



Memo

TO Rachel Schrauben, Digital Marketing Specialist
FROM Tim Dempsey and Ben Fulton, Public Sector Consultants
DATE Friday, July 15, 2022
SUBJECT 2022 Buy Nearby Results

Introduction

PSC has updated the 2021 Buy Nearby analysis by estimating the economic benefits to Michigan resulting from consumers switching one in ten of their purchases from remote sellers, i.e., e-commerce, mail-order catalogues, and home-shopping television, to retail stores located in Michigan. It also provides data on the indirect and induced (nonretail sector) jobs and economic activity related to retail industry spending patterns and local spending on goods and services by retail industry employees in Michigan

PSC followed the prior methodology by utilizing national-level data to generate Michigan estimates. The results are displayed in the following series of exhibits.

Results

If Michigan consumers redirected 10 percent of their estimated \$30.3 billion in out-of-state e-commerce and remote sales, equivalent to about \$3 billion, this modest change would have the following effects:

- Increase Michigan employment by more than 16,000 (compared to over 14,000 in 2021)
- Boost labor income (salary and benefits) by about \$660 million (\$533 million in 2021)
- Contribute \$1.2 billion in value-added to the state's economy (\$968 million in 2021)
- Contribute \$2.2 billion in gross economic output (\$1.9 billion in 2021)

Exhibit 1 details the impacts of shifting 10 percent of remote sales to local sales.

EXHIBIT 1. Total Economic Impact of Shifting 10 Percent of Remote Sales to Local Sales—\$2.8 Billion

Impact Type	Employment (Total)	Labor Income (in Millions of Dollars)	Value-Added (in Millions of Dollars)	Output (in Millions of Dollars)
Direct effect	10,024	\$285.3	\$667.9	\$1,233.7
Indirect effect	3,734	\$231.3	\$327.5	\$608.4
Induced effect	2,665	\$143.3	\$240.2	\$420.8
Total Effect	16,423	\$660.0	\$1,235.6	\$2,262.9

Source: Estimated by PSC using IMPLAN economic modeling.

Note: Totals may not sum due to rounding.

Exhibit 2 shows the top 20 industries that would benefit (in terms of employment) from a 10 percent shift from remote purchases to in-state purchases. The largest employment gains would accrue in retail industries, with the greatest benefits occurring in the nonstore, general merchandise, clothing, and electronic retail sectors.

EXHIBIT 2. Top 20 Industries Benefiting from Shifting 10 Percent of Remote Sales to Local Sales, by Employment

IMPLAN Sector	Direct	Indirect and Induced	Total
Retail—Nonstore retailers	4,941	62	5,002
Retail—General merchandise stores	1,254	81	1,335
Retail—Clothing and clothing accessories stores	1,150	26	1,175
Retail—Electronics and appliance stores	769	16	785
Retail—Miscellaneous store retailers	468	47	516
Retail—Health and personal care stores	446	37	483
Retail—Building material and garden equipment and supplies stores	281	23	304
Retail—Sporting goods, hobby, musical instrument and book stores	267	23	289
Retail—Motor vehicle and parts dealers	229	32	261
Retail—Furniture and home furnishings stores	220	16	236
Other real estate	0	610	610
Warehousing and storage	0	428	428
Employment services	0	431	431
Couriers and messengers	0	231	231
Advertising, public relations, and related services	0	174	174
Management of companies and enterprises	0	178	178
Wholesale—Wholesale electronic markets and agents and brokers	0	136	136
Business support services	0	111	111
Postal service	0	98	98
Services to buildings	0	105	105
Total Top 20	10,024	2,865	12,889
Total Overall	10,024	6,399	16,423

Source: Estimated by PSC using IMPLAN economic modeling.
 Note: Totals may not sum due to rounding.

Exhibit 3 shows the industries that would experience the greatest economic impact in terms of total output by shifting 10 percent of remote purchases to local retailers. In addition to the retail sector, the real estate, owner-occupied dwellings, warehousing and storage, management of companies and enterprises, and hospital sectors would also experience an increase in economic output.

EXHIBIT 3. Top 20 Industries Benefiting from Shifting 10 Percent of Remote Sales to Local Sales, by Output (in Millions of Dollars)

IMPLAN Sector	Direct	Indirect and Induced	Total
Retail—Nonstore retailers	\$793.2	\$9.9	\$803.1
Other real estate	\$0.0	\$122.0	\$122.0
Retail—General merchandise stores	\$105.3	\$6.8	\$112.1
Retail—Clothing and clothing accessories stores	\$93.9	\$2.1	\$96.0
Retail—Electronics and appliance stores	\$67.8	\$1.4	\$69.2
Owner-occupied dwellings	\$0.0	\$48.6	\$48.6
Management of companies and enterprises	\$0.0	\$43.8	\$43.8
Warehousing and storage	\$0.0	\$43.3	\$43.3
Retail—Health and personal care stores	\$39.2	\$3.2	\$42.4
Retail—Building material and garden equipment and supplies stores	\$36.4	\$2.9	\$39.3
Retail—Motor vehicle and parts dealers	\$32.8	\$4.6	\$37.4
Employment services	\$0.0	\$36.9	\$36.9
Hospitals	\$0.0	\$32.3	\$32.3
Retail—Miscellaneous store retailers	\$25.7	\$2.6	\$28.3
Insurance carriers, except direct life	\$0.0	\$28.2	\$28.2
Advertising, public relations, and related services	\$0.0	\$25.8	\$25.8
Monetary authorities and depository credit intermediation	\$0.0	\$23.3	\$23.3
Retail—Furniture and home furnishings stores	\$21.6	\$1.6	\$23.2
Electric power transmission and distribution	\$0.0	\$22.1	\$22.1
Retail—Sporting goods, hobby, musical instrument and book stores	\$17.8	\$1.5	\$19.3
Total Top 20	\$1,233.7	\$461.5	\$1,677.3
Total Overall	\$1,233.7	\$1,029.2	\$2,262.9

Source: Estimated by PSC using IMPLAN Economic Modeling.
 Note: Totals may not sum due to rounding.

Appendix A: Industry Classifications and Model Inputs

EXHIBIT A1. Industry Classifications and Model Inputs

IMPLAN Category—Description	North American Industrial Classification System (NAICS) Code	Model Input, Remote Sales (in Millions of Dollars)
Retail—Motor vehicle and parts dealers	441	128
Retail—Furniture and home furnishings stores	442	51
Retail—Electronics and appliance stores	443	154
Retail—Building material and garden equipment and supplies stores	444	90
Retail—Food and beverage stores*	445	78
Retail—Health and personal care stores	446	131
Retail—Gasoline stores	447	0
Retail—Clothing and clothing accessories stores	448	182
Retail—Sporting goods, hobby, musical instrument, and book stores	451	38
Retail—General merchandise stores	452	326
Retail—Miscellaneous store retailers	453	46
Retail—Nonstore retailers	454	1,779

*Note: Food and beverage stores are not included in the IMPLAN model, but are listed here for reference

Appendix B: Overall Retail Economy

In addition to the 12 retail industries directly impacted by switching remote sales to local, food service and drinking places are also often included when examining the overall retail economy. Exhibit B1 shows the industries included in the overall retail economy, though food service and drinking places were not included in the IMPLAN model on switching 10 percent of remote sales to local. Data were obtained from the Quarterly Census of Employment and Wages (utilizing 2021 data) and from the U.S. Census Bureau (utilizing 2019 data) (BLS 2022; U.S. Census Bureau 2020).

EXHIBIT B1. Industry Classifications of Overall Retail Economy—2021

NAICS Code	Category	Total Employment	Total Establishments
Total	All Retail	794,249	114,225
441	Motor vehicle dealers	65,812	8,010
442	Furniture and home furnishing stores	11,927	2,038
443	Electronics and appliance stores	12,214	1,604
444	Building materials and garden supply stores	48,474	3,175
445	Food and beverage stores	76,501	7,533
446	Health and personal care stores	40,078	8,939
447	Gasoline stations	25,924	3,193
448	Clothing and clothing accessories stores	28,078	7,413
451	Sporting goods, hobby, book, and music stores	17,999	4,113
452	General merchandise stores	106,501	3,452
453	Miscellaneous store retailers	29,265	5,286
454	Nonstore retailers	39,753	32,038
722	Food service and drinking places	291,723	27,431

Sources: BLS 2022 and U.S. Census Bureau 2020

Note: Total employment and total establishments are a combination of BLS data for 2020 and nonemployer statistics data for 2018.

Appendix C: Methodology Revisions for Estimating Remote Sales

Using updated U.S. Census Bureau and Bureau of Labor Statistics data, this study features the same methodological approach as the previous year's Buy Nearby report. The only revision to the methodology in the 2022 study is a slight change in how unallocated nonstore retail spending was calculated.

Like in previous years, the U.S. Census Bureau provides limited breakdowns for e-commerce sales in some retail subcategories (gas stations, motor vehicle and parts dealers, health and personal care stores, and general merchandise stores). As a result, there was \$151.6 billion in unallocated nonstore sales, of which \$93.4 billion was electronic shopping and \$58.2 billion was mail-order sales (U.S. Census Bureau January 23, 2022b). Given that the U.S. Census Bureau has previously noted that gas stations account for less than \$500,000, unallocated sales were first split between motor vehicle and parts dealers and health and personal care stores based on the most recent ratio of e-commerce and/or mail-order spending in each category. The remaining unallocated funds were then counted under the General Merchandise Stores category because it was the only remaining area where sales were not accounted for (U.S. Census Bureau January 28, 2021b).

References

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