

Competitive Alternatives

KPMG's guide to international business locations costs

Volume II report - 2016 edition

CompetitiveAlternatives.com

Corporate sponsors





KPMG LLP, in association with MMK Consulting Inc., has conducted an analysis of the relative costs of doing business in 10 countries in North America, Europe, and Asia Pacific. This report was made possible through the support of our research contributors and sponsors, as identified in this report.

The analysis in this publication is based on cost information collected primarily between July 2015 and January 2016. Taxes reflect tax rates in effect on January 1, 2016, and also incorporate any announced changes at that time to take effect at specified later dates. Exchange rates and other cost factors will, of course, change over time. Tax rates and other tax-related information are also subject to change as a result of new legislation, judicial decisions, and administrative pronouncements.

All information provided is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2016 MMK Consulting Inc. All rights reserved.

No part of this publication may be reproduced, reprinted, stored in a retrieval system, or transmitted, in part or whole, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the authors.

Electronic copies of this report, as well as additional information in respect of this report, are available at CompetitiveAlternatives.com.

Competitive Alternatives

KPMG's guide to international business locations costs

2016 edition

Volume II: Appendices

Appendices

Α	Details of study methodology	A1 - A4
	Discusses the study methodology and key business model assumptions underlying the analysis contained in this report.	
В	Tax assumptions and comparisons	B1 - B22
	Presents the tax rate assumptions used for each location in the comparative analysis, along with summary measures of tax burden resulting from the analysis.	
С	Selected bibliography and sources of data	C1 - C15
	Contains a listing of sources used in respect of each city to gather recent data for input to this study.	

Appendix A

Details of study methodology

The value of any major study depends on the quality of the study design, the data assembled, and the analytical methodology. This appendix provides further details of the methodology of the *Competitive Alternatives* study, including:

- Design of the Competitive Alternatives Cost Model
- Definition of the standard business operations
- Specification of common business model assumptions
- Methodology for estimating labor costs
- Methodology for estimating facilities costs
- Methodology for estimating transportation/distribution costs for each operation
- Methodology for estimating energy costs.

Competitive Alternatives Cost Model

This report utilizes the Competitive Alternatives Cost Model, a proprietary model which can analyze costs for businesses in many different types of business operations across multiple geographic locations.

The model uses two streams of information:

- Standardized operating specifications for each business operation
- Current business investment and operating cost data for each location.

By combining this information for each operation and location, the model produces pro forma estimates of annual costs and cash flows for a new business facility in each location. Outputs from the Cost Model include standard financial and project evaluation reports including:

- ten-year income statements
- ten-year balance sheets
- ten-vear cash flow statements
- net present value of cash flows
- corporate income tax calculations.

These reports form the basis of the cost comparisons contained in this report. The result is a snapshot of business costs in each location, scaled relative to the significance of each cost item during the establishment, ramp-up, and full operation phases of a new business operation, over ten years.

Standard business operations

As described in Chapter 4, 19 industry-specific standard business operations were specified for analysis in this report. These business operations have been defined according to a number of standard investment and operating specifications, including:

- land and building requirements
- machinery and equipment requirements
- inventory
- financing (debt/equity) and working capital requirements
- annual sales revenues
- workforce requirements
- raw material and component inputs
- research and development expenditures
- electricity and natural gas requirements
- product distribution requirements.

Summaries of the standardized parameters for each of the 19 industry-specific business operations can be found online at CompetitiveAlternatives.com/industries.

Business model assumptions

Common assumptions: startup phase

- All figures are shown in current US dollars, unless another currency is specified.
- For each type of facility, the following items are assumed to be identical in each location:
 - physical requirements for buildings and land
 - machinery and equipment investments
 - working capital requirements, including inventory levels
 - cost of equity capital
 - debt-to-equity ratio at start-up.
- Expenditures for land (if any) occur in Year 0. Real estate transfer taxes are capitalized in the cost of land.
- Four depreciable asset classes are recognized: buildings, machinery and equipment, office equipment, and R&D equipment. Major initial investments in all asset classes are made in Year 0.
- An initial investment in inventory is made in Year 0. Average inventory levels are assumed to remain steady over the 10-year period.
- The initial investment is partially financed with debt. Debt servicing costs are treated as expenses in the year incurred.
 No net principal payments are assumed during the 10-year period, so the level of debt remains constant.

Common assumptions: operating phase

- All figures are shown in current US dollars, unless another currency is specified.
- There is a ramp-up period of up to four years before operations reach full capacity.
- For each type of facility, the following items are assumed to be identical in each location:
 - volume of output
 - staffing requirements
 - industrial and/or office leasing requirements
 - electricity and natural gas requirements
 - research and development activities
 - cost of equity capital.
- All of the firm's business income is related to operations.
- For profit center operations, sales revenue is held constant for all locations. For cost center operations, revenue is determined using a "cost-plus" markup approach; with the markup percentage held constant for all locations.
- All revenues earned and expenses incurred in a given period are collected and paid in the same period.
- Net cash flow from operations is added to cash on the balance sheet.
- Additional capital expenditures for retooling are undertaken as required by the type of business operation.
- Costs for materials and other location-insensitive costs are based on a predetermined percentage of sales, split between direct and indirect costs in accordance with general accounting principles. These percentages vary with the business type. For cost center operations, where revenue is a function of costs, location-insensitive costs are fixed in US\$ per annum for all locations.
- The firm is a start-up, stand-alone, limited company.
- For the purposes of apportionment of taxable income in North America, the firm is assumed to be eligible to apportion income among states, but not to maintain a substantial portion of its physical business operations in any location other than the location being examined. The firm is also assumed not to be subject to a material level of taxation in any jurisdiction other than its main location.
- For North American operations, the company does not qualify as an S-Corporation in the United States or a Canadian-Controlled Private Corporation in Canada, and does not receive the preferential tax treatment accorded to those categories of company.

- For the purposes of net present value calculations, at the end of Year 10, residual value is measured as:
 - current assets (including inventory), at cost; plus
 - land, at historical cost; plus
 - buildings, at depreciated historical cost; less
 - all liabilities at face value.
- Machinery and equipment are assumed to have zero scrap value, and no taxable capital gains are realized on the sale of capital assets.
- Calculations over the 10 years of operation are made on the basis of current (2013-14) price levels, exchange rates, tax structures, and cost factors. However, where future tax changes have been announced, such future changes are reflected in the calculations.

Labor costs

To estimate annual labor costs for each facility, employees from different industries and operations have been grouped into a range of generic job positions, based on common levels of skill and responsibility. This approach reflects the nature of data available from different wage surveys, and the number of positions that can be comparably costed across a wide range of locations. By grouping employees into generic positions, the diversity of salary levels that would be encountered in a typical operation has been built into the calculation of annual labor costs. This study uses 42 generic job positions:

- eight management positions
- eight production positions
- five scientific/technical positions
- ten information technology positions
- nine sales and administrative positions
- two facility maintenance positions.

Based on individual job descriptions, typical salary and wage levels have been collected for each position in each city studied. Statutory and employer-sponsored benefits have also been calculated individually, according to the average pay for each job.

Facilities costs

Facility requirements have been developed based on actual firm data during the process of defining the standard operating parameters for each business operation:

 For service operations, facilities costs include the cost of leasing suitable Class A office space, generally in a suburban area for most business operations but in a downtown location for the International Financial Services operation

- For manufacturing operations, six operations reflect facility costs for leased premises, with costs including the cost of leasing a suitable modern industrial facility in a suburban area.
- For the other six manufacturing operations, a custom built, owned facility is assumed with costs including the cost to purchase a suitable parcel of industrial land and constructing a turn-key factory on the land (including both hard and soft construction costs).

Costs for land purchase and building construction, and lease capitalization rates are used in some instances to refine values for industrial leasing and property valuation for local tax purposes.

Costs for land purchase, building construction, industrial leasing, and/or office leasing were collected by Colliers International real estate professionals in each local market.

Transportation/distribution costs

A product distribution pattern has been developed for each relevant operation to reflect the characteristics of, and markets for, the goods produced. Product distribution has been based on global, continental, national, or regional markets.

Overseas exports are assumed to be transported by sea freight, except in the case of higher value products with shorter life cycles, in which case air freight may be used.

Food processing operation

In developing the product distribution model for the food processing industry, the tendency for food product markets to be somewhat country-specific due to different taste preferences among regions has been considered. As a result, this model assumes that 50 percent of product is sold to distributors in the region in which it is produced, with the remainder being distributed to global markets.

Advanced batteries, auto parts, metal machining, plastic products, and precision components operations

Plants manufacturing advanced battery systems, auto parts, metal components, plastic products, and precision components are generally producing for industrial customers who will use these components in further value-added manufacturing. Production of such components have become increasingly globalized over the last decade, but still with a tendency for producers to locate close to one or more of their major customers.

In the distribution models for these operations, output is assumed to be distributed to customers globally. Global sales are weighed using Gross Fixed Capital Formation as a proxy for industrial capacity and demand in each country. To allow for the local presence of major customers, this measure is double-weighted on favor of the region of production.

Electronics assembly, medical devices, pharmaceuticals, specialty chemicals, and telecom equipment operations

Markets for these products tend to be continent-wide, as a minimum, with many firms selling on a global basis In the distribution models for these operations, output is assumed to be distributed to customers globally. Global sales are weighted by a combination of population (to reflect personal consumption demand) and Gross Fixed Capital Formation (to reflect industrial consumption demand). To allow for the local presence of major customers, this measure is double-weighted in favor of the region of production.

Aircraft parts operation

Markets for these products tend to be focused on the regions surrounding major aircraft assembly plants, such as the North American Boeing plants in Seattle and Wichita, and Bombardier plant in Montreal; the European Airbus plants in Toulouse, Hamburg, and Broughton; and the Brazilian Embraer plant near Sao Paulo.

Distribution for aircraft parts is assumed to occur on the following basis:

- 60 percent to major aircraft assembly plants in Europe (25 percent), North America (25 percent), and South America (10 percent)
- 40 percent exported equally among eight broad global regions, as parts used by maintenance, repair and overhaul operations.

Other operations

The remaining operations are all services operations and have no physical product distribution requirements:

- Biomedical R&D
- Clinical trials management
- Electronics systems testing
- International financial services
- Shared services center
- Software development
- Video game production.

General product distribution assumptions

The following general assumptions apply to each of the product distribution patterns outlined above:

- The model firms do not have any in-house distribution capability, so all freight movements are handled by thirdparty logistics providers
- Each firm is able to maximize the efficiency of its distribution patterns, delivering product to its customers in full truckload and/or container-load quantities, or as standardized lessthan-load shipments
- The model firms are not selling to customers requiring justin-time (JIT) or just-in-order (JIO) deliveries
- Intra-continental distribution is by road and/or rail freight (based on the most economical option), except where the use of sea freight is required between countries in Asia (e.g. between Japan and mainland Asia).

Energy costs

Energy requirements have been developed based on actual firm and industry average data during the process of defining the standard operating parameters for each business operation. For manufacturing operations, both electricity and natural gas requirements have been considered. For service operations, where energy requirements are far less significant, only electricity requirements have been considered. Based on the identified energy requirements, costs were calculated based on published schedule rates of relevant energy suppliers or reported statistical rate data for industrial and commercial users, as available in each location.

Taxation costs

Refer to Appendix B for details of taxation methodology.

Interpretation of results

While great care has been taken in performing this analysis and developing the findings, the resulting comparisons are of a general nature. All cost factors examined in this study are subject to change over time, due to changes in local laws, regulations, and/or market conditions.

The results of this study should not be interpreted as a definitive or final opinion on the merits of locating any specific facility in one jurisdiction over another. Further analysis is required to determine the best site for a specific facility or operation.

Appendix B

Tax assumptions and comparisons

This appendix presents the tax rate assumptions used in the comparative analysis, along with summary measures of tax burden resulting from the analysis.

In this study, income taxes have been calculated on the "tax payable" basis. Deferred income tax balances (both positive and negative) have been excluded, since these accounting book entries are generally not relevant for location decision making.

All tax rates listed here are current as at January 1, 2016, based on latest information available as at that date. Taxes are grouped based on substance rather than legal form, and legislated names of specific taxes in certain jurisdictions differ from the generic titles used in this study.

Given the broad scope of this assignment, a number of simplifying assumptions have been made with respect to specific taxes. Any simplifying assumptions made are consistent with the business model assumptions set out in Appendix A.

Payroll taxes have been incorporated into statutory benefit costs shown in this report, but are not presented in this table.

These data should not be used to draw definitive conclusions regarding the relative position of any particular jurisdiction with respect to a particular element of taxation. In all circumstances, professional advice should be sought to address any specific taxation issues in any jurisdiction.

Australia

Federal, regional, and local tax rates - In percent

	Adelaide	Brisbane	Melbourne	Sydney
Corporate Income Tax ^a				
Federal	30.00	30.00	30.00	30.00
Regional	_	_	-	_
Local	_	_	-	_
Combined income tax rate	30.00	30.00	30.00	30.00
Manufacturing tax reduction ^b				
Federal	-	-	-	_
Regional		_	_	_
Combined mfg tax rate	30.00	30.00	30.00	30.00
Effective income tax rate, overall average ^c	27.41	27.14	27.31	27.15
Capital Tax d				
Tax based on:				
Capital stock	-	_	-	_
Net equity	_	_	-	-
Total assets	_	_	-	-
Debt/borrowings	_	_	-	-
Sales Tax °				
Refundable GST/VAT:				
Federal ^f	10.00	10.00	10.00	10.00
Regional ^f	_	_	-	_
Non-refundable sales tax:				
Regional ^f	_	_	-	_
Local ^f	_	_	_	_
Property Tax ^g				
Land ^h	4.52°	3.04 ^p	3.21 ^q	2.88 ^r
Buildings h	0.82	_	0.96	_
Machinery & equipment i	-	-	-	_
Inventory ^j	-	_	-	_
Total property-based taxes:				
Mfg avg (12 operations) k	\$1.54	\$1.33	\$1.41	\$1.86
Services avg (7 operations) k	\$2.95	\$3.12	\$2.46	\$3.15
Local Business Taxes				
Taxes based on:				
Gross receipts	_	-	-	-
Salaries ^m	_s	_s	_s	_s
Employees ⁿ	_	_	-	_

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent.
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- o Includes both state land tax (3.70%) and local council rates (0.82%). Land tax represents top marginal rate. Lower rates apply on the first AUD \$1.078 million of land value.
- p Includes both state land tax (2.00%) and local council rates (1.04%). Land tax represents top marginal rate. Lower rates apply on the first AUD \$5 million of land value.
- q $\,$ Includes both state land tax (2.25%) and local council rates (0.96%). Land tax represents top marginal rate. Lower rates apply on the first AUD \$3 million of land value.
- r Includes both state land tax (2.00%) and local council rates (0.88%). Land tax represents top marginal rate. Lower rates apply on the first AUD \$2.641 million of land value.
- s State payroll tax of 4.95% (for Adelaide), 4.75% (for Brisbane), 4.85% (for Melbourne) and 5.45% (for Sydney) is not shown here as it is included under statutory plans in the labor analysis.

Canada

Federal, regional, and local tax rates – In percent

	Barrie ON	Calgary AB	Charlottetown PE	Edmonton AB	Fredericton NB	Gatineau QC	Halifax NS	Kelowna BC	Moncton NB	Montreal QC
Corporate Income Tax ^a										
Federal	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Regional	11.50	12.00	16.00	12.00	12.00	11.90°	16.00	11.00	12.00	11.90°
Local	-	_	-	_	_	-	_	_	_	_
Combined income tax rate	26.50	27.00	31.00	27.00	27.00	26.90	31.00	26.00	27.00	26.90
Manufacturing tax reduction b										
Federal	-	_	_	_	-	_	-	_	_	_
Regional	1.50	_	_	_	-	_	-	_	_	_
Combined mfg tax rate	25.00	27.00	31.00	27.00	27.00	26.90	31.00	26.00	27.00	26.90
Effective income tax rate, overall average °	18.89	20.12	23.29	20.30	18.43	16.96	21.75	19.72	18.39	17.27
Capital Tax d										
Tax based on:										
Capital stock	_	_	_	-	-	_	-	_	_	_
Net equity	-	-	-	-	-	_	-	_	_	_
Total assets	-	_	_	_	-	_	-	_	_	_
Debt/borrowings	_	_	_	-	-	_	-	_	_	_
Sales Tax ^e										
Refundable GST/VAT:										
Federal ^f	} 13.00 ^p	5.00	} 14.00 ^p	5.00	} 13.00 ^p	5.00	} 15.00 ^p	5.00	} 13.00°	5.00
Regional ^f	J	_		_		9.98]	_]	9.98
			•		,	5.50	-		-	
Non-refundable sales tax:			•		,	3.30	-		-	
Regional ^f	-	-	-	-	-	-	-	7.00	-	_
	- -	- -	- -	- -	- -	- -	- -	7.00 –	- -	- -
Regional ^f		- -	- -		- -	-	- -		- -	- -
Regional ^f Local ^f	2.90	- - 1.85 ^q	2.46	- - 1.89	- - 4.17	-	3.40		4.50	4.07
Regional ^f Local ^f Property Tax ^g			- - 2.46 2.46			- -		-		
Regional ^f Local ^f Property Tax ^g Land ^h	2.90	1.85 ^q		1.89	4.17	- - 2.72	3.40	1.70	4.50	4.07
Regional ^f Local ^f Property Tax ^g Land ^h Buildings ^h	2.90 2.90	1.85 ^q	2.46	1.89 1.89	4.17	- - 2.72	3.40	1.70	4.50 4.50	4.07
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment f Inventory f Total property-based taxes:	2.90 2.90	1.85 ^q 1.85 ^q –	2.46	1.89 1.89	4.17	- - 2.72	3.40	1.70	4.50 4.50 – –	4.07
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment i Inventory i Total property-based taxes: Mfg avg (12 operations) k	2.90 2.90 - - \$2.57	1.85 ^q 1.85 ^q \$2.29	2.46 - - \$2.66	1.89 1.89 - - - \$2.07	4.17	2.72 2.72 2.72 - - \$2.89	3.40 3.40 - - \$3.60	1.70 1.68 - - \$2.20	4.50 4.50	4.07
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment i Inventory i Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k	2.90 2.90 - -	1.85 ^q 1.85 ^q –	2.46 - -	1.89 1.89 - -	4.17 4.17 – –	- - 2.72 2.72 - -	3.40 3.40 - -	1.70 1.68 -	4.50 4.50 – –	4.07 4.07 -
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment i Inventory i Total property-based taxes: Mfg avg (12 operations) k	2.90 2.90 - - \$2.57	1.85 ^q 1.85 ^q \$2.29	2.46 - - \$2.66	1.89 1.89 - - - \$2.07	4.17 4.17 - - \$4.24	2.72 2.72 2.72 - - \$2.89	3.40 3.40 - - \$3.60	1.70 1.68 - - \$2.20	4.50 4.50 - - \$4.27	4.07 4.07 - - \$4.34
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment i Inventory i Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k Local Business Taxes Taxes based on:	2.90 2.90 - - \$2.57	1.85 ^q 1.85 ^q \$2.29	2.46 - - \$2.66	1.89 1.89 - - - \$2.07	4.17 4.17 - - \$4.24	2.72 2.72 2.72 - - \$2.89	3.40 3.40 - - \$3.60	1.70 1.68 - - \$2.20	4.50 4.50 - - \$4.27	4.07 4.07 - - \$4.34
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment i Inventory i Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k Local Business Taxes	2.90 2.90 - - \$2.57	1.85 ^q 1.85 ^q \$2.29	2.46 - - \$2.66	1.89 1.89 - - - \$2.07	4.17 4.17 - - \$4.24	2.72 2.72 2.72 - - \$2.89	3.40 3.40 - - \$3.60	1.70 1.68 - - \$2.20	4.50 4.50 - - \$4.27	4.07 4.07 - - \$4.34
Regional f Local f Property Tax g Land h Buildings h Machinery & equipment i Inventory i Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k Local Business Taxes Taxes based on:	2.90 2.90 - - \$2.57	1.85 ^q 1.85 ^q \$2.29	2.46 - - \$2.66	1.89 1.89 - - - \$2.07	4.17 4.17 - - \$4.24	2.72 2.72 2.72 - - \$2.89	3.40 3.40 - - \$3.60	1.70 1.68 - - \$2.20	4.50 4.50 - - \$4.27	4.07 4.07 - - \$4.34

Canada

Federal, regional, and local tax rates - In percent

	Quebec City QC	Saskatoon SK	Sault Ste. Marie ON	St. John's NL	Toronto ON	Vancouver BC	Winnipeg MB
Corporate Income Tax ^a							
Federal	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Regional	11.90°	12.00	11.50	14.00	11.50	11.00	12.00
Local	-	_	_	_	-	_	-
Combined income tax rate	26.90	27.00	26.50	29.00	26.50	26.00	27.00
Manufacturing tax reduction b							
Federal	-	-	-	_	-	-	_
Regional	_	2.00	1.50	9.00	1.50	-	_
Combined mfg tax rate	26.90	25.00	25.00	20.00	25.00	26.00	27.00
Effective income tax rate, overall average °	17.96	18.02	18.55	11.66	18.56	19.73	16.68
Capital Tax ^d							
Tax based on:							
Capital stock	-	_	_	_	-	_	-
Net equity	_	_	_	_	_	-	_
Total assets	-	_	_	_	-	_	-
Debt/borrowings	-	-	-	_	-	-	-
Sales Tax °							
Refundable GST/VAT:							
Federal ^f	5.00	5.00	} 13.00 ^p	} 15.00 ^p	} 13.00°	5.00	5.00
Regional ^f	9.98	-) 13.00°) 15.00°	} 13.00*	-	-
Non-refundable sales tax:							
Regional ^f	-	5.00	_	_	-	7.00	8.00
Local ^f	-	_	_	-	-	_	-
Property Tax ^g							
Land ^h	4.25	1.61	5.39	3.07 ^q	2.41	1.72	2.919
Buildings ^h	4.25	1.61	5.39	3.07 ^q	2.41	1.72	2.91 ^q
Machinery & equipment i	-	_	_	-	-	-	-
Inventory ^j					_	_	_
myontory.	-	_	_	_			
Total property-based taxes:	_	_	-	_			
•	- \$4.11	\$1.90	- \$4.55	\$3.43	\$3.14	\$2.67	\$2.81
Total property-based taxes:	\$4.11 \$2.19	- \$1.90 \$1.36	\$4.55 \$2.62	\$3.43 \$5.34	\$3.14 \$4.15	\$2.67 \$4.25	\$2.81 \$3.60
Total property-based taxes: Mfg avg (12 operations) k							
Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k							
Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k Local Business Taxes							
Total property-based taxes: Mfg avg (12 operations) k Services avg (7 operations) k Local Business Taxes Taxes based on:							

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all propertybased taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent.
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- The Quebec corporate income tax rate is scheduled to reduce by 0.1% each year starting in 2017 and continuing until the rate reaches 11.5% on January 1, 2020.
- p Harmonized single sales tax applies at the rate indicated, including a 5% federal component and a provincial component that varies by province.
- q Incorporates both property tax and propertybased business/occupancy tax rates.



Federal, regional, and local tax rates - In percent

	Marseille	Paris
Corporate Income Tax ^a		
Federal	33.33	33.33
Regional	-	-
Local	-	_
Combined income tax rate	33.33	33.33
Manufacturing tax reduction b		
Federal	-	_
Regional	-	_
Combined mfg tax rate	33.33	33.33
Effective income tax rate, overall average °	21.28	20.01
Capital Tax d		
Tax based on:		
Capital stock	0.10°	0.10°
Net equity	_	_
Total assets	_	_
Debt/borrowings	_	_
Sales Tax °		
Refundable GST/VAT:		
Federal ^f	20.00	20.00
Regional ^f	_	_
Non-refundable sales tax:		
Regional ^f	_	_
Local ^f	_	_
Property Tax ^g		
Land ^h	3.17 ^p	2.40°
Buildings h	3.17 ^p	2.40 ^p
Machinery & equipment i	_	_
Inventory ^j	_	_
Total property-based taxes:		
Mfg avg (12 operations) k	\$2.61	\$2.04 ^r
Services avg (7 operations) k	\$9.14	\$13.60 ^r
Local Business Taxes		
Taxes based on:		
Gross receipts	1.50 ^q	1.50 ^q
Salaries ^m	_	-

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- o One-time tax on share issuance.
- p Includes both Tax on Developed Properties (TFPB) and Contribution for Enterprise Land Value (CFE), both of which are based on property rental value. CFE is levied directly on the lessee of leased properties.
- q Contribution for Enterprise Value Added (CVAE), top marginal rate. Lower rates apply to companies with sales turnover of less than €50 million per annum. Tax base is value added, which is calculated as gross receipts less limited specified deductions.
- r Total CFE plus CVAE is capped at 3% of value added as assessed for CVAE.

Germany

Federal, regional, and local tax rates - In percent

	Marseille	Paris
Corporate Income Tax ^a		
Federal	15.83°	15.83°
Regional	_	_
Local	14.35	16.10
Combined income tax rate	30.18	31.93
Manufacturing tax reduction b		
Federal	-	_
Regional	-	_
Combined mfg tax rate	30.18	31.93
Effective income tax rate, overall average ^c	29.64	31.41
Capital Tax d		
Tax based on:		
Capital stock	_	_
Net equity	_	_
Total assets	_	_
Debt/borrowings	_	_
Sales Tax ^e		
Refundable GST/VAT:		
Federal ^f	19.00	19.00
Regional ^f	-	_
Non-refundable sales tax:		
Regional ^f	-	_
Local f	_	-
Property Tax ^g		
Land ^h	2.84	1.75
Buildings h	2.84	1.75
Machinery & equipment i	-	_
Inventory ^j	-	_
Total property-based taxes:		
Mfg avg (12 operations) k	\$1.91	\$1.53
Services avg (7 operations) k	\$2.33	\$3.01
Local Business Taxes		
Taxes based on:		
Gross receipts	_	_
Salaries ^m	_	_
Employees ⁿ	-	_

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- o $\,$ Federal tax rate represents 15% basic tax, plus 5.5% solidarity surcharge



Federal, regional, and local tax rates – In percent

	Milan	Rome
Corporate Income Tax ^a		
Federal	27.50°	27.50°
Regional	3.90 ^p	4.82 ^p
Local	-	-
Combined income tax rate	30.86 ^q	31.66 ^q
Manufacturing tax reduction b		
Federal	-	-
Regional	-	
Combined mfg tax rate	30.86	31.66
Effective income tax rate,	24.32	25.91
overall average ^c	24.52	25.51
Capital Tax ^d		
Tax based on:		
Capital stock	-	-
Net equity	-	-
Total assets	-	-
Debt/borrowings	0.25 ^r	0.25 ^r
Sales Tax ^e		
Refundable GST/VAT:		
Federal ^f	22.00	22.00
Regional ^f	_	-
Non-refundable sales tax:		
Regional ^f	_	-
Local ^f	_	_
Property Tax ^g		
Land ^h	1.14 ^s	1.14 ^s
Buildings h	1.16s	1.16s
Machinery & equipment i	-	-
Inventory ^j	-	-
Total property-based taxes:		
Mfg avg (12 operations) k	\$1.00	\$0.93
Services avg (7 operations) k	\$6.08	\$5.83
Local Business Taxes		
Taxes based on:		
Gross receipts	-	_
Salaries ^m	-	_
Employees ⁿ		-

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- o The rate of federal corporate income tax (IRES) is scheduled to decrease to 24.0% on January 1, 2017.
- p Deductions for payroll and interest costs are limited for Italian Regional Tax on Productive Activities (IRAP). This results in a higher taxable income base for IRAP purposes than for most other income taxes listed in this Appendix.
- q In calculating the combined tax rate, regional tax paid is deductible for federal tax calculations to the extent that regional tax liability reflects non-deductible labor costs. The actual percentage federal deduction for regional tax paid varies by company and by year. The combined tax rate shown assumes a 50 percent federal deduction for regional tax paid. Therefore, the regional tax rate has been reduced by (1 (federal tax rate x 50%)) to determine the combined rate.
- r One-time tax on issuance of medium and long term loans.
- s Local tax on immovable property tax (IMU) and municipal tax on indivisible services (TASI) are based on imputed income value of a property as determined by the Immovable Property Registry. The rates shown here represent the estimated tax rate as a percentage of property fair market value, based on the assumption that for owned facilities statutory imputed income represents 1.495% of fair market value. For leased facilities, imputed income is assumed to equal actual lease payments.



Federal, regional, and local tax rates - In percent

	Osaka	Tokyo
Corporate Income Tax ^a		
Federal	24.95°	24.95°
Regional	10.07 ^p	10.07 ^p
Local	4.02 ^q	4.07 ^r
Combined income tax rate	36.53s	36.58s
Manufacturing tax reduction b		
Federal	_	_
Regional	_	_
Combined mfg tax rate	36.53	36.58
Effective income tax rate,	21.04	22.10
overall average ^c	31.94	32.19
Capital Tax ^d		
Tax based on:		
Capital stock	0.700^{t}	0.700^{t}
Net equity	0.407^{u}	0.391 ^u
Total assets	-	_
Debt/borrowings	-	-
Sales Tax °		
Refundable GST/VAT:		
Federal ^f	8.00	8.00
Regional ^f	_	_
Non-refundable sales tax:		
Regional ^f	_	_
Local ^f	_	_
Property Tax ^g		
Land ^h	1.70	1.70
Buildings h	2.16 ^v	2.11 ^v
Machinery & equipment i	1.40	1.40
Inventory ^j	_	_
Total property-based taxes:		
Mfg avg (12 operations) k	\$6.92	\$10.87
Services avg (7 operations) ^k	\$4.35	\$7.13
Local Business Taxes		
Taxes based on:		
Gross receipts	0.756 ^w	0.756 ^w
Salaries ^m	0.250×	0.250×
Francisco e a		

Employees n

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- i Percentage of cost
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee
- o Top marginal rate. The first ¥8 million of taxable income is taxed at 15.66% only if the corporation's paid-in capital is ¥100 million or less.
- p Two separate income taxes apply at the prefectural level. Business Tax applies at a top marginal rate at 7.18%, with lower rates applying to the first ¥8 million of taxable income and for corporations with paid-in capital of ¥100 million or more. However corporations with paid-in capital of ¥100 million or more are also subject to capital and value-added components of Business Tax. Special Local Corporate Tax applies as a percentage of Business Tax, which is then converted into an effective rate expressed as a percentage of taxable income. The effective top marginal rate for Special Local Corporate Tax is 2.80%.
- q Prefectural and Municipal Inhabitant Tax are based on federal corporate income tax. The combined top marginal rate of 16.1% of federal tax paid represents an effective rate of 4.02% of taxable income.
- r Prefectural and Municipal Inhabitant Tax are based on federal corporate income tax. The combined top marginal rate of 16.3% of federal tax paid represents an effective rate of 4.07% of taxable income.
- s In calculating the combined tax rate, the prefectural business tax rates have been reduced by (1 Federal tax rate) to recognize the deduction permitted at the federal level for business tax paid. Prefectural and municipal inhabitant (incomebased) taxes are not deductible for federal income tax purposes.
- t One-time tax on share issuance.
- u Approximate rate including prefectural and municipal per-capita taxes on taxable capital of ¥5 billion (rates vary based on capital stock and employees), plus capital component of Business Tax applicable to companies with paid-in capital in excess of ¥100 million. The tax rate for the capital component of Business Tax is increasing from 0.315% to 0.420% on April 1, 2016 which will increase these effective rates by 0.105%.
- v Incorporates 1.70% property tax plus building occupancy tax of ¥600 per m2 of floor space.
- w Value added component of Prefectural Business Tax applicable to companies with paid-in capital in excess of ¥100 million. Tax base is value added, defined as gross receipts less limited specified deductions. Tax rate is increasing from 0.756% to 1.008% on April 1, 2016.
- x Represents salaries portion of multi-base local business tax. Not assessable where employee count < 100.



Federal, regional, and local tax rates - In percent

	Mexico City	Monterrey
Corporate Income Tax ^a		
Federal	30.00	30.00
Regional	_	_
Local	_	_
Combined income tax rate	30.00	30.00
Manufacturing tax reduction b		
Federal	_	_
Regional	-	_
Combined mfg tax rate	30.00	30.00
Effective income tax rate,	01.41	21.22
overall average ^c	31.41	31.23
Capital Tax ^d		
Tax based on:		
Capital stock	-	_
Net equity	-	-
Total assets	-	-
Debt/borrowings	_	_
Sales Tax °		
Refundable GST/VAT:		
Federal ^f	16.00	16.00
Regional ^f	_	-
Non-refundable sales tax:		
Regional ^f	-	-
Local f	-	-
Property Tax ^g		
Land ^h	1.16	0.20
Buildings h	1.16	0.20
Machinery & equipment i	_	_
Inventory ^j	-	-
Total property-based taxes:		
Mfg avg (12 operations) k	\$0.54	\$0.09
Services avg (7 operations) k	\$4.31	\$2.82
Local Business Taxes		
Taxes based on:		
Gross receipts	-	-
Salaries ^m	3.00°	3.00 ^p
Employees ⁿ	_	

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- Exemption of 25% applies for new companies for the first year of operation. A further 20% exemption applies in any future year where the number of employees increases by at least 25% compared to the prior year.
- p Full exemption applies for new companies for the first four years of operation.

Netherlands

Federal, regional, and local tax rates - In percent

	Eindhoven	Twente Region
Corporate Income Tax ^a		
Federal	25.00°	25.00°
Regional	-	_
Local	-	_
Combined income tax rate	25.00	25.00
Manufacturing tax reduction b		
Federal	-	_
Regional	-	_
Combined mfg tax rate	25.00	25.00
Effective income tax rate,	21 100	21 120
overall average ^c	21.10 ^p	21.13 ^p
Capital Tax d		
Tax based on:		
Capital stock	-	_
Net equity	-	_
Total assets	-	_
Debt/borrowings	-	_
Sales Tax ^e		
Refundable GST/VAT:		
Federal ^f	21.00	21.00
Regional ^f	-	_
Non-refundable sales tax:		
Regional ^f	-	_
Local f	-	_
Property Tax ^g		
Land ^h	0.41 ^q	0.49 ^q
Buildings h	0.41 ^q	0.49 ^q
Machinery & equipment i	-	_
Inventory ^j	-	_
Total property-based taxes:		
Mfg avg (12 operations) k	\$0.54	\$0.58
Services avg (7 operations) k	\$1.09	\$1.02
Local Business Taxes		
Taxes based on:		
Gross receipts ¹	_	_
Salaries ^m	_	_
Employees ⁿ	-	-

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- o $\,$ Top marginal rate. The first €200,000 of taxable income is taxed at 20 %.
- p The benefits provided under the Netherlands' R&D employee wage tax withholding program are netted into the calculation of effective income tax rate.
- q Incorporates real estate taxes levied on both property owners and property occupants.

United Kingdom

Federal, regional, and local tax rates - In percent

	London	Manchester
Corporate Income Tax ^a		
Federal	20.00°	20.00°
Regional		_
Local	-	_
Combined income tax rate	20.00	20.00
Manufacturing tax reduction b		
Federal	-	_
Regional	-	_
Combined mfg tax rate	20.00	20.00
Effective income tax rate, overall average °	14.16	15.73
Capital Tax d		
Tax based on:		
Capital stock	-	_
Net equity	-	_
Total assets	_	-
Debt/borrowings	_	-
Sales Tax ^e		
Refundable GST/VAT:		
Federal ^f	20.00	20.00
Regional ^f	-	-
Non-refundable sales tax:		
Regional ^f	-	-
Local ^f	-	-
Property Tax ^g		
Land ^h	3.70	3.70
Buildings h	3.70	3.70
Machinery & equipment i	-	_
Inventory ^j	-	_
Total property-based taxes:		
Mfg avg (12 operations) k	\$7.11	\$4.04
Services avg (7 operations) k	\$12.42	\$2.96
Local Business Taxes		
Taxes based on:		
Gross receipts	-	-
Salaries ^m	-	-
Employees ⁿ		_

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- j Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent
- I Percentage of gross sales
- m Percentage of gross payroll.
- n Tax per employee.
- o The corporate income tax rate is scheduled to decrease by 1% to 19% on April 1 2017, and then by a further 1% to 18% on April 1 2020.

Federal, regional, and local tax rates - In percent

	Albuquerque NM	Anchorage AK	Atlanta GA	Austin TX	Baltimore MD	Bangor ME	Baton Rouge LA	Beaumont TX	Billings MT	Boise ID
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	6.60 ^{q,s}	9.40s	6.00 ^q	0.75 ^{q,v}	8.25 ^q	8.93 ^{q,s}	8.00 ^{q,s}	$0.75^{\rm q,v}$	6.75	7.40
Local	-	_	_	_	-	_	_	-	_	_
Combined income tax rate	37.92 ^{z,aa}	40.20 ^z	37.60 ^{z,aa}	34.50 ^z	39.45 ^z	39.89 ^z	36.56 ^{z,ac}	34.50 ^z	38.46 ^z	38.88 ^z
Manufacturing tax reduction b										
Federal	2.87 ^p	2.77 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	2.82 ^p	3.06 ^p	2.85 ^p	2.83 ^p
Regional	0.55 ^p	0.85 ^p	_	_	_	-	0.72 ^p	_	0.61 ^p	0.67 ^p
Combined mfg tax rate	34.49	36.59	34.54	31.44	36.39	36.83	33.02	31.44	34.99	35.38
Effective income tax rate, overall average °	24.05	40.30 ^{ad}	27.65	28.44	29.76	31.45	23.26	28.54	33.08	32.34
Capital Tax d										
Tax based on:										
Capital stock	-	_	_	_	-	-	-	_	_	_
Net equity	-	-	0.030 ^{af}	-	_	-	_	-	-	-
Total assets	-	_	_	_	-	-	0.300 ^{ap}	_	_	_
Debt/borrowings	-	_	_	_	_	-	-	_	_	_
Sales Tax °										
Refundable GST/VAT:										
Federal ^f	_	-	_	_	_	_	-	_	_	_
Regional ^f	-	_	_	_	-	-	_	_	_	_
Non-refundable sales tax:										
Regional ^f	5.13	-	4.00	6.25	6.00	5.50	4.00	6.25	-	6.00
Local ^f	2.06	_	2.75	2.00	-	_	5.00	2.00	_	_
Property Tax ^g										
Land ^h	1.75	1.47	1.51	2.29	1.43	2.08	1.06	2.75	1.41	1.73
Buildings h	1.75	1.47	1.51	2.29	1.43	2.08	1.59 ^{bk}	2.75	1.41	1.73
Machinery & equipment	1.75	1.47	1.51	2.29	3.30 ^{bq}	2.08at	1.59 ^{bk}	2.75	1.41	1.73
Inventory ^j	-	1.47	1.51 ^{bp}	2.29 ^{bp}	_	-	1.59 ^{br}	2.75 ^{bp}	-	-
Total property-based taxes:										
Mfg avg (12 operations) k	\$4.97	\$5.91	\$4.22	\$6.33	\$1.84	\$2.50	\$1.16	\$7.44	\$4.08	\$5.02
Services avg (7 operations) k	\$2.15	\$3.91	\$2.87	\$9.33	\$3.91	\$1.56	\$1.11	\$3.58	\$2.40	\$2.69
Local Business Taxes										
Taxes based on:										
Gross receipts 1	-	_	-	-	-	_	-	_	-	_
Salaries ^m	-	_	-	-	-	-	-	_	-	_
Employees ⁿ	_	_	-	-		-	_	_	-	_

Federal, regional, and local tax rates - In percent

	Boston MA	Burlington VT	Cedar Rapid IA	s Champaign- Urbana, IL	Charleston WV	Charlotte NC	Cheyenne WY	Chicago IL	Cincinnati OH	Cleveland OH
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	8.00	8.50s	12.00 ^{q,s}	7.75	6.50	4.00 ^{q,bh}	-	7.75	_	-
Local	_	-	_	_	-	-	-	_	1.50 ^{bo}	2.00
Combined income tax rate	39.28 ^z	39.61 ^z	39.88 ^{z,ab}	39.12 ^z	38.29 ^z	36.64 ^z	34.00	39.12 ^z	34.99 ^z	35.32 ^z
Manufacturing tax reduction ^b										
Federal	3.06 ^p	2.80 ^p	2.69 ^p	2.82 ^p	3.06 ^p	3.06 ^p	3.06 ^p	2.82 ^p	3.06 ^p	3.06 ^p
Regional	_	0.77 ^p	1.08 ^p	0.70 ^p	_	_	_	0.70 ^p	_	_
Combined mfg tax rate	36.22	36.05	36.11	35.59	35.23	33.58	30.94	35.59	31.93	32.26
Effective income tax rate, overall average ^c	30.38	33.17	29.01	32.98	30.52	29.89	29.17	32.00	27.05	26.99
Capital Tax d										
Tax based on:										
Capital stock	-	_	-	0.100 ^{ah}	-	-	-	0.100 ^{ah}	-	-
Net equity	_	_	_	_	-	-	-	_	_	-
Total assets	0.260 ^{ag}	_	-	-	-	0.150 ^{bd}	0.020	-	-	-
Debt/borrowings	-	_	-	-	-	-	-	-	-	-
Sales Tax ^e										
Refundable GST/VAT:										
Federal ^f	_	_	_	-	-	-	-	-	-	-
Regional ^f	_	_	_	-	-	-	-	-	-	-
Non-refundable sales tax:										
Regional ^f	6.25	6.00	6.00	6.25	6.00	4.75	4.00	6.25	5.75	5.75
Local f	-	0.75	1.00	2.75	1.00	2.50	2.00	2.31	1.00	2.25
Property Tax ^g										
Land ^h	2.84	2.22	3.92	2.96	1.74	1.34	0.89	3.31	2.45	4.16
Buildings h	2.84	2.22	3.92	2.96	1.74	1.34	0.89	3.31	2.45	4.16
Machinery & equipment i	2.84 ^{ar}	0.12	_	-	1.74	1.34	0.89	-	-	-
Inventory ^j	-	_	_	-	1.74	_	-	-	-	-
Total property-based taxes:										
Mfg avg (12 operations) k	\$3.87	\$2.69	\$4.04	\$3.02	\$6.12	\$3.69	\$2.61	\$4.66	\$2.24	\$3.98
Services avg (7 operations) k	\$6.44	\$2.05	\$1.07	\$2.84	\$2.66	\$2.14	\$1.01	\$6.15	\$1.93	\$2.90
Local Business Taxes										
Taxes based on:										
Gross receipts	-	_	_	-	1.00 ^{ax}	-	-	-	0.26 ^u	0.26 ^u
Salaries ^m	-	-	_	-	-	-	_	-	-	-
Employees ⁿ	-	_	_	_	_	_	_	_	-	_

Federal, regional, and local tax rates - In percent

	Dallas-Fort Worth,TX	Denver CO	Detroit MI	Fargo ND	Gulfport- Biloxi, MS	Hartford CT	Honolulu HI	Houston TX	Indianapolis IN	Jackson MS
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	$0.75^{q,v}$	4.63	6.00 ^q	4.31s	5.00s	9.00 ^{q,×}	6.40s	$0.75^{q,v}$	6.50 ^{q,w}	5.00s
Local	-	-	_bo	_	-	_	_	_	_	_
Combined income tax rate	34.50 ^z	37.06 ^z	37.96 ^z	36.84 ^z	37.30 ^z	39.94 ^z	38.22 ^z	34.50 ^z	38.29 ^z	37.30 ^z
Manufacturing tax reduction b										
Federal	3.06 ^p	2.92 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p
Regional	_	0.42 ^p	-	_	_	-	-	_	-	-
Combined mfg tax rate	31.44	33.72	34.90	33.78	34.24	36.88	35.16	31.44	35.23	34.24
Effective income tax rate, overall average °	28.27	28.67	28.85	31.18	30.77	25.88	33.44	27.84	29.38	30.62
Capital Tax d										
Tax based on:										
Capital stock	-	_	-	_	-	0.310×	-	_	-	-
Net equity	-	_	-	_	-	-	-	_	-	-
Total assets	_	_	-	_	0.250	-	-	_	-	0.250
Debt/borrowings	-	_	-	_	-	-	-	_	-	-
Sales Tax °										
Refundable GST/VAT:										
Federal ^f	-	-	-	_	-	-	_	_	-	-
Regional ^f	-	_	_	_	-	_	_	_	_	_
Non-refundable sales tax:										
Regional ^f	6.25	2.90	6.00	5.00	7.00	6.35	4.00	6.25	7.00	7.00
Local ^f	1.97	4.90	-	2.50	-	-	0.50	1.54	-	1.00
Property Tax ^g										
Land ^h	2.90	2.68	2.59	1.27	1.84	3.22	1.24	2.72	2.32	2.69
Buildings h	2.90	2.68	2.59	1.27	1.84	3.22	1.24	2.72	2.32	2.69
Machinery & equipment i	2.90	2.68	2.17 ^{bj}	_	1.84	3.22as	-	2.72	1.05	2.69
Inventory ^j	2.90 ^{bp}	-	-	_	1.84 ^{bs}	_	_	2.72 ^{bp}	_	2.69 ^{bs}
Total property-based taxes:										
Mfg avg (12 operations) k	\$8.52	\$8.02	\$5.88	\$1.31	\$6.05	\$6.85	\$2.61	\$7.70	\$4.15	\$8.92
Services avg (7 operations) k	\$3.66	\$5.16	\$2.34	\$1.76	\$2.14	\$4.93	\$2.91	\$6.08	\$3.58	\$2.86
Local Business Taxes										
Taxes based on:										
Gross receipts ¹	_	_	-	_	_	-	_	-	-	-
Salaries ^m	-	-	_	-	-	-	-	-	-	-
Employees ⁿ	_	\$36.00 ^{av}	-	_	_	-	_	_	_	_

Federal, regional, and local tax rates - In percent

	Kansas City MO	Las Vegas NV	Lexington KY	Little Rock AR	Los Angeles CA	Madison WI	Manchester NH	Memphis TN	Miami FL	Minneapolis MN
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	6.25 ^q	-	6.00 ^{q,s}	6.50s	8.84 ^q	7.90 ^q	8.20	6.50 ^q	5.50 ^{q,s}	9.80 ^q
Local	1.00	_	2.75	_	-	_	_	_	_	_
Combined income tax rate	37.72 ^{z,ab}	34.00	39.78 ^z	38.29 ^z	39.83 ^z	39.21 ^z	39.41 ^z	38.29 ^z	37.63 ^z	40.47 ^z
Manufacturing tax reduction b										
Federal	2.87 ^p	3.06 ^p	2.88 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	2.89 ^p	3.06 ^p
Regional	0.56 ^p	-	0.54 ^p	-	-	-	_	-	0.50 ^p	_
Combined mfg tax rate	34.29	30.94	36.36	35.23	36.77	36.15	36.35	35.23	34.24	37.41
Effective income tax rate, overall average °	26.37	28.32	33.16	31.07	30.44	29.30	32.24	30.50	27.64	28.73
Capital Tax d										
Tax based on:										
Capital stock	_	_	_	0.300	-	_	_	_	_	_
Net equity	_	_	_	_	_	_	_	_	_	_
Total assets	_	_	_	_	_	_	_	0.250 ^{bd}	_	0.025ak
Debt/borrowings	_	_	_	_	-	_	_	_	_	_
Sales Tax °										
Refundable GST/VAT:										
Federal ^f	_	_	_	_	-	_	_	_	_	_
Regional ^f	_	_	_	_	_	_	_	_	_	_
Non-refundable sales tax:										
Regional ^f	4.23	6.85	6.00	6.50	7.50	5.00	_	7.00	6.00	6.88
Local ^f	3.69	1.30	_	2.50	1.50	0.50	_	2.25	1.00	0.25
Property Tax ^g										
Land ^h	3.15	1.17	1.21	1.37	1.30	2.30	2.37	3.11	2.11	3.76
Buildings h	3.15	1.17	1.21	1.37	1.30	2.30	2.37	3.11	2.11	3.76
Machinery & equipment i	2.81	1.17	0.15	1.37	1.30	2.30 ^{ao}	_	2.33	2.11	_
Inventory ^j	-	_	0.51	1.37	-	_	_	_	_	_
Total property-based taxes:										
Mfg avg (12 operations) k	\$8.45	\$3.62	\$1.76	\$4.68	\$4.42	\$2.86	\$2.62	\$6.89	\$6.79	\$4.23
Services avg (7 operations) k	\$3.74	\$4.45	\$1.71	\$1.50	\$5.27	\$2.48	\$2.09	\$3.18	\$3.03	\$4.48
Local Business Taxes										
Taxes based on:										
Gross receipts ¹	0.08bt	0.18 ^{am}	_	_	0.51 ^{bu}	_	-	_	-	-
Salaries ^m	-	1.33	_	_	-	_	0.72 ^{bg}	_	-	-
Employees ⁿ	_	_	-	_	_	-	_	_	\$4.50ae	_

Federal, regional, and local tax rates - In percent

	Mobile AL	Montgomery AL	Nashville TN	New Orleans LA	New York City, NY	North Virgina (Metro DC), VA	Oklahoma City, OK	Omaha NE	Orlando FL	Philadelphia PA
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	6.50	6.50	6.50 ^q	8.00 ^{q,s}	8.16 ^{q,r}	6.00 ^q	6.00	7.81 ^{q,s}	5.50 ^{q,s}	9.99 ^q
Local	-	_	_	_	_bo	_	_	_	-	_bo
Combined income tax rate	36.08 ^{z,ac}	36.08 ^{z,ac}	38.29 ^z	36.56 ^{z,ac}	39.39 ^z	37.96 ^z	37.96 ^z	38.54 ^{z,aa}	37.63 ^z	40.59 ^z
Manufacturing tax reduction b										
Federal	2.86 ^p	2.86 ^p	3.06 ^p	2.82 ^p	3.06 ^p	2.88 ^p	2.88 ^p	2.84 ^p	2.89 ^p	2.75 ^p
Regional	0.59 ^p	0.59 ^p	-	0.72 ^p	6.50 ^{bc}	0.54 ^p	0.54 ^p	0.65 ^p	0.50 ^p	0.90 ^p
Combined mfg tax rate	32.63	32.63	35.23	33.02	29.83	34.54	34.54	35.06	34.24	36.94
Effective income tax rate, overall average °	30.08	30.13	30.73	22.86	27.49	29.49	30.88	24.76	27.89	28.40
Capital Tax d										
Tax based on:										
Capital stock	-	_	_	_	_	_	_	0.150 ^{an}	_	_
Net equity	-	_	_	_	0.125 ^r	_	0.125 ^{al}	_	_	_
Total assets	0.175 ^{ai}	0.175 ^{ai}	0.250 ^{bd}	0.300 ^{ap}	_	_	_	_	_	_
Debt/borrowings	-	_	_	_	_	_	_	_	-	_
Sales Tax e										
Refundable GST/VAT:										
Federal ^f	_	_	-	_	-	-	-	-	_	_
Regional ^f	-	_	_	_	_	_	_	_	-	_
Non-refundable sales tax:										
Regional ^f	4.00	4.00	7.00	4.00	4.00	4.30	4.50	5.50	6.00	6.00
Local f	6.50	6.00	2.50	4.88	4.63	1.70	3.88	1.50	0.50	_
Property Tax ^g										
Land ^h	1.27	0.73	1.46	1.15	2.91 ^t	1.19	1.30	2.22	2.05	2.53
Buildings h	1.27	0.73	1.46	1.73 ^{bk}	2.91 ^t	1.19	1.30	2.22	2.05	2.53
Machinery & equipment i	1.27	0.73	1.10	1.73 ^{bk}	_	2.00	1.63 ^{bf}	2.22	2.05	_
Inventory ^j	-	_	_	1.73 ^{br}	_	_	1.63 ^{bp}	_	-	_
Total property-based taxes:										
Mfg avg (12 operations) k	\$3.38	\$1.97	\$3.35	\$1.35	\$4.91	\$5.22	\$2.63	\$2.98	\$5.79	\$3.31
Services avg (7 operations) k	\$2.63	\$2.31	\$2.93	\$2.12	\$9.70	\$3.71	\$1.61	\$3.93	\$2.85	\$2.24
Local Business Taxes										
Taxes based on:										
Gross receipts ¹	-	_	_	-	-	0.21az	-	-	-	0.142 ^{be}
Salaries ^m	-	-	_	_	_	-	-	_	-	_
Employees ⁿ	-	_	-	_	-	_	-	-	\$6.16 ^{aj}	

Federal, regional, and local tax rates - In percent

	Phoenix AZ	Pittsburgh PA	Portland OR	Providence RI	Raleigh NC	Richmond VA	Riverside-San Bernardino, CA	Rochester NY	Sacramento CA	Saginaw MI
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	5.50 ^{q,bn}	9.99 ^q	7.60s	7.00	$4.00^{\rm q,bh}$	6.00 ^q	8.84 ^q	6.50 ^{q,r}	8.84 ^q	6.00 ^q
Local	_	-	1.45 ^{bo}	_	_	-	_	_	-	_bo
Combined income tax rate	37.63 ^z	40.59 ^z	39.97 ^z	38.62 ^z	36.64 ^z	37.96 ^z	39.83 ^z	38.29 ^z	39.83 ^z	37.96 ^z
Manufacturing tax reduction b										
Federal	2.89 ^p	2.75 ^p	3.06 ^p	3.06 ^p	3.06 ^p	2.88 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p
Regional	0.50 ^p	0.90 ^p	_	_	-	0.54 ^p	_	6.50 ^{bc}	-	_
Combined mfg tax rate	34.24	36.94	36.91	35.56	33.58	34.54	36.77	28.73	36.77	34.90
Effective income tax rate, overall average °	28.82	29.09	33.62	29.33	29.91	30.32	31.31	28.39	31.09	29.37
Capital Tax ^d										
Tax based on:										
Capital stock	-	-	_	-	-	_	_	-	-	_
Net equity	-	-	_	-	-	_	_	0.125 ^r	-	_
Total assets	-	-	_	_	0.150 ^{bd}	_	_	_	-	_
Debt/borrowings	-	-	_	_	-	_	_	_	-	_
Sales Tax ^e										
Refundable GST/VAT:										
Federal ^f	_	_	_	_	_	-	_	_	-	_
Regional ^f	-	-	_	-	_	-	_	-	-	_
Non-refundable sales tax:										
Regional ^f	5.60	6.00	_	7.00	4.75	4.30	7.50	4.00	7.50	6.00
Local f	2.20	1.00	_	-	2.00	1.00	0.58	4.00	1.00	_
Property Tax ^g										
Land ^h	2.66	2.85	1.28	2.12	1.04	0.92	1.17	5.41	1.14	2.88
Buildings h	2.66	2.85	1.28	2.12	1.04	0.92	1.17	5.41	1.14	2.88
Machinery & equipment i	2.66	-	2.07	3.02 ^{au}	1.04	3.01 ^y	1.17	-	1.14	2.28^{bj}
Inventory ^j	-	-	_	_	-	_	_	_	-	_
Total property-based taxes:										
Mfg avg (12 operations) k	\$7.53	\$3.45	\$5.32	\$2.80	\$2.99	\$1.53	\$3.68	\$6.74	\$3.47	\$6.03
Services avg (7 operations) k	\$3.64	\$2.37	\$3.58	\$3.72	\$2.07	\$2.70	\$4.12	\$2.82	\$3.17	\$2.63
Local Business Taxes										
Taxes based on:										
Gross receipts	_	-	_	-	-	0.200az	0.011 ^{bu}	_	0.040 ^{bu}	_
Salaries ^m	_	-	_	-	-	_	_	_	_	_
Employees ⁿ	-	_	_	_	-	_	_	-	_	_

Federal, regional, and local tax rates - In percent

	Salt Lake City UT	San Antonio TX	San Diego CA	San Francisco CA	Savannah GA	Seattle WA	Shreveport LA	Sioux Falls SD	Spartanburg SC	Spokane WA
Corporate Income Tax ^a										
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	5.00 ^q	$0.75^{\rm q,v}$	8.84 ^q	8.84 ^q	6.00 ^q	_	8.00 ^{q,s}	-	5.00 ^q	_
Local	_	-	_	_	_	_	-	_	-	_
Combined income tax rate	37.30 ^z	34.50 ^z	39.83 ^z	39.83 ^z	37.60 ^{z,aa}	34.00	36.56 ^{z,ac}	34.00	37.30 ^z	34.00
Manufacturing tax reduction b										
Federal	2.91 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	3.06 ^p	2.82 ^p	3.06 ^p	3.06 ^p	3.06 ^p
Regional	0.45 ^p	-	_	_	_	-	0.72 ^p	-	-	-
Combined mfg tax rate	33.94	31.44	36.77	36.77	34.54	30.94	33.02	30.94	34.24	30.94
Effective income tax rate, overall average °	30.39	28.68	30.64	29.61	28.13	27.31	23.82	29.20	29.75	28.93
Capital Tax d										
Tax based on:										
Capital stock	-	-	_	-	_	_	_	-	_	_
Net equity	-	-	_	-	0.030 ^{af}	_	_	-	0.100	_
Total assets	-	-	_	-	_	_	0.300 ^{ap}	-	_	_
Debt/borrowings	-	-	_	_	_	_	_	-	-	_
Sales Tax ^e										
Refundable GST/VAT:										
Federal ^f	-	-	-	-	_	_	-	-	-	_
Regional ^f	_	-	_	_	_	_	_	_	_	_
Non-refundable sales tax:										
Regional ^f	4.70	6.25	7.50	7.50	4.00	6.50	4.00	4.00	6.00	6.50
Local ^f	2.15	2.00	0.50	2.00	3.00	2.93	4.60	2.00	-	2.20
Property Tax ^g										
Land ^h	1.37	3.10	1.12	1.21	1.29	1.35	1.66	1.96	5.04 ^{aq}	1.38
Buildings h	1.37	3.10	1.12	1.21	1.29	1.35	2.49 ^{bk}	1.96 ^{aw}	5.04 ^{aq}	1.38
Machinery & equipment	1.37	3.10	1.12	1.21	1.29	1.35	2.49 ^{bk}	-	5.04 ^{aq}	1.38
Inventory ^j	-	3.10 ^{bp}	-	-	1.29 ^{bp}	-	2.49 ^{br}	-	-	-
Total property-based taxes:										
Mfg avg (12 operations) k	\$4.08	\$8.46	\$3.81	\$4.44	\$3.47	\$4.26	\$1.70	\$1.38	\$9.87	\$4.19
Services avg (7 operations) k	\$2.29	\$4.06	\$4.25	\$4.17	\$2.92	\$2.86	\$2.27	\$1.98	\$7.92	\$1.86
Local Business Taxes										
Taxes based on:										
Gross receipts	-	-	_	0.078 ^{bu}	-	1.500 ^{bb}	0.100 ^{ay}	-	-	1.500 ^{bb}
Salaries ^m	-	_	-	1.125 ^{bi}	-	-	-	-	-	-
Employees ⁿ			\$5.00 ^{ba}		_	-	_	-	_	_

Federal, regional, and local tax rates – In percent

	St. Louis MO	Tampa FL	Trenton NJ	Wichita KS	Wilmington DE	Youngstown OH
Corporate Income Tax ^a						
Federal	34.00°	34.00°	34.00°	34.00°	34.00°	34.00°
Regional	6.25 ^q	5.50 ^{q,s}	9.00 ^{q,s}	7.00s	8.70 ^q	-
Local	_bo	-	-	_	-	1.00 ^{bo}
Combined income tax rate	37.06 ^{z,ab}	37.63 ^z	39.94 ^z	38.62 ^z	39.74 ^z	34.66 ^z
Manufacturing tax reduction b						
Federal	2.87 ^p	2.89 ^p	2.78 ^p	2.85 ^p	2.79 ^p	3.06 ^p
Regional	0.56 ^p	0.50 ^p	0.81 ^p	0.63 ^p	0.78 ^p	-
Combined mfg tax rate	33.63	34.24	36.35	35.14	36.17	31.60
Effective income tax rate, overall average °	25.61	27.82	28.73	32.61	30.94	27.19
Capital Tax d						
Tax based on:						
Capital stock	-	_	_	_	0.035ы	_
Net equity	-	_	_	_	-	_
Total assets	-	-	-	_	-	-
Debt/borrowings	-	_	-	_	-	-
Sales Tax ^e						
Refundable GST/VAT:						
Federal ^f	-	_	_	_	-	_
Regional ^f	-	_	_	_	-	_
Non-refundable sales tax:						
Regional ^f	4.23	6.00	7.00	6.50	-	5.75
Local ^f	4.27	1.00	-	1.00	-	1.00
Property Tax ^g						
Land ^h	3.09	2.06	2.88	2.93	1.39	2.08
Buildings ^h	3.09	2.06	2.88	2.93	1.39	2.08
Machinery & equipment i	3.16	2.06	-	_	-	-
Inventory ^j	-	-	-	_	-	-
Total property-based taxes:						
Mfg avg (12 operations) k	\$9.05	\$5.97	\$4.14	\$2.59	\$1.59	\$2.11
Services avg (7 operations) k	\$4.94	\$1.95	\$2.72	\$2.96	\$1.81	\$0.97
Local Business Taxes						
Taxes based on:						
Gross receipts ¹	-	-	-	-	0.398 ^{bm}	0.260^{u}
Salaries ^m	-	-	-	-	-	-
Employees ⁿ	_	-	_	_	_	_

Footnotes

- a Percentage of taxable income. Minor adjustments required in the calculation of taxable income in each jurisdiction are not individually disclosed. Tax rates shown in this exhibit are for the size of entity examined in this study. Many jurisdictions offer lower income tax rates for small businesses.
- b Manufacturing tax rate reductions may reduce on a pro-rata basis where a significant component of a company's payroll or capital assets are not devoted to manufacturing or processing operations.
- c The effective income tax rates for the overall average (services and manufacturing) in this study vary from the combined nominal income tax rates in each location due to the impact of adjustments to taxable income and income tax credits.
- d Percentage of taxable capital, determined on the general basis indicated. In many jurisdictions, the general tax base indicated here is subject to minor adjustment.
- e Percentage of sales price.
- f General rate. Other rates may apply to specified articles.
- g The Property Tax category includes all property-based taxes, including the property-based component of multi-base local business taxes. Property tax rates relate to the suburban or urban areas identified in the real estate research for this study as offering sites suitable for the types of operation being examined.
- h Percentage of current market value, incorporating current tax rates, assessment factors, base-year price equalization factors, and rental yields (estimated where required).
- i Percentage of depreciated value. Special depreciation rates may apply for property tax purposes.
- Percentage of cost.
- k Total property-based taxes in US \$ per square foot of building space. Property taxes include taxes levied on the value of land and buildings, machinery and equipment, inventory, and other physical assets. For service operations (occupying leased office space), property taxes include the amount of tax paid by the landlord and passed to the tenant as additional rent.
- Percentage of gross sales.
- m Percentage of gross payroll.
- n Tax per employee.
- o Marginal tax rate applies if earnings exceed US \$335,000 and are less than US \$10 million. All US taxable income in excess of US \$75,000 is taxed at marginal rates of 34% to 39%. Lower marginal rates (15% to 25%) apply to the first US \$75,000 of taxable income

Footnotes continue on next page.

Footnotes

- p Effective impact of 9% tax deduction for Qualified Production Activities Income (QPAI). Benefit at the federal level is reduced where a state also permits the QPAI deduction, as this reduces the federal deduction for state income tax paid. However, in these instances, the effective value of the saving at the state level is also shown, resulting in a higher total rate reduction than in states that do not permit the QPAI deduction. Effective rates shown are further adjusted to reflect the impact of state deductibility of federal and/or state taxes as relevant, to be consistent with the presentation of combined income tax rate.
- q Interstate and export sales from this state may not be attributed back to the state-of-origin for the purpose of allocating income between states (due to no "sales throwback" and/ or attribution of services to where the "benefit of the services is received by the client" instead of where the "income producing activities are performed"). For companies with a single main location for operations (as is assumed in this study), this may result in a portion of taxable income not being subject to state income tax. The extent of this benefit depends on the weighting given to the sales factor in each state's interstate income apportionment formula.
- r New York State franchise tax is calculated as the greater of 6.5% of taxable income or 0.125% of taxable capital. For the New York City region, the Metropolitan Transit surcharge of 1.664% is added to the state franchise rate for taxable income, for a total rate of 8.164%. The tax rate on capital for manufacturers is lower than for general corporations. Where tax is based on capital, maximum annual tax is US \$350,000. The capital tax rate is reducing 0.025% annually until it reaches 0% in 2021.
- s Top marginal tax rate. Lower rates of tax apply to the first US \$10,000 to US \$1,000,000 of income, depending on the state. Tax calculations in this study reflect the benefit of lower marginal tax rates as appropriate.
- t New York City Commercial Rent Tax applies in addition for businesses located in downtown New York City. This tax is an additional 3.90% of rent paid (effective rate).
- u For Ohio commercial activity tax on gross receipts, all sales to customers located outside Ohio are exempt.
- v Texas franchise tax is based on "net margin" tax base, as defined for Texas franchise tax
- w Indiana corporate income tax rate is scheduled to decrease to 6.25% in 2017, 6.00% in 2018, 5.75% in 2019 and 5.50% in 2020.
- x Connecticut business tax is calculated as the greater of tax on income or tax on capital. Tax on income is 9.0% for 2016 and 2017 and 8.25% for 2018 only for companies with gross income in excess of US \$100 million or filing unitary or combined returns. In all other cases the tax rate is 7.50%. Tax on capital is 0.31% of taxable capital, with a maximum tax of US \$1 million.
- y For Richmond, a reduced rate of 0.275% applies for property tax on manufacturing machinery.
- z In calculating the combined tax rate, the regional and local tax rates have been reduced by (1-Federal tax rate) to recognize the deduction permitted at the federal level for regional/local income taxes paid.
- aa In calculating the combined tax rate, the regional tax rate has been reduced by (1-Regional tax rate) to recognize the deduction permitted at the regional level for regional taxes paid.
- ab In calculating the combined tax rate, the federal tax rate has been reduced by (1 50% x) Regional tax rate) to recognize the 50% deduction permitted at the regional level for federal income taxes paid.
- ac In calculating the combined tax rate, the federal tax rate has been reduced by (1-Regional tax rate) to recognize the deduction permitted at the regional level for federal income taxes paid.
- ad Overall effective income tax rate for all operations is not reflective of true tax rates due to marginal profitability for some operations, combined with the effects of Alternative Minimum Tax. Results shown represent the support services operation, as an operation with a reasonable net income before tax and no special tax provisions.

- ae Miami-Dade business tax per employee. Rate varies by industry. This rate applies to manufacturing and many types of service operations.
- af For Georgia capital tax, rate shown is approximate rate for firms with US \$1 million to US \$20 million of taxable capital. Actual rates vary based on amount of taxable capital. Maximum annual tax is US \$5.000.
- ag Massachusetts excise tax on capital effectively applies only to inventory and supplies, not total assets. For manufacturing firms, excise tax also applies to machinery and equipment, in lieu of local property tax.
- ah Illinois franchise tax, maximum annual tax is US \$2 million.
- ai Alabama business privilege tax, top marginal rate. Lower rates apply where taxable capital is less than US \$2.5 million. Maximum annual tax is US \$15,000.
- aj Orlando local business tax comprises two flat amounts determined from tables of values based on ranges of employees and space occupied. This complex, minor tax is approximated in the analysis as \$6.16 per employee to a maximum annual tax of US \$2,000.
- ak Minnesota tax is based on inventory, tangible property, payroll and in-state sales. Tax is a flat amount based on ranges of taxable value. Rate shown is an approximation. Maximum annual tax is US \$9,500.
- al Oklahoma franchise tax. Maximum annual tax is US \$20,000.
- am Nevada commerce tax on gross revenue for businesses where gross revenue exceeds US \$4 million. Rates vary by type of business. Rate shown is applicable to professional, scientific or technical services. Rate for manufacturing is 0.091%.
- an Nebraska tax on paid-in capital is a bi-annual tax. The rate has been halved to show the effective rate on an annualized basis. Effective maximum annual tax is US \$11,995.
- ao In Wisconsin, all manufcturing machinery and computer equipment are exempt from property tax.
- ap Louisiana taxable capital is the greater of total fixed assets, or capital plus retained earnings plus 44% of debt. Rate shown is top marginal rate. The first US \$300,000 is taxed at half this rate
- aq For Spartanburg, this study incorporates a five year exemption for new manufacturing establishments from a portion of county-level property taxes. Firms are still subject to full city and school taxes
- ar In Massachusetts, machinery and equipment of manufacturing and processing firms are exempt from local property tax.
- as For Connecticut, this study incorporates a five-year automatic property tax exemption for new in-state manufacturing equipment.
- at For Maine, this study incorporates an automatic property tax exemption for most new new in-state business equipment.
- au In Rhode Island, manufacturing equipment is exempt from property tax.
- av Denver and Aurora Occupational Privilege Taxes per employee.
- aw For Sioux Falls, this study incorporates a one year full abatement and a five year tax phasein for property taxes on new industrial buildings.
- ax Charleston business and occupation tax on gross receipts. Rate shown is for services companies. Manufacturers are exempt.
- ay Shreveport occupational license tax on gross receipts. Rate shown is for services firms, manufacturers are exempt. Maximum annual tax is \$6,200.
- az Virginia business license tax on gross receipts. Rates vary by type of business. Rate shown is applicable to many types of business services. Manufacturers are exempt.

Footnotes continue on next page

Footnotes

- ba In San Diego County 18 cities require business licenses, with a variety of tax/fee structures (gross receipts, per employee, flat, etc.). Given this diversity, City of San Diego peremployee tax is applied to reflect the various taxes in the county.
- bb Washington State business and occupation tax. Rate shown is the general rate for services companies. General rate for manufacturing companies is 0.484%. Specific rates apply to certain industries.
- bc New York State franchise tax rate for manufacturers is now zero. However, in the New York City region, the Metropolitan Transit levy still applies.
- bd For North Carolina and Tennessee, the capital/franchise tax base is the greater of net worth or real and tangible property.
- be In Greater Philadelphia, the applicability of gross receipts tax varies by municipality. The rate shown is reflective of more central locations in the metro area and is applied to the services operations modeled. Many outer suburban locations do not have a gross receipts tax, and no tax has been applied to the manufacturing operations modeled.
- bf For Oklahoma, this study incorporates a five-year property tax exemption for new in-state machinery and equipment.
- bg New Hampshire business enterprise tax applies to salaries and interest paid.
- bh The North Carolina corporate income tax rate is legislated to decrease to 3% in the first calendar year following the fiscal year when state net General Fund taxes collected exceed \$20,975 million.
- bi Applies only to downtown operations located within the City of San Francisco.
- bj In Michigan, this study incorporates a state exemption for a portion of property tax paid on manufacturing machinery and equipment.
- bk For Louisiana, this study incorporates a 10 year full abatement on buildings and machinery for new in-state manufacturing operations.

- bl Delaware capital tax, maximum annual tax is \$180,000.
- bm Delaware gross receipts tax rate shown is for professional/business services companies on gross receipts in excess of US \$1.2 million. For manufacturers, tax is 0.126% on gross receipts over US \$15 million.
- bn Arizona corporate income tax rate is scheduled to decrease to 4.9% in 2017.
- bo Local income tax rates shown reflect suburban locations. Higher local income tax rates apply to downtown operations in Cincinnati (2.10%), Detroit (2.00%), New York City (8.85%), Philadelphia (6.41%), Portland (3.65%), Saginaw (1.50%), St. Louis (1.00%), and Youngstown (2.75%).
- bp Freeport exemptions apply to manufacturers' inventory in Georgia, Oklahoma, and Texas.
- bq In Baltimore, a property tax abatement applies to all manufacturing and R&D machinery and equipment.
- br In Louisiana, manufacturers, wholesalers, and retailers receive a partially refundable income tax credit equal to the amount of property tax paid on inventory.
- bs In Mississippi, manufacturers, wholesalers, and retailers receive a non-refundable income tax credit equal to property tax paid on inventory.
- bt Kansas City business license fee based on gross receipts. Actual rates vary based on receipts. Rate shown is approximate rate for services firms with receipts greater than US \$1 million. Approximate rate for manufacturing firms with receipts greater than US \$1 million is 0.07%.
- bu Municipal business license tax. Rates vary by type of business. Rates shown are applicable to most business services. Lower rates apply for manufacturers in Los Angeles (0.101%), Riverside-San Bernardino (0.006%) and San Francisco (0.035%). Higher rates apply to downtown operations at 0.140% for service operations and 0.11875% for high tech operations. Maximum annual tax is US \$7,660 Riverside-San Bernardino and US \$5,000 in Sacramento.

(This page is intentionally blank.)

Appendix C

Selected bibliography and sources of data

For the purposes of this study, a wide variety of sources in each city and country were contacted to gather recent and accurate statistical data for input to the industry models. These sources are listed on the following pages. Where only the name of an organization is listed, data were sourced either from the organization's website or custom prepared reports. Document titles are included where data were sourced from a specific, publicly-available publication.

A. Location, population, local industry, and transportation

Australia All cities Australian Bureau of Statistics

Adelaide City of Adelaide, Economic Development

Department of Trade and Economic Development, South Australia

Brisbane City Council

Brisbane Investment

Site Selection Online

Melbourne City of Melbourne

Melbourne Development Board

Melbourne Port Corporation

Sydney New South Wales Department of State and Regional Development

City of Sydney

CanadaAll CitiesStatistics Canada

Barrie City of Barrie

Belleville-Quinte West

Brandon

City of Belleville; City of Quinte West

Economic Development Brandon

Manitoba Trade & Investment

Calgary Economic Development

Charlottetown Innovation PEI

Atlantic Canada Opportunities Agency

Edmonton Alberta Treasury Board and Enterprise

Edmonton Economic Development Corporation

Fredericton Enterprise Fredericton

Gatineau Développement économique - CLD Gatineau

Grand Prairie City of Grande Prairie
Halifax Greater Halifax Partnership

Kelowna Central Okanagan Economic Development Commission

Lethbridge Economic Development Lethbridge

Lloydminster Economic Development Corporation

Medicine Hat City of Medicine Hat

Moncton Enterprise Greater Moncton

Atlantic Canada Opportunities Agency

Montreal International

Investissement Québec

Moose Jaw City of Moose Jaw

Enterprise Saskatchewan

Niagara Region Niagara Economic Development

Prince Albert Enterprise Saskatchewan

Quebec City Québec International

Red Deer City of Red Deer

Regina Regional Opportunities Commission

Saint John Enterprise Saint John

Saskatoon Regional Economic Development Authority
Sault Ste. Marie Community Development Corporation of Sault Ste. Marie

Sherbrooke City of Sherbrooke

St. John's Newfoundland and Labrador, Department of Innovation, Business and Rural

Development City of St. John's

Atlantic Canada Opportunities Agency

Sydney Enterprise Cape Breton Corporation

Thunder Bay Community Economic Development Commission

Toronto City of Toronto

Truro Nova Scotia Economic and Rural Development and Tourism

Vancouver Metro Vancouver

Vancouver Economic Commission

Windsor-Essex Economic Development Corporation

Winnipeg Economic Development Winnipeg Inc.

Manitoba Entrepreneurship, Training & Trade

France All Cities Institut National de la Statistique et des Études Économiques

Marseille Ville de Marseille

Paris Regional Development Agency

Germany Berlin Berlin Partner GmbH

Frankfurt Economic Development GmbH

Italy All Cities Istituto Nazionale di Statistica

Milano Metropoli Rome Sviluppo Lazio

Japan Osaka City of Osaka

Tokyo Metropolitan Government

Mexico All Cities ProMexico

Instituto Nacional de Estadística Geografía e Informática (INEGI)

USTrade Department

Mexico City Government of Distrito Federal

Monterrey Government of the State of Nuevo León

Monterrey Ciudad Internacional del Conocimiento

Monterrey Technology Park

Netherlands All Cities Statistics Netherlands

Amsterdam Economic Board

Rotterdam Partners

United Kingdom All Cities UK Office for National Statistics

London Government Office for the South East

London Development Agency

South London Chamber of Commerce & Industry

Manchester City Council

Manchester Training and Enterprise Council
Manchester Chamber of Commerce and Industry

Manchester Business Link

Manchester Investment & Development Agency Services

United States All Cities US Census Bureau

InfoUSA

www.city-data.com

Albuquerque City of Albuquerque

Alexandria Louisiana Economic Development

City of Alexandria

Anchorage Economic Development Corporation

Atlanta Metro Atlanta Chamber of Commerce

Austin The Greater Austin Chamber of Commerce

Baltimore City of Baltimore

Emerging Technology Centers

Baltimore Development Corporation

Bangor Region Development Alliance

Baton Rouge East Baton Rouge Parish

Beaumont City Town Info, Beaumont, Texas

Billings City of Billings

Boise Boise Area Chamber of Commerce
Boston Greater Boston Chamber of Commerce
Burlington Greater Burlington Industrial Corporation
Cedar Rapids Cedar Rapids Area Chamber of Commerce

Champaign-Urbana Illinois Department of Commerce and Economic Opportunity

Charleston Charleston Area Alliance
Charlotte Charlotte Regional Partnership

Cheyenne The Cheyenne-Laramie County Corporation for Economic Development

Chicago City of Chicago

Cincinnati Ohio Economic Development

Cleveland City of Cleveland

Dallas-Fort Worth Greater Dallas Chamber

Texas Department of Economic Development

Denver Metro Denver Economic Development Corporation

Detroit Wayne County Economic Development

Fargo Great Fargo Moorhead Economic Development Corporation

Gulfport-Biloxi Harrison County Development Commission

Hartford Greater Hartford Chamber of Commerce

Honolulu City and County of Honolulu, Economic Development

Houma Louisiana Economic Development

Terrebonne Economic Development Authority

Houston Greater Houston Partnership Research Department

Indianapolis Private Industry Council

Jackson Metro Jackson Economic Development Alliance
Kansas City Economic Development Corporation of Kansas City

Lafayette Louisiana Economic Development

Lafayette Economic Development Authority

Lake Charles Louisiana Economic Development

SWLA Chamber-Economic Development Alliance

Las Vegas City of Las Vegas

Las Vegas Chamber of Commerce

Lexington Lexington-Fayette Urban County Government

Little Rock Chamber of Commerce

City of Little Rock

Los Angeles County Economic Development

San Gabriel Valley Economic Partnership

Madison City-Data.com
Manchester City of Manchester

Memphis Economic Development

Miami City of Miami

Miami Dade County

Minneapolis Greater Minneapolis Chamber of Commerce

Mobile Mobile Area Chamber of Commerce
Monroe Louisiana Economic Development

University of Louisiana at Monroe, Business and Economic Climate of

Monroe and Northeast Louisiana 2010

Montgomery Area Chamber of Commerce
Nashville Nashville Area Chamber of Commerce

New Orleans Louisiana Economic Development; City of New Orleans

New York City Hoover's Online

City of New York

North Virginia (Metro DC) Northern Virginia Economic Development Coalition
Oklahoma City Greater Oklahoma City Chamber of Commerce

Omaha City of Omaha

Omaha Economic Development Corporation

Orlando Metro Orlando Economic Development Commission

Philadelphia Economic Development

Greater Philadelphia Chamber of Commerce

Phoenix Greater Phoenix Chamber of Commerce
Pittsburgh Urban Redevelopment Authority of Pittsburgh
Portland Portland Metropolitan Chamber of Commerce
Providence Rhode Island Economic Development Corporation

Raleigh Greater Raleigh Chamber of Commerce

Research Triangle Park

Richmond City of Richmond

Riverside-San Bernardino California Employment Development Department

Inland Empire Economic Partnership

City of Riverside

City of San Bernardino

Rochester Economic Development Corporation

Sacramento City of Sacramento

Saginaw City of Saginaw, Assessor's Office

Salt Lake City City of Salt Lake City

Salt Lake City Chamber of Commerce

San Antonio City of San Antonio

San Antonio Economic Development Foundation

San Diego San Diego Regional Economic Development Corporation

San Francisco City and County of San Francisco

San Francisco Center for Economic Development

Savannah Savannah Economic Development Authortity

Seattle Chamber of Commerce

Economic Development Council of Seattle and King County

Shreveport Chamber of Commerce
Sioux Falls Sioux Falls Area Chamber of Commerce

Spartanburg City of Spartanburg

Greater Greenville Chamber of Commerce

Spokane Area Economic Development Council

Washington State Labor Market Information

St. Louis The Alliance of Edwardsville & Glen Carbon (economic development)

Tampa Greater Tampa Chamber of Commerce

Trenton New Jersey Economic Development Association

Wichita Office of Economic Development

Wilmington Economic Development Corporation

Youngstown Warren Regional Chamber

General City Populations Online – http://www.citypopulation.de

Google Maps

B. Land prices, construction costs, and facility lease costs

All countries Colliers International

C. Wages and salaries, statutory plans, and benefits

Wages and salaries All Countries Mercer (customized report)

Mercer, Total Employment Costs Report, 2015

North America ERI Economic Research Institute, Salary Assessor Database, 2015

Mercer, Canada and US Geographic Salary Differentials, 2015

Robert Half, Accounting and Finance Salary Guide, Canada and US, 2015

Statutory benefits All Countries Mercer, Total Employment Costs Report, 2015

North America Tax Facts, KPMG Canada

Canada Revenue Agency Internal Revenue Service

State Employment and/or Labor Commissions, as required

State/provincial Workers' Compensation Boards or private insurers, as

required

Other benefits All Countries Mercer, Total Employment Costs around the World, 2015

Mercer, Worldwide Benefit and Employment Guidelines, 2015

Canada AON Hewitt Associates (customized report)

United States US Bureau of Labor Statistics, Employer Costs for Employee Compensation,

June 2015

D. Electricity costs

Australia Adelaide Origin, Energy Australia

Brisbane Origin, Ergon

Melbourne Origin

Sydney Origin, Energy Australia

Canada Barrie PowerStream Inc

Belleville-Quinte West Veridian Connections

Ontario Energy Board

Brandon Manitoba Hydro

Calgary ENMAX

Charlottetown Maritime Electric Company Limited

Edmonton EPCOR

Fredericton New Brunswick Power Corporation

Gatineau Hydro Quebec

Grand Prairie ATCO, Direct Energy Halifax Nova Scotia Power

Kelowna BC Hydro

Lethbridge City of Lethbridge Electric Utility

ENMAX

Lloydminster ATCO, Direct Energy

Medicine Hat City of Medicine Hate Electric Utility

Moncton New Brunswick Power Corporation

Montreal Hydro Quebec
Moose Jaw SaskPower
Niagara Region Horizon
Prince Albert SaskPower
Quebec City Hydro Quebec
Red Deer ENMAX
Regina SaskPower

Saint John New Brunswick Power Corporation

Saskatoon SaskPower
Sault Ste. Marie PUC Distribution
Sherbrooke Hydro Quebec

St. John's Newfoundland Power
Sydney Nova Scotia Power
Thunder Bay Thunder Bay Hydro
Toronto Toronto Hydro

Ontario Energy Board

Truro Nova Scotia Power

Vancouver BC Hydro
Windsor-Essex EnWin Utilities

Ontario Energy Board

Winnipeg Manitoba Hydro

Europe All Cities EuroStat

International Energy Agency, Energy Prices and Taxes, Q3 2015

Japan All Cities International Energy Agency, Energy Prices and Taxes, Q3 2015

Mexico All Cities Comision Federal de Electricidad

International Energy Agency, Energy Prices and Taxes, Q3 2015

United States All Cities US Energy Information Administration

E. Natural gas costs

Australia Adelaide AGL, Energy Australia, Origin

Brisbane Origin
Melbourne AGL, Origin
Sydney AGL, Origin

Canada Alberta ATCO Gas

British Columbia Terasen Gas
Manitoba Manitoba Hydro
New Brunswick Enbridge Gas
Newfoundland Imperial Oil

Petro-Canada

Nova Scotia Imperial Oil

Heritage Gas Petro-Canada

Ontario Enbridge Gas

Union Gas

Prince Edward Island Imperial Oil

Petro-Canada

Quebec Gaz Métro

Saskatchewan TransGas Limited

Europe All Cities EuroStat

International Energy Agency, Energy Prices and Taxes, Q3 2015

Japan All Cities International Energy Agency, Energy Prices and Taxes, Q3 2015

Mexico All Cities Pemex

United States All States US Energy Information Administration

F. Road transportation costs

Australia KPMG Australia

Canada & United States North American Inland Freight Model 2015, MMK Consulting,

Model sources include:

American Trucking Association American Trucking Trends 2015

American Trucking Association ATA Driver Compensation Study, 2011 American Trucking Association Motor Carrier Annual Report 2011

BC Ferries

US Energy Information Administration, 2015 data Fuel Costs, 2015 data: Kent Marketing Services Ltd.

http://www.truckmiles.com Federation of Tax Administrators

Marine Atlantic

International Registration Plan, Inc.

Matson Lines

Transport Canada, Operating Cost of Trucking and Surface Intermodal

Transportation in Canada 2015

Taylor Study, The U.S.-Canada Border: Cost Impacts, Causes, and Short to

Long Term Management Options 2003 Statistics Canada, Working in Canada, 2015

US Department of Labor, Bureau of Labor Statistics 2014

Galaxy Transport Corp. and its agents

Mexico Cosmex International

G. Sea transportation costs

All countries Galaxy Transport Corp. and its agents

H. Air transportation costs

All countries Galaxy Transport Corp. and its agents

I. National and regional taxes

Australia All Cities KPMG Australia

Canada All Cities KPMG Canada, Tax Facts

Revenue Canada

Provincial Revenue/Tax Departments as required

France All Cities Fidal (KPMG France)

Germany All Cities KPMG Germany

Italy All Cities K Studio Associate (KPMG Italy)

Japan All Cities KPMG Japan

Mexico All Cities KPMG Mexico

Boise

Cosmex International

Netherlands All Cities KPMG Meijburg (Tax Lawyers)

United Kingdom All Cities KPMG United Kingdom

United States All Cities CCH, 2015 State Tax Handbook

State Revenue/Tax Departments as required

Albuquerque State of New Mexico Taxation & Revenue

Louisiana Department of Revenue Alexandria Anchorage Alaska Department of Revenue Atlanta Georgia Department of Revenue Austin Texas Comptroller of Public Accounts Baltimore Maryland Department of Revenue Bangor Maine Department of Revenue Baton Rouge Louisiana Department of Revenue Beaumont Texas Comptroller of Public Accounts Billings Montana Department of Revenue

Boston Massachusetts Department of Revenue

Idaho State Tax Commission

Vermont Department of Taxes Burlington Cedar Rapids Iowa Department of Revenue Champaign-Urbana Illinois Department of Revenue Charleston West Virginia State Tax Department Charlotte North Carolina Department of Revenue Chevenne Wyoming Department of Revenue Illinois Department of Revenue Chicago Cincinnati Ohio Department of Taxation Cleveland Ohio Department of Taxation

Dallas-Fort Worth

Denver

Colorado Department of Revenue

Detroit

Michigan Department of Treasury

Fargo

North Dakota State Tax Department

Gulfport-Biloxi, MS

Missouri Department of Revenue

Hartford State of Connecticut, Department of Revenue Services

Honolulu Hawaii Department of Taxation
Houma Louisiana Department of Revenue
Houston Texas Comptroller of Public Accounts
Indianapolis Indiana Department of Revenue
Jackson Mississippi State Tax Commission
Kansas City Missouri Department of Revenue

Lafayette Louisiana Department of Revenue
Lake Charles Louisiana Department of Revenue
Las Vegas Nevada Department of Taxation
Lexington Kentucky Department of Revenue

Little Rock Arkansas Department of Finance and Administration

Los Angeles California Franchise Tax Board
Madison Wisconsin Department of Revenue

Manchester New Hampshire Department of Revenue Administration

Memphis Tennessee Department of Revenue
Miami Florida Department of Revenue

Minneapolis Minnesota Revenue

Mobile Alabama Department of Revenue

Monroe Louisiana Department of Revenue

Montgomery Alabama Department of Revenue

Nashville Tennessee Department of Revenue

New Orleans Louisiana Department of Revenue

New York City

New York State Department of Taxation and Finance

North Virginia (Metro DC) Virginia Department of Taxation
Oklahoma City Oklahoma Tax Commission

Omaha Nebraska Department of Revenue
Orlando Florida Department of Revenue

Philadelphia Pennsylvania Department of Revenue
Phoenix Arizona Department of Revenue
Pittsburgh Pennsylvania Department of Revenue
Portland Oregon Department of Revenue
Providence Rhode Island Division of Taxation

Raleigh North Carolina Department of Revenue

Richmond Virginia Department of Taxation
Riverside-San Bernardino California Franchise Tax Board

Rochester New York State Department of Taxation and Finance

Sacramento California Franchise Tax Board
Saginaw Michigan Department of Treasury
Salt Lake City Utah State Tax Commission

San Antonio Texas Comptroller of Public Accounts

San Diego California Franchise Tax Board
San Francisco California Franchise Tax Board
Savannah Georgia Department of Revenue

Seattle Washington State Department of Revenue

Shreveport Louisiana Department of Revenue
Sioux Falls South Dakota Department of Revenue
Spartanburg South Carolina Department of Revenue
Spokane Washington State Department of Revenue

St. Louis Missouri Department of Revenue
Tampa Florida Department of Revenue
Trenton New Jersey Division of Taxation
Wichita Kansas Department of Revenue
Wilmington Delaware Division of Revenue
Youngstown Ohio Department of Taxation

J. Local taxes

Australia All Cities KPMG Australia

Local city councils

Canada All Cities Provincial Revenue/Tax Departments as required

Barrie City of Barrie
Belleville-Quinte West City of Belleville

City of Quinte-West

Brandon City of Brandon
Calgary City of Calgary
Charlottetown Town of Stratford
Edmonton City of Edmonton
Fredericton City of Fredericton
Gatineau Ville de Gatineau
Grande Prairie City of Grande Prairie

Halifax Regional Municipality, Tax Division

Kelowna City of Kelowna
Lethbridge City of Lethbridge
Lloydminster City of Lloydminster
Medicine Hat City of Medicine Hat

Moncton Business Moncton, Property Taxes

Montreal City of Beaconsfield, Tax Department

Ville de Montreal, Financial Management

Moose Jaw City of Moose Jaw, City Hall

Niagara Region City of Niagara, Falls, City of St. Catharine's

Prince Albert City of Prince Albert, Assessment & Taxation Department

Quebec CityCity of Quebec, Tax DepartmentRed DeerCity of Red Deer, Tax DepartmentReginaCity of Regina, Tax Department

Saint John City of Saint John

Saskatoon City of Saskatoon, Office of the City Assessor

Sault Ste. Marie City of Sault Ste. Marie
Sherbrooke City of Sherbrooke, Finances

St. John's City of Mount Pearl, Tax Department

Town of Paradise

Sydney Cape Breton Regional Municipality, Tax Office

Thunder Bay City of Thunder Bay

Toronto City of Toronto, Tax & Water Department

City of Brampton, Finance Department

City of Mississauga

Truro Town of Truro, Finance & Property Department

Vancouver City of Maple Ridge

City of Surrey

Township of Langley, Property Tax Department

Windsor-Essex Town of Lake Shore, Tax Department

Town of Tecumseh, Tax Department

Winnipeg City of Winnipeg, Tax Department & Corporate Finance

France All Cities Fidal (KPMG France)

Germany All Cities KPMG Germany

Italy All Cities K Studio Associate (KPMG Italy)

Japan All Cities KPMG Japan

Mexico All Cities Cosmex International

DFK / Llarena y Asociados S.C.

Netherlands All cities KPMG Meijburg (Tax Lawyers)

United Kingdom All Cities KPMG United Kingdom

United States All cities National Conference of State Legislatures

Albuquerque City of Albuquerque, Treasury Department

Alexandria Rapides Parish Assessor

Anchorage The Municipality of Anchorage, Treasury Division

Atlanta Georgia Department of Revenue, Property Tax Division

Austin Travis County Tax

Baltimore State of Maryland, Department of Assessment & Taxation

Bangor City of Bangor, Treasury Department
Baton Rouge East Baton Rouge Parish Assessor

Beaumont Jefferson County Tax Office
Billings Yellowstone County, Treasurer

City of Billings, Department of Revenue

Boise Ada County Treasurer

Canyon County Assessor

Boston Massachusetts Department of Revenue, Division of Local Services

Burlington City of Burlington

City of South Burlington
Town of Colchester
Town of Essex

Cedar Rapids Linn County Assessor

Iowa Department of Revenue and Finance

Champaign-Urbana County of Champaign Treasury

Charleston Kanawha County, Assessor & County Clerk

Putnam County Assessor

Charlotte North Carolina, Department of Revenue

City of Charlotte

Mecklenburg County

Cheyenne Laramie County Assessor
Chicago Will County Recorder Office

Will County Clerk's Office, Tax Extension

Illinois Department of Revenue

Cincinnati Hamilton County Auditor; Butler Country Treasurer

Cleveland Cuyahoga County Treasurer's Office

Dallas-Fort Worth Dallas County, Central Appraisal District

Tarrant County, Tax Assessment

Denver Adams County

Detroit

Arapahoe County City of Aurora City of Denver City of Lakewood Jefferson County

City of Romulus Assessor's Office

Wayne County Register of Deeds

Fargo North Dakota State Tax Commissioner

Cass County Assessor

Gulfport-Biloxi Harrison County Tax Assessor

Hartford State of Connecticut, Tax Collector & Real Estate Conveyance Tax

Town of Newington, Town Clerk

Town of Southington, Town Clerk & Assessor

Town of Cheshier, Town Clerk Town of Wolcott, Town Clerk

Town of Enfield, Town Clerk & Assessor

Town of Somers, Town Clerk

Honolulu City of Honolulu, Real Property Assessment Division

State of Hawaii, Department of Taxation

Houma Terrebonne Parish Assessor

Houston Harris County, Tax Assessor/Collector Indianapolis Hendricks County, Auditor's Office

Jackson Hinds County, Tax Assessor

Kansas City City of Kansas City

Missouri Department of Revenue

Clay County, Jackson County, Platte County

Lafayette Assessor

Lake Charles Calcasieu Parish Sheriff's Office
Las Vegas Nevada Department of Taxation

Clark County Treasurer

Lexington Lexington-Fayette Urban County Government, County Clerk

PVD Network

Kentucky Department of Revenue

Little Rock Pulaski County Treasurer

Los Angeles County of Los Angeles, Department of Auditor-Controller

Madison Dane County; Department of Revenue, Wisconsin

Manchester City of Manchester, Tax Collector's Office
Memphis Tennessee Department of Revenue

Shelby County, Assessor of Property

Miami Dade County Property Appraisal Department

Minneapolis Minnesota House Research Department

Dakota County Treasurer, Auditor Department

Mobile Alabama Department of Revenue, Property Tax Division

Montgomery State of Alabama, Revenue Department

Nashville Tennessee Comptroller of the Treasury, Division of Property Assessments

New Orleans Orleans and Jefferson Parish Assessors
New York City City of New York, Finance Department

New York State, Office of Real Estate Property Services

Nassau County

North Virginia (Metro DC) Prince William County, Tax Administration

State of Virginia, Deeds Office

Oklahoma City Oklahoma County Assessor
Omaha Douglas County Treasurer

Orlando Orange County Property Appraiser
Philadelphia Montgomery County Assessor

Bucks County Board of Assessment

Pennsylvania Department of Community & Economic Development

Services, Governor's Centre for Local Government Services

State Tax Equalization Board

Phoenix Maricopa County, Finance Department

Pittsburgh County Allegheny Treasurer

Portland Multnomah County, Assessment & Taxation & Recorder's Office

Oregon Department of Revenue – Statistics

Providence Rhode Island Economic Development Corporation

Rhode Island Tax Department

State of Rhode Island Municipal Affairs, Department of Administration

Rhode Island Economic Development Corporation

Raleigh Wake County Department of Revenue & Register of Deeds

North Carolina Department of Revenue, Property Tax Division

Richmond Chesterfield County, Henrico County Department of Finance

State of Virginia, Deeds Office

Riverside-San Bernardino Riverside County Auditor

San Bernardino County Auditor

Rochester City of Rochester Assessment Bureau

New York State, Office of Real Estate Property Services

Monroe County

Sacramento County Auditor

Saginaw County, Register of Deeds

State of Michigan, Department of Treasury

Salt Lake City Salt Lake County, Auditor

San Antonio Bexar County, Tax Assessor-Collector

San Diego County of San Diego Assessor, Recorder, County Clerk & Property Tax

Services

San Francisco City of Newark

City of Oakland City of San Francisco

County of Alameda, Auditor-Controller

County of San Mateo, Controller

Savannah Georgia Department of Revenue, Property Tax Division

Seattle King County, Department of Assessments

Pierce County

Kent Economic Development

Washington State Department of Revenue

Shreveport Caddo Parish Tax Division

City of Shreveport Revenue Division

Louisiana Tax Commission

Sioux Falls South Dakota Department of Revenue and Regulation, Business Tax Division

County of Minnehaha, Register of Deeds

Sioux Falls Development Foundation

Spartanburg South Carolina Department of Commerce & Tax Department

County of Spartanburg, Auditor

Spokane County Assessor

Spoke County Treasurer

Washington State Department of Revenue

St. Louis St Louis County, Collector of Revenue & Department of Taxes

Missouri Department of Revenue

Tampa Hillsborough County

Polk County Tax Controller

Tampa Bay Economic Development
Greater Tampa Chamber of Commerce

Trenton Mercer County Taxation Department

New Jersey Division of Taxation, Realty Transfer Fees

Wichita Sedgwick County, Clerk's Office Wilmington Delaware Division of Revenue

Newcastle County Recorder of Deeds

State of Delaware, Property Taxes

Youngstown Trumbull County Auditor

Ohio Department of Taxation

CompetitiveAlternatives.com