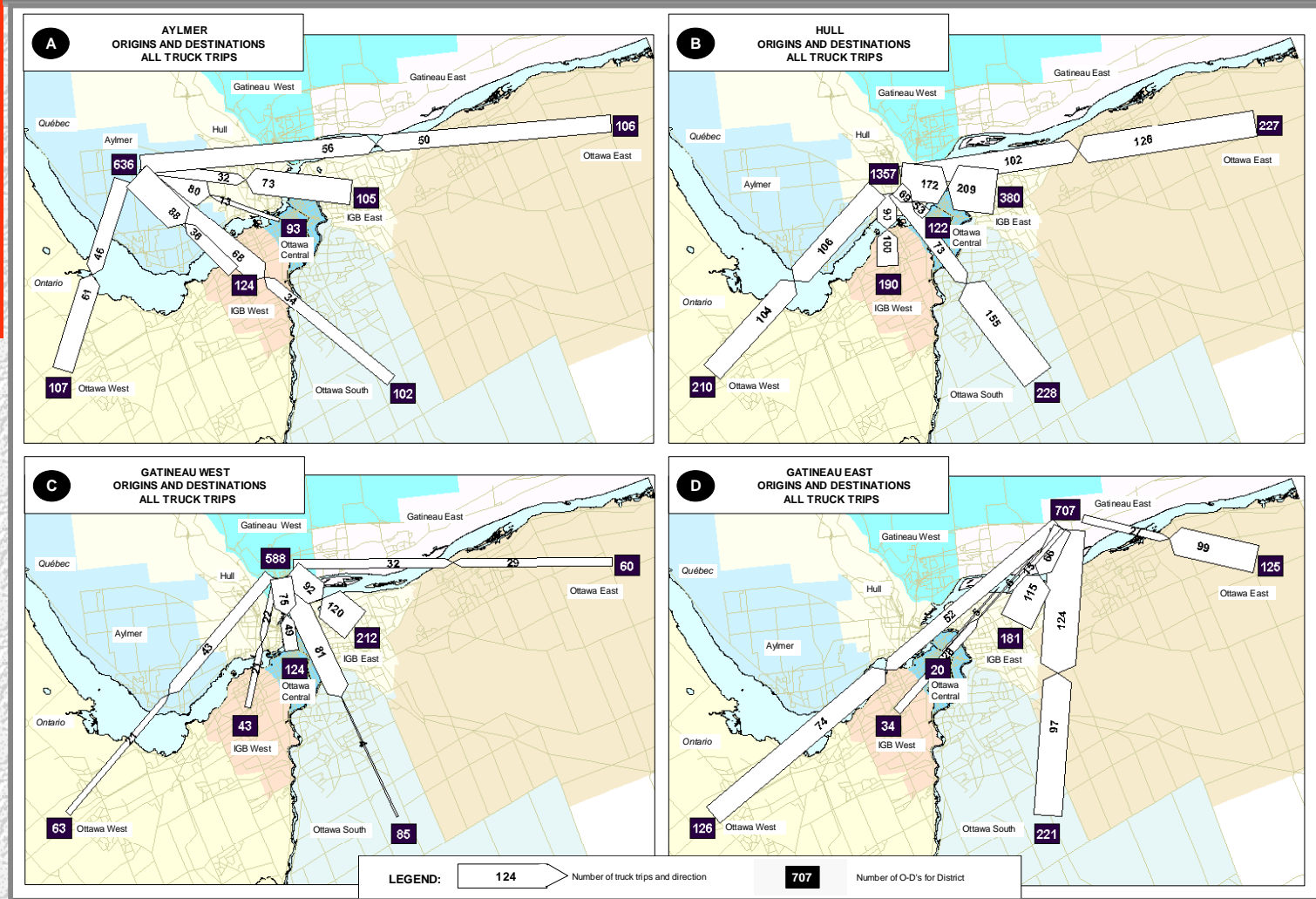
Distribution of Origins and Destinations (10 District System)



Concentration of Truck Trips by Type (Trip Origins + Destinations)

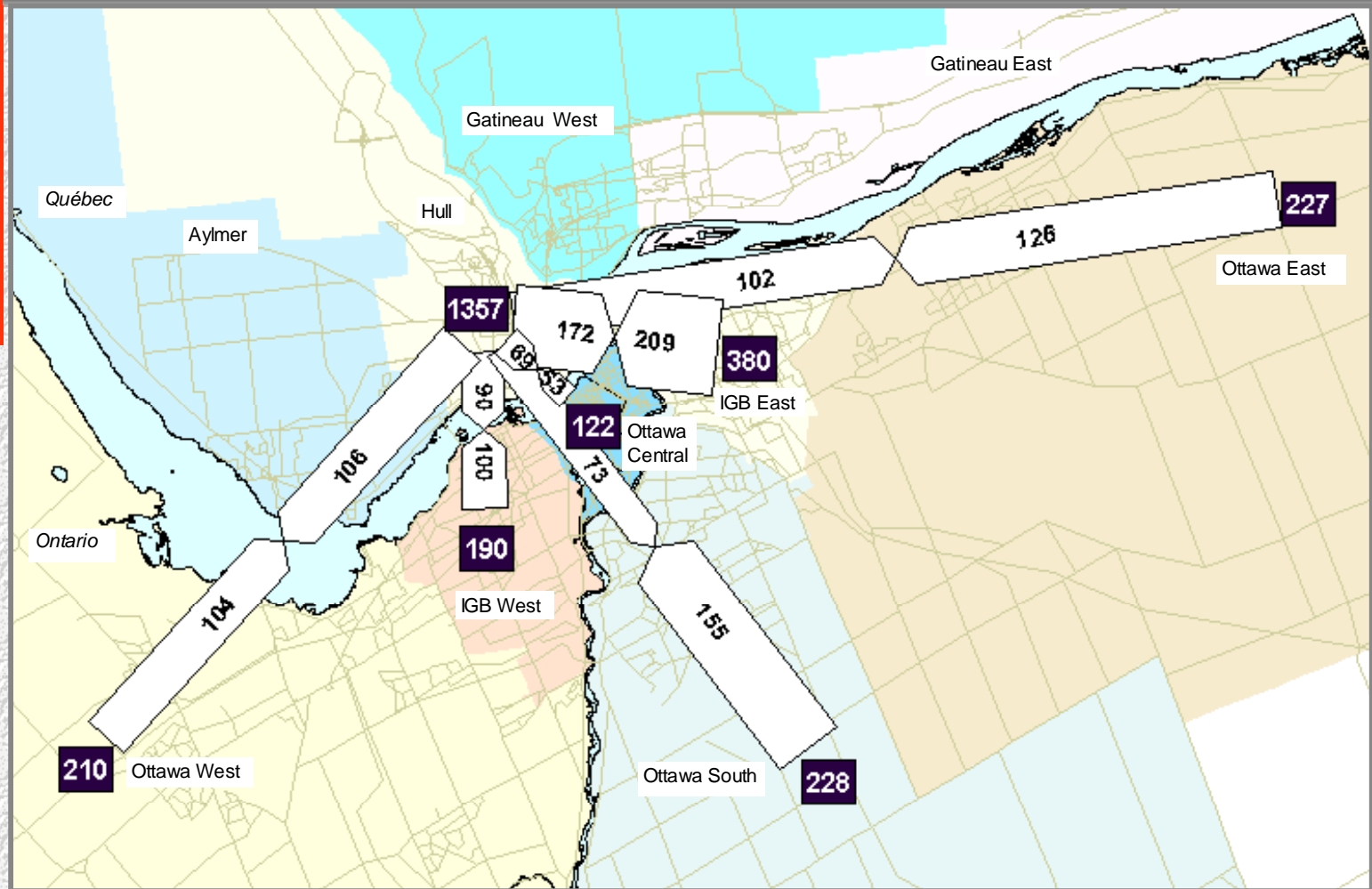


Daily Origin-Destination Desire Lines All Truck Trips



Daily Origin-Destination Desire Lines

All Truck Trips (From/To Hull)



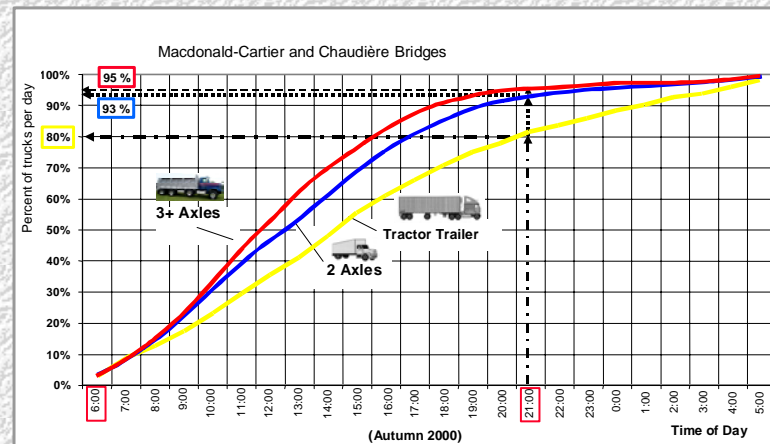
Summary

- **an effective database of high quality, strong and meaningful information for application in future transportation planning activities**
- **a substantiation for using the data collected in the 2000 interprovincial truck surveys in future interprovincial transportation studies**
- **does not address specific transportation issues**

Summary

Continued

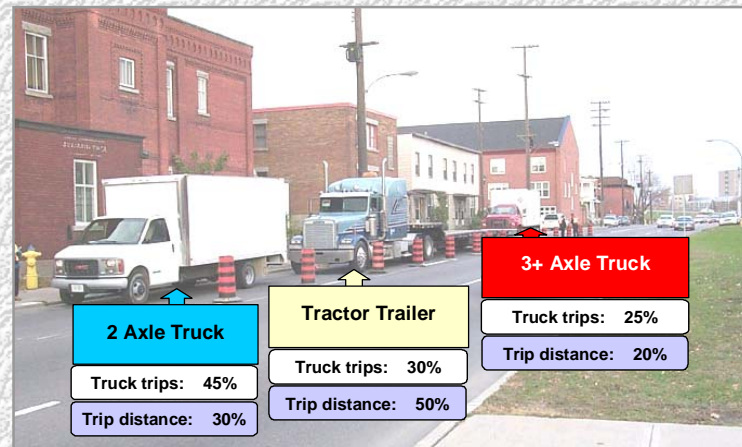
- the basis for a more thorough understanding of interprovincial truck movements



Summary

Continued

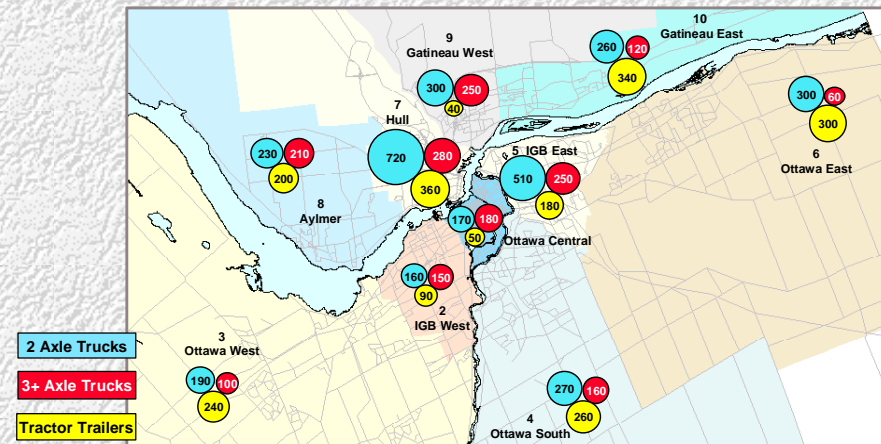
- an efficient means of evaluating costs and benefits in assessing alternative solutions to interprovincial truck travel issues



Summary

Continued

- a thorough understanding of the interprovincial movement patterns, origins and destinations, and characteristics of trucks in the NCR



Summary

Continued

- a demonstration of the potential applications of the database

