

REPORT TO COMMITTEE OF THE WHOLE APRIL 8, 2002

THE IMPACT OF THE AUTOMOTIVE SECTOR SLOWDOWN ON VAUGHAN'S ECONOMY

Recommendation

The Commissioner of Development Services and Public Works recommends:
That the following report be received for information purpose only.

Purpose

To provide Council with an analysis of "The IMPACT OF THE AUTOMOTIVE SECTOR SLOWDOWN ON VAUGHAN'S ECONOMY"

Background - Analysis and Options

In February 2001, an 86 page study "The Impact of The Automotive Sector Slowdown on Vaughan's Economy" was prepared by staff. It is significant to note that the predictions contained in last year's study have come true. This study is available from Technology Development Division upon request. The following is an executive summary update to the study. It incorporates the key events which have occurred in the past year, and staff's economic predictions for the coming year.

Executive Summary Update of "The Impact of The Automotive Sector Slowdown on Vaughan's Economy" – February 2002:

The impact of economic downturn is a ripple effect. At its worst, it eliminates jobs, construction, development, and so on... The ripples began from the beginning of 2001. The epicenters were the auto industry and hi-tech industries, especially the telecommunication industry. It started with DaimlerChrysler's announcement on January 29, 2001: "The company is shaving 26,000 jobs worldwide, a disproportionately high 4,300 of these jobs in Canada". From the moment of the announcement, ripples fanned out from the DaimlerChrysler plants to the hundreds of primary suppliers that feed them - parts factories flung far and wide across Ontario and the U.S.

Production slowdowns at the factories then multiplied into smaller ripples of scaled-back orders for the secondary companies that supply the suppliers. Those Tier 2 suppliers, in turn, were dependent on more suppliers. All, ultimately, felt the pull of an auto industry on the ebb, and the North American economy entered into recession.

This effect was strongly enhanced by:

- the events of "September 11",
- the news which Ford announced on January 11, 2002 (Ford said it would slash 35,000 jobs worldwide. Of those, 22,000 will be in North America, including Ford's Ontario Oakville Truck plant where approximately 1,400 hourly and 100 salaried jobs will be eliminated.);
- and the news which GM announced on February 4, 2002 (General Motors Corp. is eliminating 932 jobs at two St. Catharines' plants).

Recent various economic indices (i.e. unemployment rate, inventory rate, quarterly GDP...), suggest that the economic situation is stabilizing, and possibly beginning to start recovery. It is not clear how robust the North American economic recovery will be. It is still quite possible that the economy may follow the same pattern as the Japanese economy did in the past decade, because there are so many similarities between today's North American economic situation and the Japanese economic situation a decade ago. The Japanese economy recovery pattern for the past decade was an "up and down", "up and down" pattern.

Naturally, the City of Vaughan's automotive businesses and overall local economy will not be able to avoid this ripple effect. Staff through their research have attempted to address several important questions in their report:

- What is the exact economic picture that we have today?
- What is the degree of concern and impact for automotive related companies in the City of Vaughan?
- What is the impact of this economic downturn on the City of Vaughan's economy?

Conclusion

- The Canadian economy will grow between 0 to 1.5 per cent in the first half of the year 2002, and 1 to 2.9 per cent in the second half of the year 2002;
- Year 2002 automotive production in Canada will be reduced by further 4 to 8 per cent, from year 2001 reduction of 10 to 15 per cent;
- Vaughan companies eliminated about 500 to 750 automotive parts and accessories manufacturing jobs in 2001, and may eliminate a forecasted 350 to 500 automotive parts and accessories manufacturing jobs in 2002;
- Total eliminated jobs in the City of Vaughan for the year 2001 and 2002 combined (caused by this economic downturn) will be approximately 1200 to 2800, which is 0.9 to 2.2% of total number of jobs in the City of Vaughan;
- The most effected employment areas in the City of Vaughan will be:
 - Tudor East Employment Area
 - Keele Employment Area
 - Tudor West Employment Area
 - Emery Creek Employment Area
 - Pine Valley Employment Area(In Vaughan, automotive related businesses are concentrated in these employment areas.)
- City of Vaughan Economic Base Multiplier: $M = 3.1205$
Meaning: in the City of Vaughan, 1 (one) basic sector job (i.e. automotive manufacturing job) loss or addition will result in a total loss or addition

respectively of 3.1 jobs city wide (including the 1 (one) BASIC sector job (i.e. automotive manufacturing job) plus 2.1 non basic (i.e. health care job) City wide jobs).

Attachments

Background information from “ The Impact of The Automotive Sector Slowdown on Vaughan’s Economy – Feb. 2001”

I. Background Premises

1. Definitions
2. Automotive Industry Employment Snapshot (Canada and Vaughan)
3. Relation Between Automotive Related Industry and Its Employment
4. Relation Between Production and Employment in the Manufacturing Industry

II. Related Charts and Graphs

1. Distribution of Business By Employment Area in the City of Vaughan
2. City of Vaughan Automotive Related Companies
3. Automotive Related Employees in Vaughan – by employment area & by automotive related industry group
4. Automotive Related Companies in Vaughan – by employment area & by automotive related industry group
5. Automotive Manufacturing Companies in Vaughan – by number of employees
6. Automotive Wholesale Trade Companies in Vaughan – by number of employees
7. Automotive Retail Trade Companies in Vaughan – by number of employees
8. Automotive Manufacturing Companies in Vaughan – by number of employees

III. Table of Contents of the Study “ The Impact of The Automotive Sector Slowdown on Vaughan’s Economy – Feb. 2001” (full study available upon request from Technology Development Division, ETDD)

Report prepared by:

Lucille King, Manager of Technology Development Division, ext. 8653
Fan Cheng, Senior Economic Researcher/Technology Specialist, ext. 8430

Respectfully submitted,

Frank Miele
Commissioner of Development Services and Public Works

I. BACKGROUND PREMISES

1. Definitions

In this research, the following definitions have been used:

Automotive Related Industry: All activities related with automotive production. This industry is divided into three groups:

- a. **Automotive Manufacturing**, including:
 Motor Vehicle Assembly (NAIC: 3361);
 Truck Bodies and Trailers (NAIC: 3362);
 Automotive Parts and Accessories (NAIC: 3363)
- b. **Automotive Dealers / Distribution**, including:
 Motor Vehicle and Parts Wholesaler – Distributors (NAIC: 415)
 Motor Vehicle and Parts Dealers (NAIC: 441)
- c. **Automotive Aftermarket**, including:
 Insurance Carriers and Relative Activities (NAIC: 524)
 Automotive Equipment Rental and Leasing (NAIC: 5321)
 Automotive Repair and Maintenance (NAIC: 8111)

2. Automotive Industry Employment Snapshot

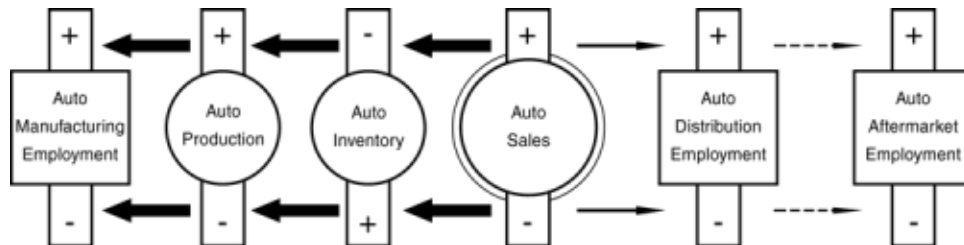
Table 1. Canada and City of Vaughan Automotive Industry Jobs Snapshot

	Automotive Manufacturing			Automotive Dealers / Distribution	Automotive Aftermarket	Total
	Motor Vehicle Assembly	Truck Bodies and Trailers	Automotive Parts and Accessories			
Canada	51,000	16,000	92,000	158,000	222,000	539,000
City of Vaughan	0	0	6,222	2,866	1,953	11,041

sources: TD Bank Estimates ; Industry Canada ; City of Vaughan Economic & Technology Development Department

3. Relation Between Automotive Related Industry and Its Employment

Figure 1. Automotive Related Industry and Employment Relation Chart

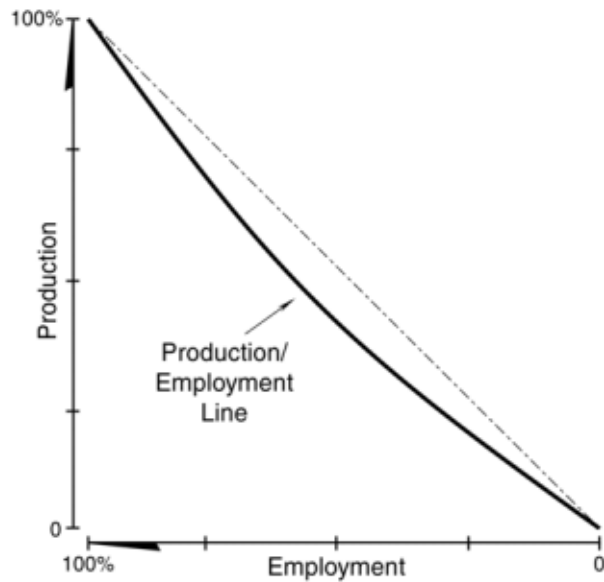


From this chart, we can see:

- Auto Sales is definitely the key element, providing direct, strong, and almost real time relation with Auto Inventory, Auto Production, and Auto Manufacturing Employment;
- Auto Manufacturing Employment has the strongest relation with Auto Sales. When sales increase, inventory will fall, then more production would be required, resulting in more Auto Manufacturing Employment;
- Auto Distribution Employment has certain ties with Auto Sales, but not as strong as Auto Manufacturing Employment has. The reason is that distribution increase or decrease directly effects a company's market share. So, companies usually make very careful decisions on a distribution employment cut;
- Auto Aftermarket Employment is subject to the least direct influence from Auto Sales. It is effected by other factors, other than Auto Sales.

4. Relation Between Production and Employment in the Manufacturing Industry

Figure 2. Production and Employment in the Manufacturing Industry Relation Chart



From this Chart, we can see:

- When employment is increased, production will also be increased, and vice versa;
- Production/Employment Curve demonstrates a slight curve which means; normally the production change percentage is close (slightly higher) to the employment change percentage.

Distribution of Businesses By Employment Area in the City of Vaughan:

Employment Area	# of Businesses	# of Employees
Area 1: Highway 427 West Employment Area	25	1,414
Area 2: Highway 427 East Employment Area	7	106
Area 3: West Woodbridge Employment Area	367	4,677
Area 4: Pine Valley Employment Area	687	8,661
Area 5: Emery Creek Employment Area	11	2,082
Area 6: Steeles West Employment Area	563	7,185
Area 7: Weston 400 North Employment Area	30	263
Area 8: Weston 400 Employment Area	345	5,599
Area 9: Vaughan 400 North Employment Area	96	3,949
Area 10: Jane North Employment Area	123	3,070
Area 11: Vaughan 400 Employment Area	885	13,409
Area 12: Jane South Employment Area	267	4,827
Area 13: Steeles East Employment Area	126	2,090
Area 14: Keele Employment Area	749	18,444
Area 15: Tudor West Employment Area	97	3,457
Area 16: Tudor East Employment Area	274	8,118
Area 17: Langstaff Employment Area	399	6,896
Area 18: Steeles Campus Employment Area	299	5,285
Area 19: Maple Employment Area	66	1,470



Source: Economic and Technology Development Department, City of Vaughan, 2001

Table 3. CITY OF VAUGHAN AUTOMOTIVE RELATED COMPANIES

City Wide																					
Automotive Manufacturing								Automotive Dealers/Distribution						Aftermarket							
Assemble		Body & Trailer		Parts & Access.		Subtotal		Wholesale Trade		Retail Trade		Subtotal		Rental & Leasing		Repair & Main.		Insur. & Related		Subtotal	
Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees	Companies	Employees
0	0	0	0	55	6222	55	6222	59	1038	90	1828	149	2866	21	172	323	1127	57	654	401	1953
Total Basic Auto Employment										Total Non Basic Auto Employment											
Companies						Employees				Companies						Employees					
114						7260				491						3781					
Projected mainly negative impact from this downturn													Projected mainly neutral or positive impact from this downturn								
Companies						Employees						Companies				Employees					
204						9088						401				1953					
Total																					
Companies											Employees										
605											11041										

Source: Economic & Technology Development Department, January 2001.

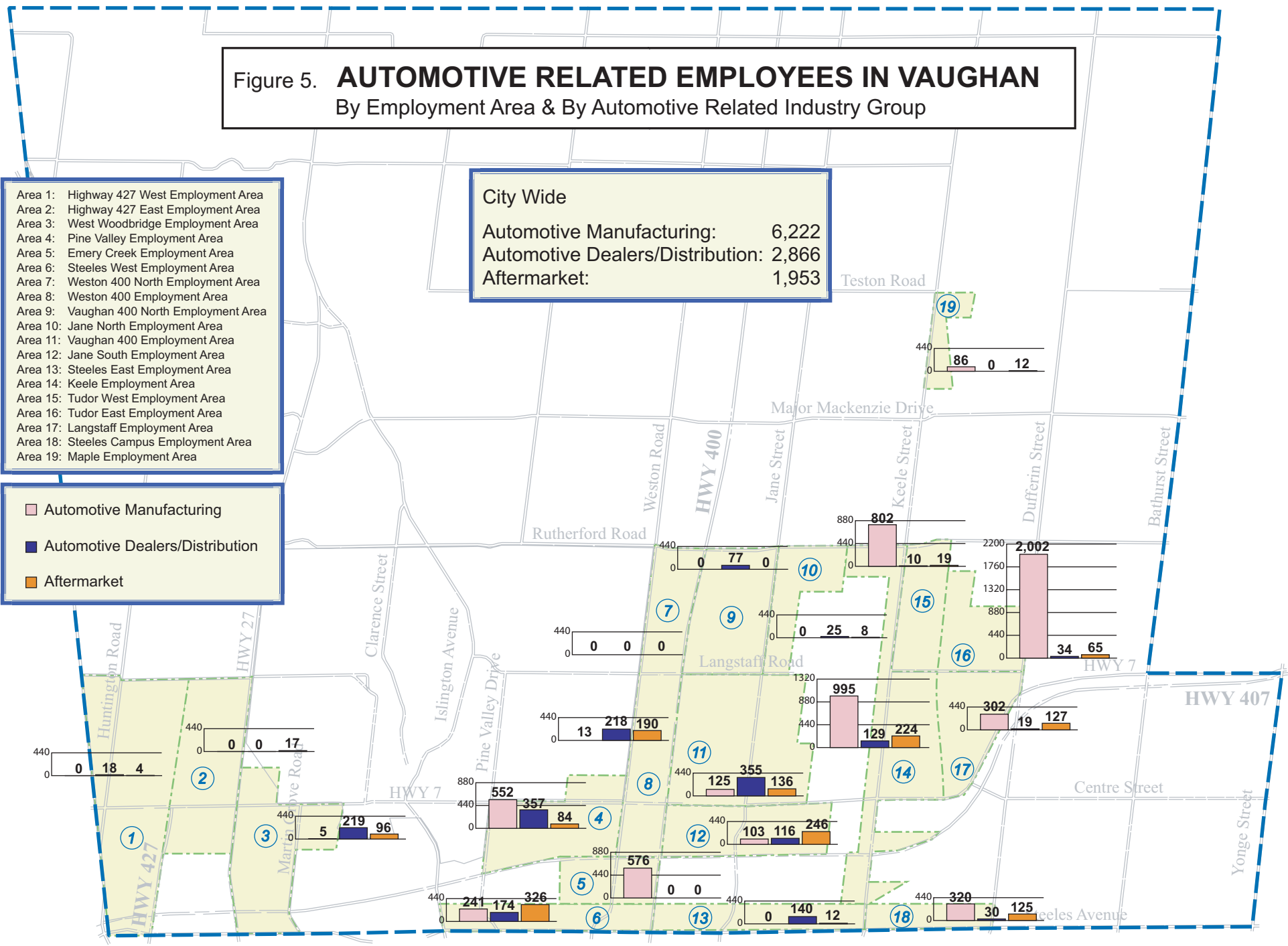
Figure 5. **AUTOMOTIVE RELATED EMPLOYEES IN VAUGHAN**
By Employment Area & By Automotive Related Industry Group

- Area 1: Highway 427 West Employment Area
- Area 2: Highway 427 East Employment Area
- Area 3: West Woodbridge Employment Area
- Area 4: Pine Valley Employment Area
- Area 5: Emery Creek Employment Area
- Area 6: Steeles West Employment Area
- Area 7: Weston 400 North Employment Area
- Area 8: Weston 400 Employment Area
- Area 9: Vaughan 400 North Employment Area
- Area 10: Jane North Employment Area
- Area 11: Vaughan 400 Employment Area
- Area 12: Jane South Employment Area
- Area 13: Steeles East Employment Area
- Area 14: Keele Employment Area
- Area 15: Tudor West Employment Area
- Area 16: Tudor East Employment Area
- Area 17: Langstaff Employment Area
- Area 18: Steeles Campus Employment Area
- Area 19: Maple Employment Area

City Wide

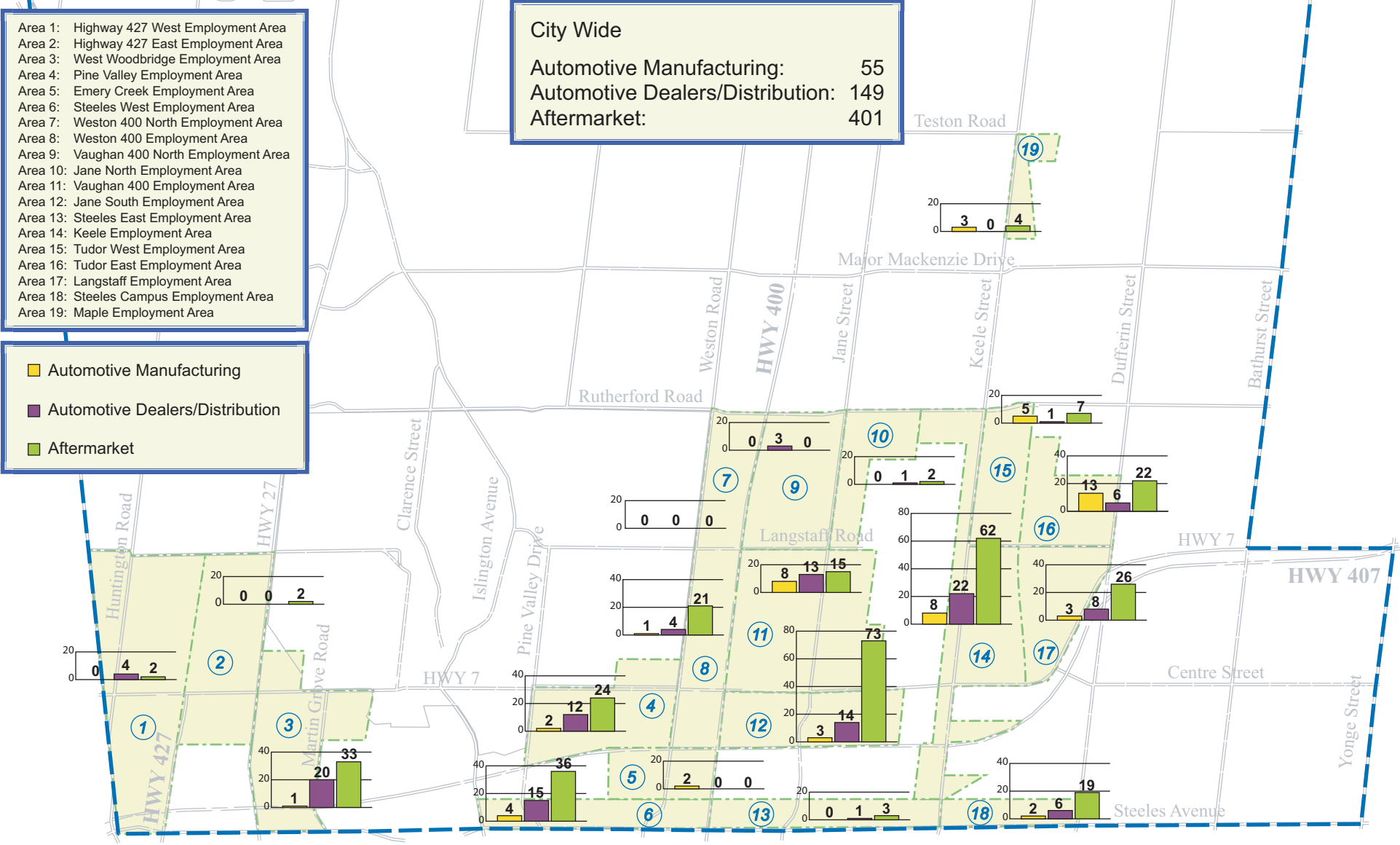
Automotive Manufacturing:	6,222
Automotive Dealers/Distribution:	2,866
Aftermarket:	1,953

- Automotive Manufacturing
- Automotive Dealers/Distribution
- Aftermarket



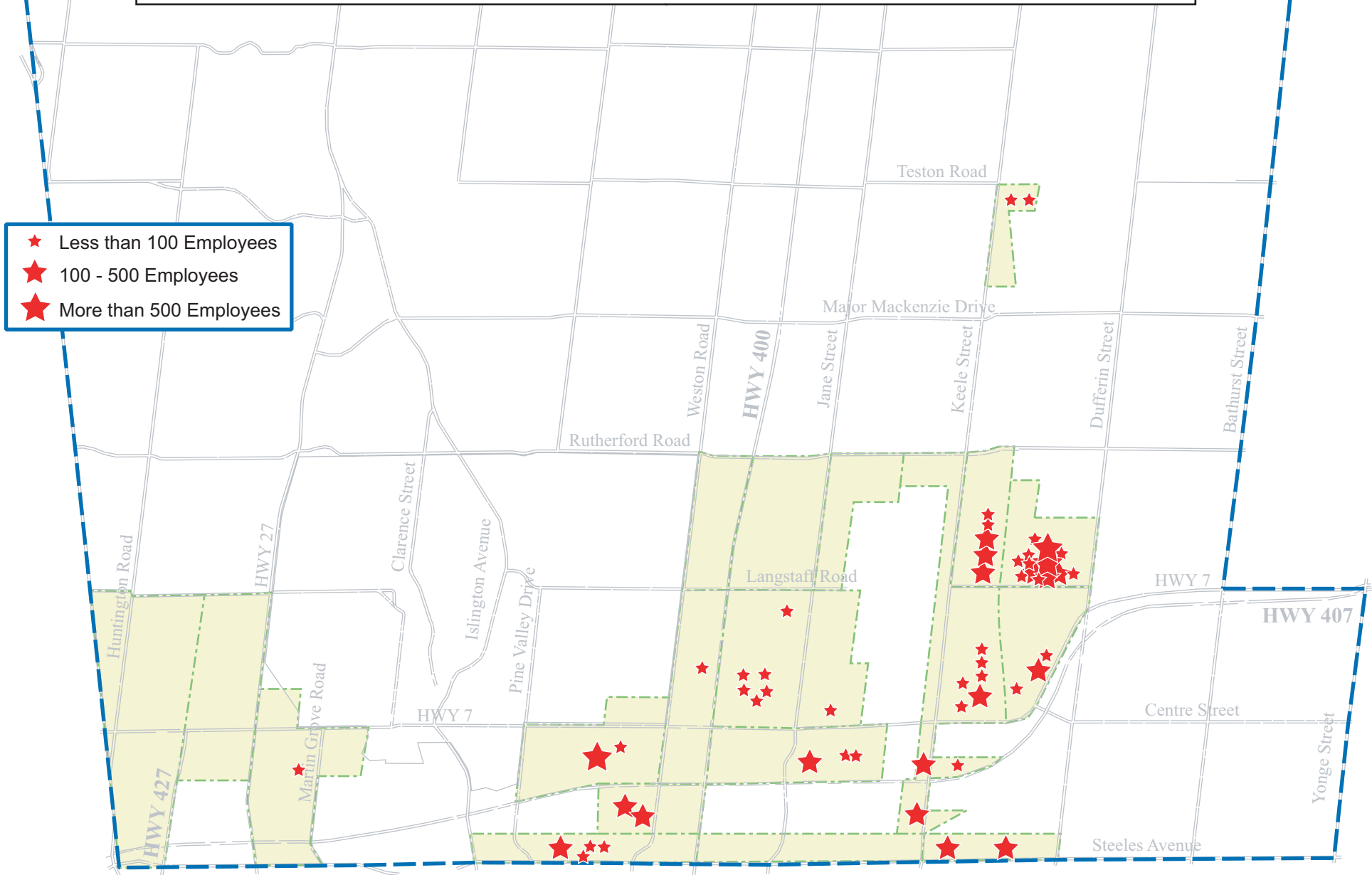
Source: Economic & Technology Development Department, January, 2001.

Figure 6. **AUTOMOTIVE RELATED COMPANIES IN VAUGHAN**
By Employment Area & By Automotive Related Industry Group



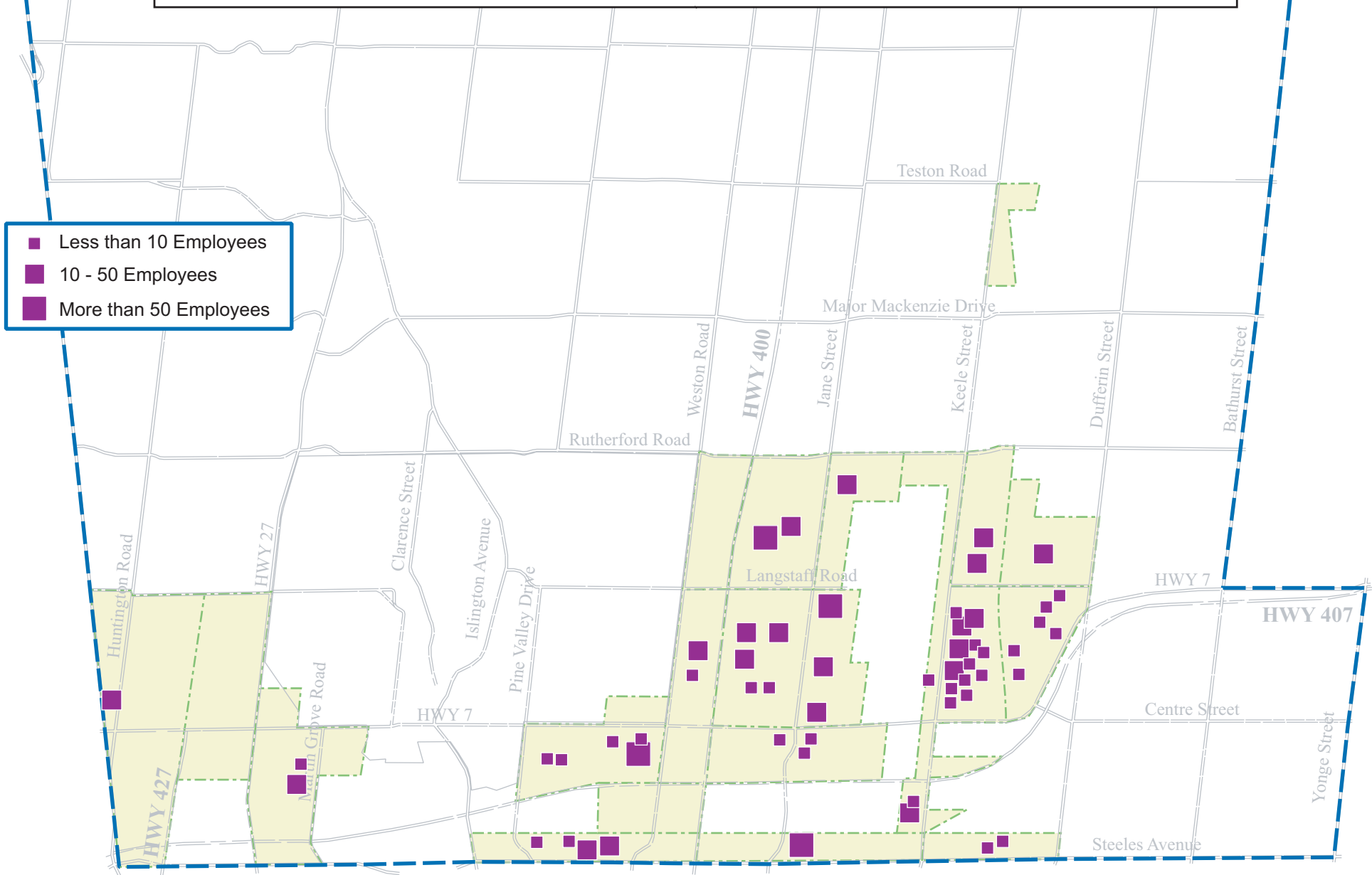
Source: Economic & Technology Development Department, January, 2001.

Figure 7. **AUTOMOTIVE MANUFACTURING COMPANIES IN VAUGHAN**
By Number of Employees



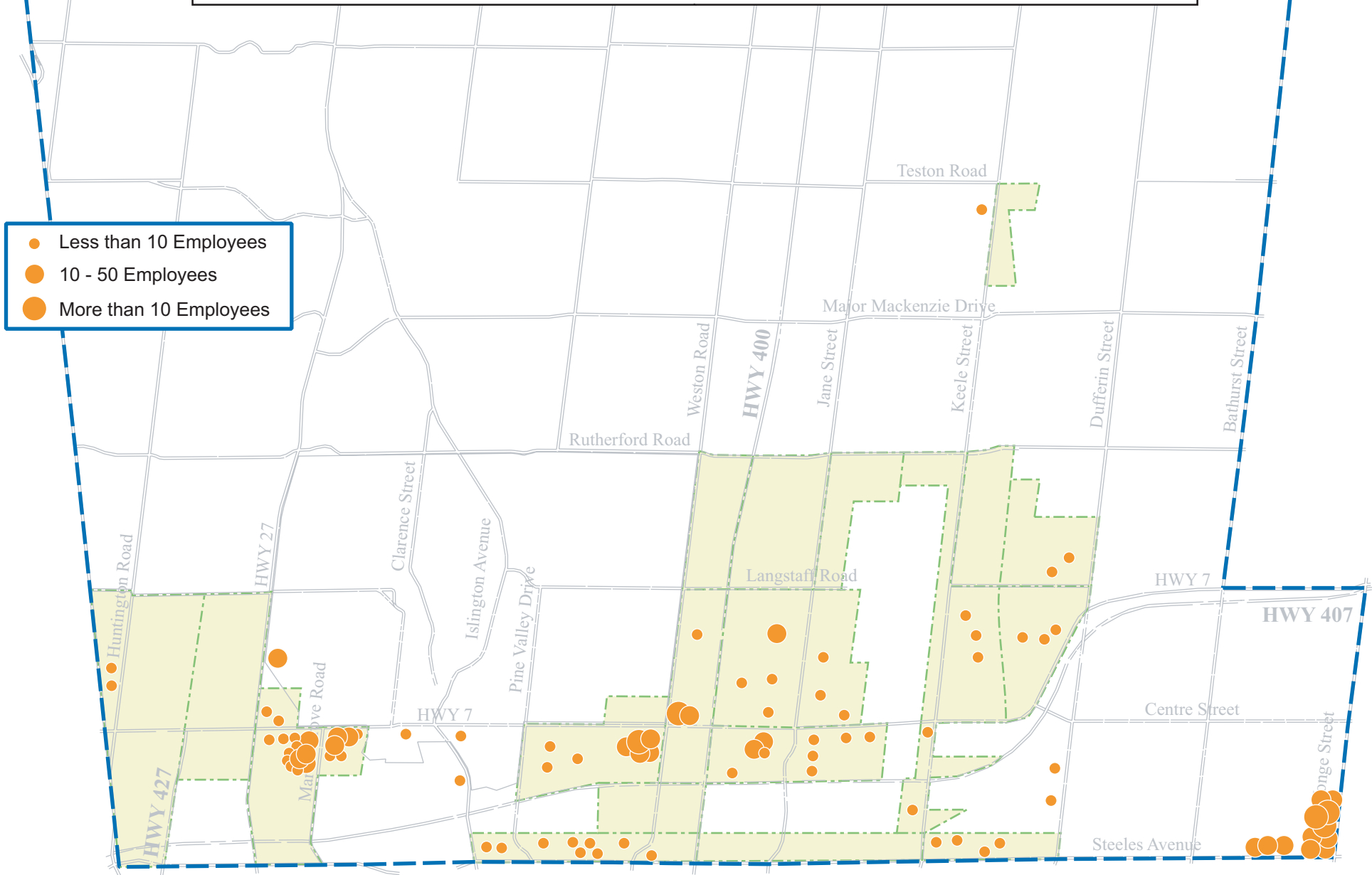
Source: Economic & Technology Development Department, January, 2001.

Figure 8. **AUTOMOTIVE WHOLESALE TRADE COMPANIES IN VAUGHAN**
By Number of Employees



Source: Economic & Technology Development Department, January, 2001.

Figure 9. **AUTOMOTIVE RETAIL TRADE COMPANIES IN VAUGHAN**
By Number of Employees



Source: Economic & Technology Development Department, January, 2001.

THE IMPACT OF AUTOMOTIVE SECTOR SLOWDOWN ON VAUGHAN'S ECONOMY - 2001

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1. City of Vaughan Business and Employment Profile
2. City of Vaughan Basic and Non Basic Employment Analysis by Using Indirect Method: Assumptions Approach, Local Quotient Approach, and Surplus Workers Approach
3. Distribution of Businesses and Automotive Related Businesses by Vaughan Employment Areas:
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IV. CONCLUSION

V. APPENDICES

1. Distribution of (Canadian) Employed People, by Industry
3. NAIC (North American Industrial Code) Index