



**The Benefits to Government of New Home Construction in BC**  
**Prepared for the Canadian Home Builders' Association of BC**  
**January 2019**

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## EXECUTIVE SUMMARY

The Canadian Home Builders' Association of BC engaged MNP to undertake a study to assess the monetary benefits that governments receive from new home construction, and how the cost of building a new home is affected by development fees and charges in nine communities in BC.

### Scope of the Study

For the purpose of this study, monetary benefits were defined to include both fees and taxes directly levied on the construction and sale of new homes, and additional revenues generated through income taxes and taxes on the purchase of materials used in construction.

The taxes and fees directly levied on construction and the sale of new homes were:

- Municipal development fees and charges typically applicable to new home construction.
- Annual property taxes payable to municipalities.
- Taxes payable on the sale of new homes and the transfer of ownership of property.

Additional revenues were:

- Income taxes paid by people employed in the development and construction of residential properties.
- Provincial sales taxes generated from the purchase of construction materials for new home construction.

The communities included in the study were Cranbrook, Kamloops, Kelowna, Mission, Nanaimo, Penticton, Prince George, Squamish, and Surrey.

### Methodology

Development fees and charges were calculated based on the characteristics of the development. To ensure that differences in the municipal revenues were not the result of differences in the characteristics of the home we used standard specifications or “archetypes” to estimate development fees and charges.

The archetypes used in the study were a single-family home and a four-unit townhome. For each archetype we developed estimates for two scenarios:

- **Basic Scenario:** This scenario includes only the standard fees and charges applicable to all new home developments, and assumes that no rezoning, subdivision or site servicing is required.
- **Additional Charges Scenario:** This scenario includes both the standard fees and charges, and additional charges that are incurred when rezoning, subdivision and site servicing is required.

Property transfer taxes and the goods and service tax were calculated based on the purchaser being a BC resident, and the transaction did not qualify for any rebates or exemptions.

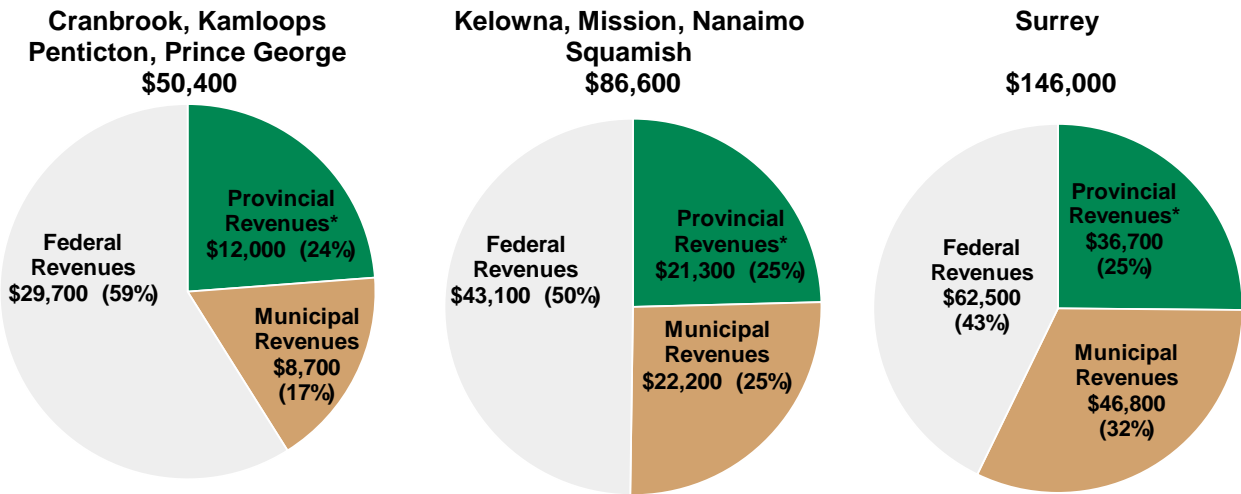
### Monetary Benefits to Government

Revenues from fees and taxes directly levied on new home construction tend to be lowest in smaller communities and highest in densely populated areas. Among the communities in the study, the lowest levels of fees and taxes were in Cranbrook, Kamloops, Penticton and Prince George. Higher levels of fees and taxes were found in Kelowna, Mission, Nanaimo and Squamish, while Surrey had the highest level of fees and taxes.

Single-Family Home

Figure A summarizes the average revenues generated from fees and taxes levied on construction of a single-family home for the basic scenario. Direct levies averaged \$50,400 in Cranbrook, Kamloops, Penticton and Prince George, \$86,600 in Kelowna, Mission, Nanaimo and Squamish and \$146,000 in Surrey.

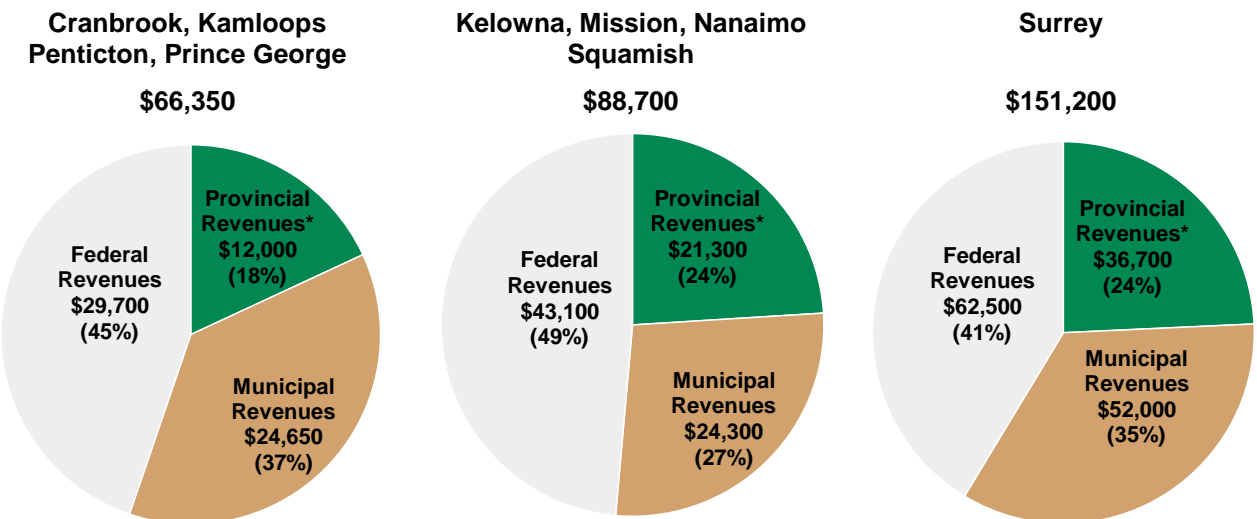
**Figure A: Average Fees and Taxes Levied on Construction of a Single-Family Home (Basic Scenario)**



\*Property Transfer Tax and Electrical Permit

Figure B summarizes the average revenues generated from fees and taxes levied on construction of a single-family home for the additional charges scenario. When additional charges were incurred the average direct levies increased to \$66,350 in Cranbrook, Kamloops, Penticton and Prince George, \$88,700 in Kelowna, Mission, Nanaimo and Squamish and \$151,200 in Surrey. In both scenarios provincial taxes account for approximately 25 percent of direct levies while federal taxes account for between 40 percent and 60 percent, and municipal fees and taxes account for the remainder.

**Figure B: Average Fees and Taxes Levied on Construction of a Single-Family Home (Additional Charges Scenario)**



\*Property Transfer Tax and Electrical Permit

Sales and income tax rates are set at the provincial and federal level and do not vary by community. Table A shows the government revenues generated from sales taxes on materials used during construction and income taxes paid by those employed in construction of a single-family home. Sales taxes were approximately \$3,800 and income taxes were approximately \$38,300.

**Table A: Additional Government Revenues (Single-Family Home)**

	Provincial	Federal
<b>Sales Taxes (Materials)</b>	\$3,800	Included in GST on final sale
<b>Income Taxes</b>	\$10,600	\$27,700
<b>Total</b>	<b>\$14,400</b>	<b>\$27,700</b>

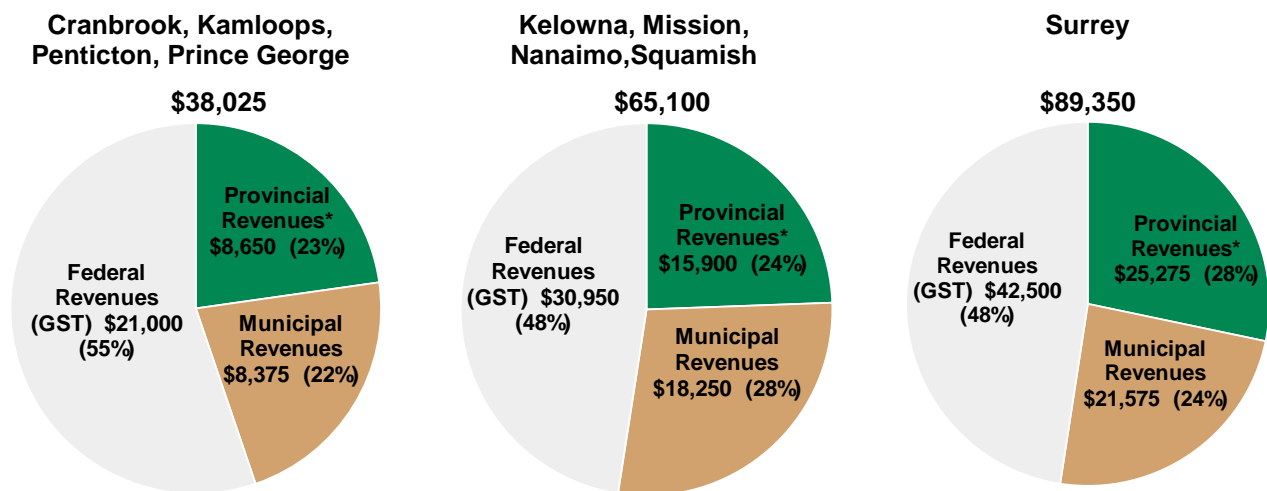
Construction of a single-family home was estimated to generate total monetary benefits of:

- Between \$92,500 (basic scenario) and \$108,450 (additional charges scenario) in Cranbrook, Kamloops, Penticton and Prince George.
- Between \$128,700 (basic scenario) and \$130,800 (additional charges scenario) in Kelowna, Mission, Nanaimo and Squamish.
- Between \$188,100 (basic scenario) and \$193,300 (additional charges scenario) in Surrey.

Townhome Unit

Figure C summarizes the average revenues generated from fees and taxes on construction of a townhome unit for the basic scenario. Direct levies averaged \$38,025 in Cranbrook, Kamloops, Penticton and Prince George, \$65,100 in Kelowna, Mission, Nanaimo and Squamish, and \$89,350 in Surrey.

**Figure C: Average Fees and Taxes Levied on Construction of a Townhome Unit (Basic Scenario)**

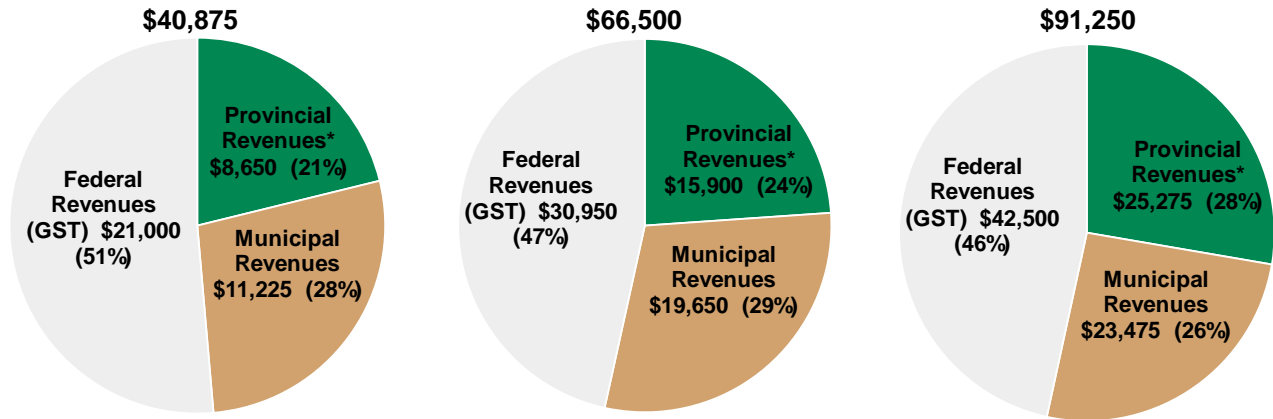


\*Property Transfer Tax and Electrical Permit

Figure D summarizes the average revenues generated from fees and taxes on construction of a townhome unit for the additional charges scenario. When additional charges were incurred average direct levies increased to approximately \$40,875 in Cranbrook, Kamloops, Penticton and Prince George, \$66,500 in Kelowna, Mission, Nanaimo and Squamish, and \$91,250 in Surrey. In both scenarios, provincial fees and

taxes account for between 20 percent and 30 percent of direct levies, federal taxes account for between 40 percent and 60 percent, and the municipal fees and taxes account for the remainder.

**Figure D: Average Fees and Taxes Levied on Construction of a Townhome Unit (Additional Charges Scenario)**



\*Property Transfer Tax and Electrical Permit

Sales and income tax rates are set at the provincial and federal level and do not vary by community. Table B shows the government revenues generated from sales taxes on materials used during construction and income taxes paid by those employed in construction of a townhome unit. Sales taxes were approximately \$2,600 and income taxes were approximately \$26,225.

**Table B: Additional Government Revenues (Townhome Unit)**

	Provincial	Federal
<b>Sales Taxes (Materials)</b>	\$2,600	Included in GST on final sale
<b>Income Taxes</b>	\$7,250	\$18,975
<b>Total</b>	<b>\$9,850</b>	<b>\$18,975</b>

Construction of a townhome unit was estimated to generate total monetary benefits of:

- Between \$66,850 (basic scenario) and \$69,700 (additional charges scenario) in Cranbrook, Kamloops, Penticton and Prince George.
- Between \$93,925 (basic scenario) and \$95,325 (additional charges scenario) in Kelowna, Mission, Nanaimo and Squamish.
- Between \$118,175 (basic scenario) and \$120,075 (additional charges scenario) in Surrey.

# 1. INTRODUCTION

## Background and Purpose

Housing affordability has become a major concern in BC. The provincial and municipal governments have taken steps to address affordability through the introduction of taxes to curb speculation and encourage homeowners to rent out vacant properties. The provincial government has also announced that it intends to make significant investments in increasing housing supply.<sup>1</sup>

There have been a number of studies undertaken to identify the factors affecting housing affordability; however, the subject of how development fees and charges, and other government levies contribute to the cost of housing has not been fully addressed.

The Canadian Home Builders' Association of BC engaged MNP to undertake a study to assess the monetary benefits that governments receive from new home construction, and how the cost of building a new home is affected by development fees and charges.

## Scope

The scope of the study was to:

- Estimate the development fees and charges levied on new home construction in nine communities in BC.
- Estimate the municipal, provincial and federal revenue that results from new home construction.

The communities included in the study were:

- Cranbrook
- Kamloops
- Kelowna
- Mission
- Nanaimo
- Penticton
- Prince George
- Squamish
- Surrey

## Approach

In preparing this report, MNP carried out the following activities:

- Gathered information from publicly available sources to identify development fees and charges in each of the communities included in the study.
- Conducted interviews with builders to identify the most common development fees and charges associated with new home construction in each of the communities.
- Developed standard specifications or “archetypes” for a single-family home and a townhome and estimated the development fees and charges associated with each archetype.
- Developed estimates of the provincial sales taxes, income taxes, and number of jobs created from construction of a single-family home and construction of a townhome.
- Developed estimates of property tax, property transfer taxes, and goods and services tax (GST) from the construction and sale of a single-family home and a townhome.

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<sup>1</sup> BC Gov News. “BC Government addressing housing affordability challenges”. (Available here: <https://news.gov.bc.ca/factsheets/bc-government-addressing-housing-affordability-challenges>).

## Structure of the Report

The remainder of the report is organized as follows:

- Section 2 describes the methodology and data sources used in the study.
- Section 3 provides a high-level overview of residential construction in BC.
- Section 4 provides an overview of the revenues to government from residential construction.
- Section 5 provides estimates of the government revenues from construction of single-family homes.
- Section 6 provides estimates of the government revenues from construction of townhomes.
- Section 7 summarizes the revenue estimates by community.

## Limitations

We have relied upon the completeness, accuracy and fair presentation of all information and data obtained from public sources, believed to be reliable. The accuracy and reliability of the findings and opinions expressed in the presentation are conditional upon the completeness, accuracy and fair presentation of the information underlying them. As a result, we caution readers not to rely upon any findings or opinions expressed for business or investment decisions and disclaim any liability to any party who relies upon them as such.

The findings and opinions expressed in this report constitute judgments as of the date of the report, and are subject to change without notice. MNP is under no obligation to advise of any change brought to its attention which would alter those findings or opinions.

## 2. METHODOLOGY

For the purpose of this study, monetary benefits were defined as:

- Municipal development fees and charges typically applicable to new home construction.
- Provincial sales taxes generated from the purchase of construction materials for new home construction.
- Income taxes paid by those employed in the development and construction of residential properties.
- Property taxes paid by the builder on the lot during construction.
- Property transfers tax paid on the purchase of the property by the builder and on the sale of the completed home.
- GST paid on the sale of a new home.



## Approach

To estimate the monetary benefits to government from new home construction in BC we employed the following approach:

Identified Fees and Charges	Defined Standard Archetypes	Defined Scenarios	Estimated Government Revenues
<ul style="list-style-type: none"><li>Identified the fees and charges associated with residential construction in each of the nine communities included in the study.</li></ul>	<ul style="list-style-type: none"><li>Developed archetypes for a townhome and single-family home based on the factors that determine the fees and charges for residential construction.</li></ul>	<ul style="list-style-type: none"><li>Defined a basic scenario and alternative scenario that were used to estimate the revenues for municipal governments.</li></ul>	<ul style="list-style-type: none"><li>Estimated the revenues to municipal government for each scenario and archetype.</li><li>Estimated the provincial sales tax, provincial income tax, and federal income tax using input/output modelling.</li><li>Estimated other government revenue for each archetype.</li></ul>

### Standard Archetypes

Development fees and charges are calculated based on the characteristics of the development. To ensure that differences in municipal revenues were not the result of differences in the characteristics of the development we used standard specifications or “archetypes” to estimate development fees and charges.

The archetypes used in the study were a single-family home and a four-unit townhome.

### Scenarios

There are two categories of fees and charges levied by municipalities – those that are applicable to all developments and those that only apply in specific circumstances. To account for this we based our estimates on two scenarios:

- Basic Scenario:** This scenario includes only the standard fees and charges applicable to all new home developments, and assumes that no rezoning, subdivision or site servicing is required.
- Additional Charges Scenario:** This scenario includes both the standard fees and charges, and additional charges that are incurred when rezoning, subdivision and site servicing is required.

### Estimated Government Revenues

Municipal government revenues were estimated based on the applicable published fees and charges for each municipality.

Estimates of provincial sales taxes, provincial and federal income taxes, and number of jobs created were developed using Statistics Canada’s BC 2013 input-output multipliers for residential building construction. A description of how provincial sales and income taxes were calculated is provided in Appendix B.

Estimates of property tax and property transfer tax were developed based on tax rates published by the Government of British Columbia.

Estimates of GST were developed by applying 5 percent to the estimated sale price for each housing unit.

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## **Data Sources**

Information used in the study was gathered from primary and secondary sources.

### **Primary Research**

Interviews with builders from Cranbrook, Kamloops, Kelowna, Mission, Prince George and Surrey were conducted to gather information on the most common municipal fees and charges levied on new home construction projects, and the characteristics of a typical single-family home and townhome.

### **Secondary Research**

A review of relevant publicly available documents published by municipalities was undertaken to identify the fees and charges associated with new home construction in each community.

### 3. RESIDENTIAL CONSTRUCTION IN BC

Residential construction is an important component of the BC economy. In 2017 residential construction accounted for approximately 4 percent of provincial GDP<sup>2</sup> and employed over 64,000 people<sup>3</sup>.

The residential construction industry is comprised of businesses throughout the province that provide goods and services within their local communities. According to builders interviewed by MNP, construction of a new home typically involves 20 to 25 different suppliers, and most goods and services are purchased locally.

Residential construction provides employment for a range of skilled and unskilled workers. Skilled workers include tradespeople such as carpenters, plumbers, electricians and roofers, as well as architects, engineers and project managers. Unskilled and semi-skilled workers include equipment operators and general labourers.

In addition to the jobs created directly at the construction site, jobs are supported indirectly at businesses providing the goods and services for construction. For example, a builder's purchase of concrete for the foundation supports employment at the concrete supplier.

To illustrate the employment impacts of residential construction we estimated the number of full-time equivalent (FTEs) jobs created both on-site and at suppliers for a single-family home and for a four-unit townhome (see Table 1). Construction of a single-family home creates approximately three FTEs on-site and two FTEs at suppliers. Construction of a four-unit townhome creates approximately nine FTEs on-site and four at suppliers.

**Table 1: FTEs Generated by New-home Construction in BC**

	Single-Family Home	Townhome
Direct	3	9
Indirect	2	4
Total Employment	5	13

### 4. GOVERNMENT REVENUES FROM RESIDENTIAL CONSTRUCTION

Construction of new homes generates revenues for both municipal and provincial governments. In this section we describe the building process and the revenues generated by charges, fees and taxes for municipal, provincial and federal governments.

#### Overview of the Building Process

Residential construction involves two phases. The first phase is pre-construction which typically involves:

- Finding an appropriate piece of land and ensuring that it is zoned in accordance with the proposed development. Rezoning and subdividing of the property may be required.
- Applying for and obtaining a demolition permit to demolish any prior building structures on the land.
- Developing design and engineering plans for the development.
- Applying for and obtaining the necessary permits and approvals to proceed with construction.

<sup>2</sup> Statistics Canada, Table 36-10-0402-01 Gross domestic product (GDP) at basic prices, by industry, provinces and territories (x 1,000,000)

<sup>3</sup> BC Stats, British Columbia Employment by Detailed Industry, Annual Average, 2017.

Once the development has been approved and the necessary permits are obtained, the construction phase begins. This typically involves:

- Site preparation including surveying and servicing the lot with connections to municipal services (e.g., water and sewer) as required.
- Laying the foundation.
- Building according to the approved design plans.

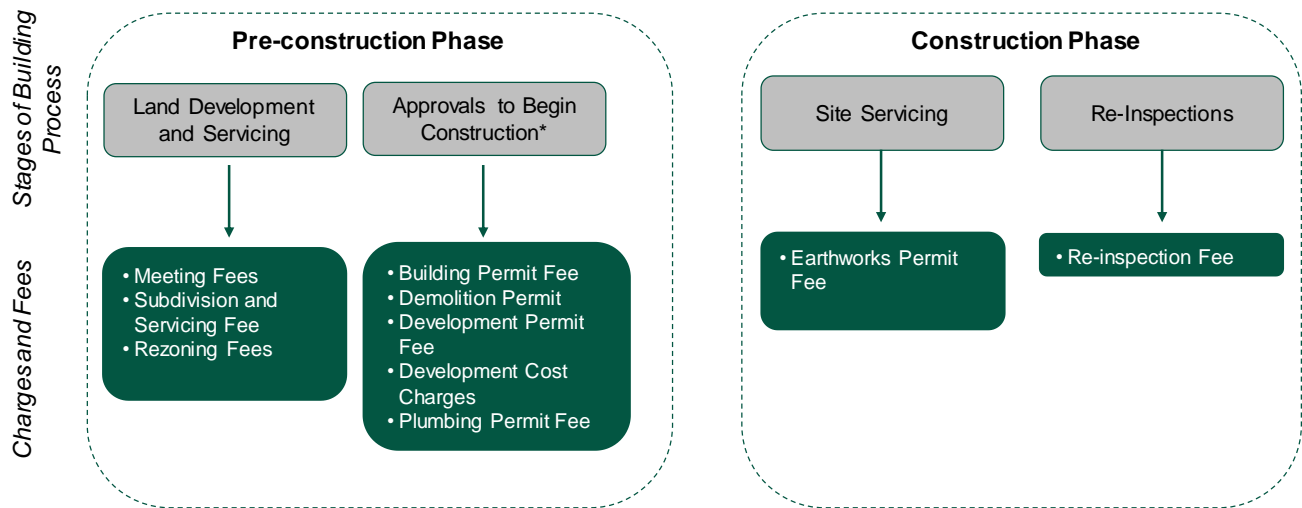
During the construction phase there are periodic inspections by municipal staff to ensure compliance with the municipality’s building bylaws.

## Municipal Government Revenues

Municipal governments are responsible for overseeing development activities within their boundaries. This includes developing and managing building codes, determining zoning and ensuring that local services are provided at appropriate levels.

Residential developments generate revenues for municipal governments from the permit fees and development related charges that are levied as part of the approval process, and from the fees and charges for services related to the construction phase. Figure 1 shows the municipal fees and charges associated with each stage of the building process. A description of each of the categories of fees and charges follows.

**Figure 1: Municipal Fees and Charges by Phase of Construction**



\*An electrical permit issued by Technical Safety BC, a provincial regulatory body, is also required. For the purposes of this study electrical permits have been classified as provincial.

Table 2 describes the municipal fees and charges that are typically levied in connection with residential construction. The basic charges are applicable to all residential construction projects, while the additional charges are only applicable in specified circumstances (e.g., rezoning or subdivision of a property).

**Table 2: Municipal Fees and Charges**

Description	
<b>Basic Fees and Charges</b>	
<b>Demolition Permit</b>	A demolition permit is required to demolish any building structures on the lot. Fees associated with demolition of a single dwelling are fixed and range between \$40 and \$200
<b>Building Permit</b>	A building permit is required to construct a building. The fees associated with the building permit are calculated based on the value of construction. Rates per \$1,000 dollar of construction vary by municipality.
<b>Development Permit</b>	Municipalities may require a development permit in addition to a building permit. Development permits are intended to ensure that the development is consistent with the municipality's development objectives and community plans. Development permits are typically required for construction or subdivision in environmentally sensitive areas or areas with hazardous site conditions such as steep slopes. They may also be required for infill property areas, urban growth areas or multi-family residential zones. Fees associated with development permits are set based on the area the development is located in and the type of development.
<b>Plumbing Permit</b>	Plumbing permits are required for the installation of plumbing fixtures such as hot water tanks, washing machines, built-in dishwashers, as well as installation of connections to the city water supply, sanitary sewer, and storm water sewer. The fees for a plumbing permit are calculated based on the number of plumbing fixtures.
<b>Development Cost Charges (DCCs)</b>	DCCs are collected to support the provision or expansion of infrastructure such as the sewage system, water and drainage, highway facilities, and parks as a result of development. DCCs are typically payable upon applying for a building permit; however, in some cases they are only payable if subdivision is required. For single-family homes DCCs are a fixed fee, while for multi-family developments DCCs are calculated based on the square footage.
<b>Re-inspection</b>	During the construction phase if additional inspections are required a re-inspection fee may be charged. The fees for an additional inspection range from \$50 to \$160 per inspection.
<b>Additional Fees and Charges</b>	
<b>Rezoning Fee</b>	Rezoning and related fees are payable when the development requires changes to the property's zoning. Rezoning charges may also be accompanied by charges to prepare site profiles for rezoning and a public hearing fee.
<b>Subdivision and Servicing</b>	When the development requires changes to the existing property lines (e.g. consolidating two or more lots into one or dividing a lot into two or more lots) subdivision and servicing fees are applied. These include: <ul style="list-style-type: none"> <li>• A subdivision fee based on the number of lots that are created.</li> <li>• A preliminary layout approval fee.</li> <li>• An engineering and inspection fee for administration of the construction work involved in subdivision (e.g. provision of water and sewer connections and servicing of roads, lanes and sidewalks).</li> </ul>
<b>Earthworks Permits</b>	Additional permits such as grading permits, blasting permits and soil removal permits may also be required to prepare the site for construction.
<b>Meetings</b>	As part of the development application process builders may be required to meet with municipal staff or be required to attend public information meetings. Fees for meetings are either a flat fee per meeting or calculated per hour.

## Municipal Taxes

While there are no direct municipal taxes on new home construction, municipal property taxes are payable annually by the registered owner of a property.

## Provincial Government Revenues

The provincial government's role in residential construction is primarily to establish provincial regulations with respect to building codes and standards, and legislation governing stratas.

The provincial government does not directly generate revenues from fees or charges on residential construction. Rather provincial revenues from construction activity are generated in the form of:

- Provincial sales tax on construction materials.
- Provincial income tax paid by those employed in the development and construction of residential properties.
- Property transfer tax payable when a property is purchased. The property transfer tax is determined by the fair market value or sale price (exclusive of GST) of the property. Please note that purchases of newly built homes may be exempted from property transfer tax if the home was built on a parcel of vacant land, has a fair market value of less than \$750,000 and if the home is only used as a principal residence.<sup>4</sup> Purchases by first time home buyers are also exempt if the fair market value is less than \$500,000.

Fees for electrical permits are paid to Technical Safety BC, the independent provincial regulatory body that oversees the installation of technical systems in BC. For the purposes of this study electrical permits have been classified as provincial revenues.

## Federal Government Tax Revenues

The federal government generates revenue from GST payable on the purchase of a new home. First time home buyers may be eligible for a rebate on the purchase of a new built home if the fair market value of the property (including land value) is less than \$450,000.<sup>5</sup>

## 5. REVENUES TO GOVERNMENT FROM SINGLE-FAMILY HOME CONSTRUCTION

The single-family home archetype used in the study was a 2,400 square foot, two storey home on a 6,000 square foot lot. The home had four bedrooms, three full bathrooms, one half bathroom and a garage/carport. The finishing was assumed to be of a medium level and the characteristics of the house were assumed to be consistent with zoning bylaws. The overall cost of construction was assumed to be \$175 per square foot and the time to complete the project was 18 months. A complete list of characteristics is provided in Appendix A.

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<sup>4</sup> BC Government, "Property Transfer Tax Exemptions", Available here: <https://www2.gov.bc.ca/gov/content/taxes/property-taxes/property-transfer-tax/exemptions> (Accessed December 18, 2018)

<sup>5</sup> Canada Revenue Agency. "GST/HST New Housing Rebate" Available here: <https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/gst-hst-businesses/gst-hst-home-construction/gst-hst-new-housing-rebate.html> (Accessed December 18, 2018).

There were no changes to the Official Community Plan (OCP) required for the development and the location was not in an environmentally sensitive, watercourse or hazardous area. In the basic scenario the lot did not require rezoning, subdivision or site servicing. In the additional charges scenario rezoning, subdivision and site servicing were required. In both scenarios no re-inspections were required.

The purchaser of the completed home was a BC resident and the purchase did not qualify for any rebates or exemptions from property transfer tax or GST.

## Revenues from Fees Levied on Construction

Table 3 shows the estimated revenues generated from fees and charges for the construction of a single-family home under the basic scenario in each of the communities included in the study. With the exception of electrical permits, revenues from these fees accrue to municipal governments. The municipal fees associated with building a new single-family home ranged from approximately \$3,000 in Prince George to \$43,000 in Surrey. The highest fees and charges were DCCs, which accounted for over 70 percent of the total fees and charges in seven of the communities.

**Table 3: Fees and Charges for Construction of a Single-Family Home – Basic Scenario**

Municipality	Building Permit	Demolition Permit	Development Permit	DCCs	Plumbing Permit	Electrical Permit	Total
Prince George	\$2,865	\$75	\$0	\$0	\$300	\$642	\$3,882
Cranbrook	\$2,223	\$150	\$0	\$1,430	\$340	\$642	\$4,785
Penticton	\$5,040	\$150	\$0	\$0	\$400	\$642	\$6,232
Kamloops	\$2,760	\$100	\$1,000	\$10,077	\$433	\$642	\$15,012
Squamish	\$3,780	\$200	\$0	\$13,014	\$440	\$642	\$18,076
Mission	\$3,730	\$200	\$507 <sup>6</sup>	\$13,328	\$493	\$642	\$18,900
Nanaimo	\$3,335	\$40	\$0	\$14,865	\$315	\$642	\$19,197
Kelowna	\$3,611	\$175	\$930 <sup>7</sup>	\$17,392	\$595	\$642	\$23,345
Surrey	\$4,278	\$178	\$0	\$37,790 <sup>8</sup>	\$799	\$642	\$43,687

In addition to the permitting fees and DCCs, there may also be fees related to rezoning, subdivision and site servicing. Table 4 shows the municipal revenues generated from fees and charges under the additional charges scenario where rezoning, subdivision and site servicing is required. (Please note the fees and charges associated with rezoning, subdivision and site servicing vary by project depending on the scope of work involved. Consequently, the estimates presented in Table 4 represent minimum expected charges.) The additional charges associated with rezoning, subdivision and site servicing increase the total municipal fees and charges by between approximately \$2,000 and \$27,000. Rezoning charges range from \$1,000 to \$5,500 while charges related to subdivision of the property range from under \$1,000 in Prince George, Penticton, Kamloops and Nanaimo to approximately \$25,000 in Cranbrook.

<sup>6</sup> Lot is assumed to be located in Development Permit Area A.

<sup>7</sup> Lot is assumed to be zoned RU7 Infill Housing Zone.

<sup>8</sup> DCCs include Community Amenity Contribution fee and Greater Vancouver Sewerage and Drainage District Development fee.

**Table 4: Fees and Charges for Construction of a Single-Family Home – Additional Charges Scenario**

Municipality	Basic Fees (Table 3)	Rezoning <sup>9</sup>	Subdivision and Servicing <sup>10</sup>	Changes to DCCs due to Subdivision	Other**	Total
Prince George	\$3,882	\$2,227	\$810 <sup>11</sup>	\$3,529	\$250	\$10,698
Kamloops	\$15,012	\$2,000*	\$900 <sup>9</sup>	\$0	\$150	\$18,062
Nanaimo	\$19,197	\$1,000	\$650 <sup>9</sup>	\$0	\$20	\$20,867
Penticton	\$6,232	\$1,215	\$480	\$13,262	\$400	\$21,589
Squamish	\$18,076	\$2,800	\$3,188 <sup>12</sup>	\$0	\$650	\$24,714
Mission	\$18,900	\$5,008	\$4,178 <sup>13</sup>	\$0	\$150	\$28,236
Kelowna	\$23,345	\$2,410	\$2,685	\$0	\$260	\$28,700
Cranbrook	\$4,785	\$1,300	\$25,200 <sup>14</sup>	\$602	0	\$31,887
Surrey	\$43,687	\$5,500	\$2,366	\$0	\$972 <sup>15</sup>	\$52,525

\*Development permit fees are reduced by \$300 when rezoning is part of the application. The value reported here is the rezoning fee less the \$300 reduction in development permit fees.

\*\*Other fees and charges include earthworks permits and meetings.

Table 5 shows the contribution of fees and charges to the cost of building a single-family home in each community. Fees and charges add between 1 percent and 13 percent to the cost of building. Standard fees applicable to all new home construction add between one percent and six percent in most communities and 11 percent in Surrey. Additional fees applicable in specific circumstances add between two and seven percent to the cost of building.

**Table 5: Contribution of Fees and Charges to the Cost of Building a Single-Family Home**

Municipality	Basic Scenario	Additional Charges Scenario
Cranbrook	1%	8%
Prince George	1%	3%
Penticton	2%	5%
Kamloops	4%	5%
Nanaimo	5%	5%
Mission	5%	7%
Kelowna	6%	7%
Squamish	5%	7%
Surrey	11%	13%

## Revenue from Taxes

Municipal, provincial and federal governments generate revenue from property taxes, property transfer tax and GST. Property taxes are paid by the builder over the course of construction. The property transfer tax is paid

<sup>9</sup> Rezoning charges include public hearing/advertisement fee and site profile fee where applicable.

<sup>10</sup> Subdivision costs include preliminary layout approval, final approval, and engineering and inspection fee.

<sup>11</sup> An additional inspection fee will also be levied of 2% of the costs associated with subdivision.

<sup>12</sup> The fee includes a minimum engineering and inspection fee of \$2,500.

<sup>13</sup> The fee includes a minimum engineering and inspection fee of \$2,531.

<sup>14</sup> The fee includes a minimum engineering and inspection fee of \$25,000.

<sup>15</sup> Includes \$540 sediment and erosion control permit fee.



when the property is purchased by the builder and again when the completed house is sold by the builder. GST is paid on the final sale of the completed house.

Table 6 below shows estimated taxes associated with construction and sale of a single-family home. Taxes ranged from approximately \$37,000 in Cranbrook to \$102,000 in Surrey. It is important to note that property tax, property transfer tax and GST are calculated on property values. Consequently, these taxes are higher in communities with high property values.

**Table 6: Taxes Levied on Construction and Sale of a Single-Family Home**

Municipality	Property Tax	Property Transfer Tax	GST	Total
Cranbrook	\$1,360	\$9,460	\$26,400	\$37,220
Prince George	\$1,850	\$10,100	\$27,500	\$39,450
Penticton	\$1,860	\$13,000	\$32,500	\$47,360
Kamloops	\$2,280	\$12,900	\$32,500	\$47,680
Nanaimo	\$2,460	\$14,500	\$35,000	\$51,960
Mission	\$2,570	\$19,000	\$40,000	\$61,570
Kelowna	\$2,850	\$20,200	\$42,500	\$65,550
Squamish	\$3,800	\$29,000	\$55,000	\$87,800
Surrey	\$3,670	\$36,000	\$62,500	\$102,170

Table 7 summarizes revenues from construction of a single-family home for each level of government. Total government revenues from construction of a single-family home range from approximately \$42,000 in Cranbrook to over \$150,000 in Surrey. Provincial revenues account for approximately 25 percent of total revenues in most communities. Municipal revenues vary widely and account for between 13 percent of total revenues and 32 percent of total government revenues. Federal revenue from GST accounts for between approximately 40 percent and 60 percent of total government revenues.

**Table 7: Summary of Fees and Taxes Levied on Single Family Homes**

Municipality	Municipal Revenues		Provincial Revenues*	Federal Revenues	Total	
	Basic Scenario	Additional Charges Scenario			Basic Scenario	Additional Charges Scenario
Cranbrook	\$5,503	\$ 32,605	\$10,100	\$26,400	\$42,003	\$ 69,105
Prince George	\$5,090	\$ 11,906	\$10,700	\$27,500	\$43,290	\$ 50,106
Penticton	\$7,450	\$ 22,807	\$13,600	\$32,500	\$53,550	\$ 68,907
Kamloops	\$16,650	\$ 19,700	\$13,500	\$32,500	\$62,650	\$ 65,700
Nanaimo	\$21,015	\$ 22,685	\$15,100	\$35,000	\$71,115	\$ 72,785
Mission	\$20,827	\$ 30,164	\$19,600	\$40,000	\$80,427	\$ 89,764
Kelowna	\$25,553	\$ 30,908	\$20,800	\$42,500	\$88,853	\$ 94,208
Squamish	\$21,234	\$ 27,872	\$29,600	\$55,000	\$105,834	\$ 112,472
Surrey	\$46,715	\$ 55,553	\$36,600	\$62,500	\$145,815	\$ 154,653

\*Includes property transfer tax and fees for electrical permits.

## Additional Revenues Generated from Construction

In addition to the fees and taxes directly levied on the construction of single-family homes, governments receive revenues from sales taxes paid on construction materials and the income taxes paid by people directly employed in the construction. Table 8 shows the sales and income taxes generated by the construction of a

single-family home. The provincial sales taxes paid on materials and equipment used in a single-family home were estimated to be approximately \$3,800. Income taxes paid by those employed in building a single-family home were estimated to be approximately \$38,300.

**Table 8: Sales and Income Taxes from Construction of a New Single-Family Home**

	Provincial Taxes	Federal Taxes
<b>Sales Tax</b>	\$3,800	Included in GST on final sale
<b>Income Tax</b>	\$10,600	\$27,700
<b>Total</b>	<b>\$14,400</b>	<b>\$27,700</b>

## 6. REVENUES TO GOVERNMENT FROM CONSTRUCTION OF A TOWNHOME

The townhome archetype used in the study was a four-unit row house. Each unit was 1,800 square feet with three bedrooms, two full bathrooms, one half bathroom and a garage/carport. The finishing was assumed to be of a medium level and the characteristics of the house were assumed to be consistent with zoning bylaws. The overall cost of construction was assumed to be \$160 per square foot and it was assumed that project takes approximately 24 months to be completed. A full list of characteristics is provided in Appendix A.

There were no changes to the OCP required for the development and the location was not in an environmentally sensitive, watercourse or hazardous area. In the basic scenario the lot did not require rezoning, subdivision or site servicing. In the additional charges scenario rezoning, subdivision and site servicing were required. In both scenarios no re-inspections were required.

The purchasers of the completed units were BC residents and the purchases did not qualify for any rebates or exemptions from property transfer tax or GST.

### Revenues from Fees Levied on Construction

Table 9 shows the revenues generated from fees and charges for the construction of a four-unit townhome under the basic scenario. With the exception of the electrical permit, all fees are paid the municipal government. The municipal fees and charges ranged from approximately \$10,600 in Prince George to approximately \$73,000 in Surrey. The largest component was DCCs, which accounted for over half of the fees and charges in seven of the communities.

**Table 9: Fees and Charges for Construction of a Four-Unit Townhome - Basic Scenario** <sup>16</sup>

Municipality	Building Permit	Demolition Permit	Development Permit	DCCs	Plumbing Permit	Electrical Permit	Total
Prince George	\$7,623	\$75	\$2,240	\$0	\$684	\$1,877	\$12,499
Cranbrook	\$5,883	\$150	\$600	\$5,720	\$970	\$1,877	\$15,200
Penticton	\$13,824	\$150	\$1,125	\$22,192	\$1,330	\$1,877	\$40,498
Kamloops	\$7,152	\$100	\$1,000	\$30,996	\$975	\$1,877	\$42,100
Squamish	\$10,368	\$200	\$2,400	\$28,236	\$1,310	\$1,877	\$44,391
Nanaimo	\$8,459	\$40	\$2,000	\$54,881	\$879	\$1,877	\$68,136
Mission	\$9,329	\$200	\$3,230 <sup>17</sup>	\$52,564	\$1,511	\$1,877	\$68,711
Kelowna	\$9,503	\$175	\$930	\$57,136	\$2,080	\$1,877	\$71,701
Surrey	\$10,983	\$178	\$3,307	\$55,832 <sup>18</sup>	\$2,668	\$1,877	\$74,845

Table 10 shows the municipal revenues generated from fees and charges in the additional charges scenario in which rezoning, subdivision and site servicing were required. (Please note the fees and charges associated with rezoning, subdivision and site servicing vary by project depending on the scope of work involved. Consequently, the estimates presented in Table 10 represent minimum expected charges.) The additional fees and charges increase the total municipal fees and charges by between approximately \$2,000 and \$29,000. The additional charges for rezoning, subdivision and site servicing were similar to those for a single-family home as these charges are typically per application and are independent of the size of the development or number of units.

**Table 10: Fees and Charges for Construction of a Four-Unit Townhome – Additional Charges Scenario** <sup>19</sup>

Municipality	Basic Fees (Table 9)	Rezoning <sup>20</sup>	Subdivision and Servicing <sup>21</sup>	Changes to DCCs due to Subdivision	Other**	Total
Prince George	\$12,499	\$1,600	\$810 <sup>22</sup>	\$9,180	\$250	\$24,339
Penticton	\$40,498	\$1,215	\$480	\$0	\$400	\$42,593
Cranbrook	\$15,200	\$1,300	\$25,200 <sup>23</sup>	\$2,408	\$0	\$44,108
Kamloops	\$42,100	\$2,000*	\$900 <sup>19</sup>	\$0	\$150	\$45,150
Squamish	\$44,391	\$3,400	\$3,188 <sup>24</sup>	\$0	\$650	\$51,629
Nanaimo	\$68,136	\$1,000	\$650 <sup>19</sup>	\$0	\$20	\$69,806
Mission	\$68,711	\$3,782	\$4,178 <sup>25</sup>	\$0	\$150	\$76,821
Kelowna	\$71,701	\$2,410	\$2,685	\$0	\$260	\$77,056
Surrey	\$74,845	\$4,299	\$2,366	\$0	\$972 <sup>26</sup>	\$82,482

\*Development permit fees are reduced by \$300 when rezoning is part of the application. The value reported here is the rezoning fee less the \$300 reduction in development permit fees.

\*\*Other fees and charges include earthworks permits and meetings.

<sup>16</sup> Please note that Building Permit Fee, Plumbing Permit Fee and DCCs have been estimated for each four-unit townhome, based on characteristics outlined in Appendix A. The estimates represent minimum applicable fees for each development permit application.

<sup>17</sup> Lot is assumed to be in Development Permit Area B.

<sup>18</sup> DCCs estimate include Community Amenity Contribution fee and Greater Vancouver Sewerage and Drainage District Development fee.

<sup>19</sup> Please note that Subdivision Fee, Rezoning Fee and Earthworks and Site Servicing Permit Fee depends on the type and scale of construction project. The estimates represent minimum applicable fees for each development permit application.

<sup>20</sup> Rezoning charges include public hearing/advertisement fee and site profile fee where applicable.

<sup>21</sup> Subdivision costs includes preliminary layout approval, final approval, and engineering and inspection fees.

<sup>22</sup> An additional inspection fee of 2% of total construction costs will also be levied.

<sup>23</sup> The fee includes a minimum engineering and inspection fee of \$25,000

<sup>24</sup> The fee includes a minimum engineering and inspection fee of \$2,500.

<sup>25</sup> The fee includes a minimum engineering and inspection fee of \$2,531.

<sup>26</sup> Includes \$540 sediment and erosion control permit fee.

Table 11 shows the contribution of fees and charges to the cost of building a four-unit townhome in each community. Fees and charges add between one percent and seven percent to the cost of building. Standard fees applicable to all new home construction add between one percent and six percent while additional fees applicable in specific circumstances add between one and three percent to the cost of building.

**Table 11: Contribution of Fees and Charges to the Cost of Building a Four-Unit Townhome**

	Basic Scenario	Additional Charges Scenario
<b>Cranbrook</b>	1%	4%
<b>Kamloops</b>	4%	4%
<b>Kelowna</b>	6%	7%
<b>Mission</b>	6%	7%
<b>Nanaimo</b>	6%	6%
<b>Penticton</b>	4%	4%
<b>Prince George</b>	1%	2%
<b>Squamish</b>	4%	4%
<b>Surrey</b>	6%	7%

## Revenue from Taxes

Municipal, provincial and federal governments generate revenue from property taxes, property transfer tax and GST. Property taxes are paid by the builder over the course of construction. The property transfer tax is paid when the property is purchased by the builder and again when the completed units are sold by the builder. GST is paid on the final sale of the completed units.

Table 12 below shows the estimated taxes levied on the construction and sale of a four-unit townhome. Taxes ranged from approximately \$109,000 in Cranbrook to \$280,000 in Surrey. It is important to note that property tax, property transfer tax and GST are calculated on property values. Consequently, these taxes are higher in communities with high property values.

**Table 12: Taxes on Construction and Sale of a Four-Unit Townhome**

Municipality	Property Tax	Property Transfer Tax <sup>27</sup>	GST	Total
<b>Prince George</b>	\$8,700	\$29,760	\$80,000	\$118,460
<b>Penticton</b>	\$6,940	\$37,200	\$90,000	\$134,140
<b>Cranbrook</b>	\$6,450	\$26,800	\$76,000	\$109,250
<b>Kamloops</b>	\$8,980	\$37,200	\$90,000	\$136,180
<b>Squamish</b>	\$15,110	\$86,800	\$160,000	\$261,910
<b>Nanaimo</b>	\$9,900	\$43,600	\$100,000	\$153,500
<b>Mission</b>	\$9,380	\$53,200	\$110,000	\$172,580
<b>Kelowna</b>	\$12,240	\$63,200	\$125,000	\$200,440
<b>Surrey</b>	\$13,320	\$99,200	\$170,000	\$282,520

Table 13 summarizes the revenues for each level of government from fees and taxes levied on a four-unit townhome. Total revenues range from approximately \$125,000 in Cranbrook to \$365,000 in Surrey. Federal

<sup>27</sup> The calculations assume that each townhouse unit is sold separately.

revenues account for the largest share at between 45 percent and 60 percent of the total. Provincial revenues accounts for between 20 percent and 30 percent of total revenues, while municipal revenues account for between 15 percent and 33 percent of total revenues.

**Table 13: Summary of Government Revenues From Fees and Taxes Levied on a Four-Unit Townhome**

Municipality	Municipal Revenues		Provincial Revenues*	Federal Revenues	Total Revenues	
	Basic Scenario	Additional Charges Scenario			Basic Scenario	Additional Charges Scenario
Cranbrook	\$19,773	\$48,681	\$28,677	\$76,000	\$124,450	\$153,358
Prince George	\$19,322	\$31,162	\$31,637	\$80,000	\$130,959	\$142,799
Penticton	\$45,561	\$47,656	\$39,077	\$90,000	\$174,638	\$176,733
Kamloops	\$49,203	\$52,253	\$39,077	\$90,000	\$178,280	\$181,330
Nanaimo	\$76,159	\$77,829	\$45,477	\$100,000	\$221,636	\$223,306
Mission	\$76,214	\$84,324	\$55,077	\$110,000	\$241,291	\$249,401
Kelowna	\$82,064	\$87,419	\$65,077	\$125,000	\$272,141	\$277,496
Squamish	\$57,624	\$64,862	\$88,677	\$160,000	\$306,301	\$313,539
Surrey	\$86,288	\$93,925	\$101,077	\$170,000	\$357,365	\$365,002

\*Includes property transfer tax and fees for electrical permits.

Table 14 shows the government revenues from fees and taxes on each townhome unit. Total fees and taxes range from approximately \$31,000 in Cranbrook to \$91,000 in Surrey.

**Table 14: Summary of Government Revenues From Fees and Taxes Levied on a Townhome Unit**

Municipality	Municipal Revenues		Provincial Revenues*	Federal Revenues	Total Revenues	
	Basic Scenario	Additional Charges Scenario			Basic Scenario	Additional Charges Scenario
Cranbrook	\$4,943	\$12,170	\$7,169	\$19,000	\$31,112	\$38,339
Prince George	\$4,831	\$7,791	\$7,909	\$20,000	\$32,740	\$35,700
Penticton	\$11,390	\$11,914	\$9,769	\$22,500	\$43,659	\$44,183
Kamloops	\$12,301	\$13,063	\$9,769	\$22,500	\$44,570	\$45,332
Nanaimo	\$19,040	\$19,457	\$11,369	\$25,000	\$55,409	\$55,826
Mission	\$19,054	\$21,081	\$13,769	\$27,500	\$60,323	\$62,350
Kelowna	\$20,516	\$21,855	\$16,269	\$31,250	\$68,035	\$69,374
Squamish	\$14,406	\$16,216	\$22,169	\$40,000	\$76,575	\$78,385
Surrey	\$21,572	\$23,481	\$25,269	\$42,500	\$89,341	\$91,250

\*Includes property transfer tax and fees for electrical permits.

## Additional Revenues Generated from Construction

In addition to the fees and taxes directly levied on the construction of single-family homes, governments receive revenues from sales taxes paid on construction materials and the income taxes paid by people directly employed in the construction.

Table 15 shows the sales and income taxes generated from the construction of a four-unit townhome. The provincial sales taxes paid on materials used in construction were estimated to be approximately \$10,400 per four-unit townhome development. The income tax paid by those employed in the construction of a townhome were estimated to be approximately \$104,000 per four-unit townhome development.

**Table 15: Sales and Income Taxes from Construction of a Four-Unit Townhome**

	Total		Per Unit	
	Provincial	Federal	Provincial	Federal
<b>Sales Tax</b>	\$10,400	Included in GST on final sale	\$2,600	Included in GST on final sale
<b>Income Tax</b>	\$29,000	\$75,900	\$7,250	\$18,975
<b>Total</b>	<b>\$39,400</b>	<b>\$75,900</b>	<b>\$9,850</b>	<b>\$18,975</b>

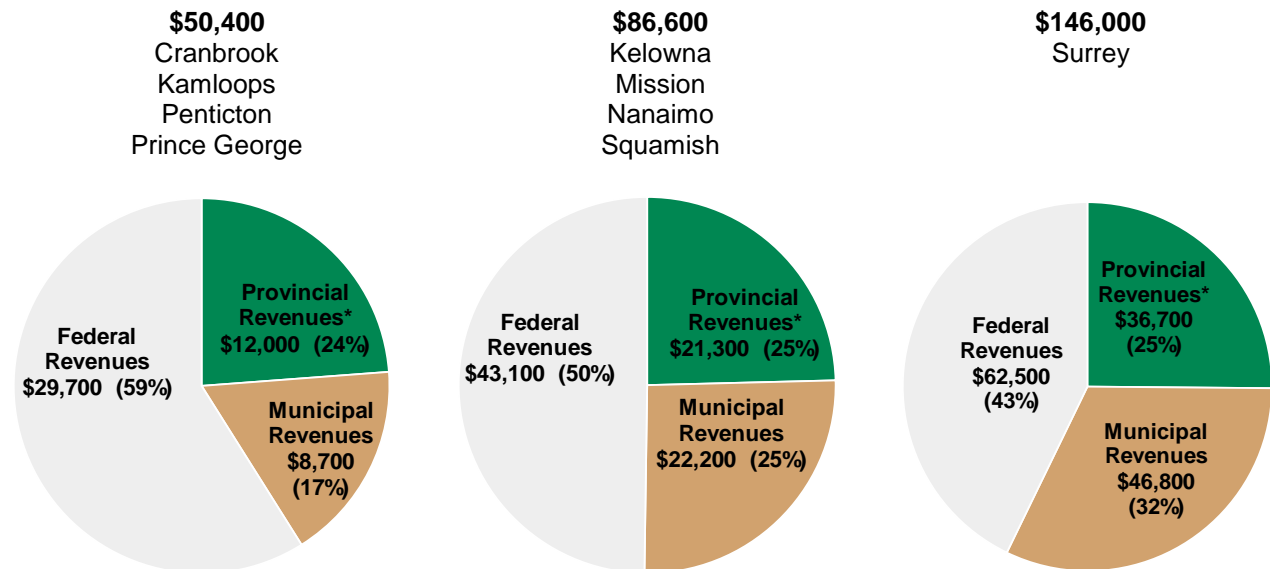
## 7. SUMMARY OF REVENUE ESTIMATES BY COMMUNITY

Revenues from fees and taxes directly levied on new home construction tend to be lower in smaller communities and highest in densely populated areas. Among the communities in the study, the lowest levels of fees and taxes were in Cranbrook, Kamloops, Penticton and Prince George. Higher levels of fees and taxes were found in Kelowna, Mission, Nanaimo and Squamish, while Surrey had the highest level of fees and taxes.

Figure 2 illustrates the average government revenues generated from the construction and sale of a single-family home for each group of communities from the basic scenario. Direct levies averaged \$50,400 in Cranbrook, Kamloops, Penticton and Prince George, \$86,600 in Kelowna, Mission, Nanaimo and Squamish and \$146,000 in Surrey.

**Figure 2: Government Revenues from Construction of a Single-Family Home (Basic Scenario)**

### Average Fees and Taxes Levied on Construction of a Single Family Home (Basic Scenario)



\*Property Transfer Tax and Electrical Permit

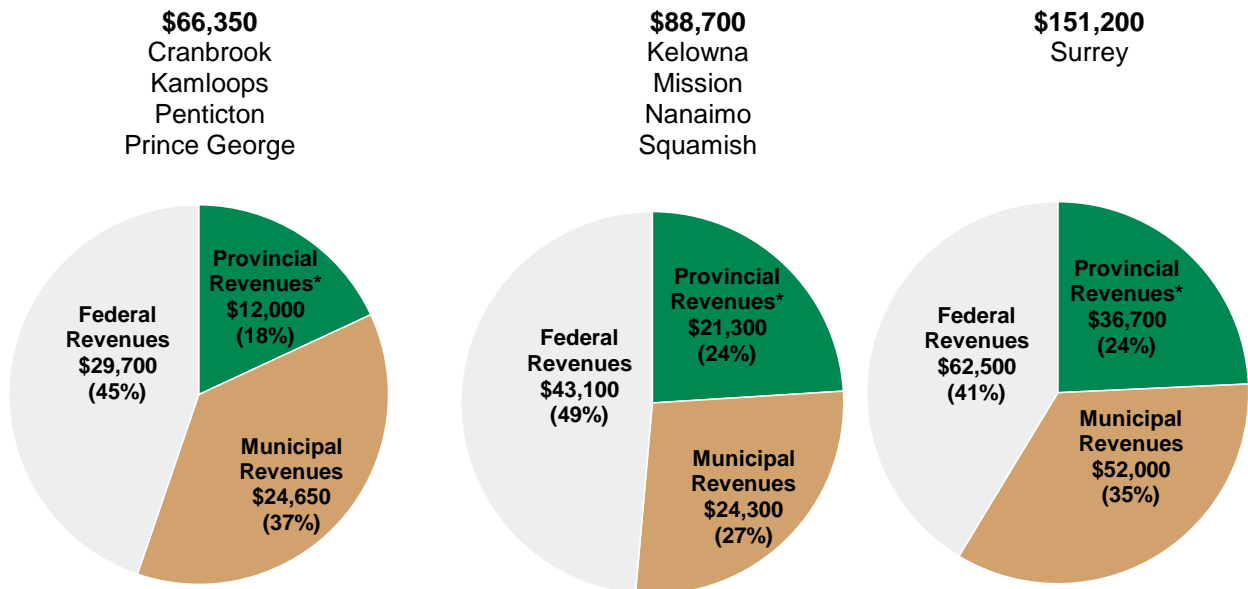
### Additional Government Revenues

	Provincial	Federal
Sales Taxes (Materials)	\$3,800	Included in GST on final sale
Income Taxes	\$10,600	\$27,700
<b>Total</b>	<b>\$14,400</b>	<b>\$27,700</b>

Figure 3 illustrates the average government revenues generated from the construction and sale of a single-family home for each group of communities from the additional charges scenario. Direct levies averaged \$66,350 in Cranbrook, Kamloops, Penticton and Prince George, \$88,700 in Kelowna, Mission, Nanaimo and Squamish and \$151,200 in Surrey.

**Figure 3: Government Revenues from Construction of a Single-Family Home (Additional Charges Scenario)**

**Average Fees and Taxes Levied on Construction of a Single Family Home (Additional Charges Scenario)**



\*Property Transfer Tax and Electrical Permit

**Additional Government Revenues**

	Provincial	Federal
Sales Taxes (Materials)	\$3,800	Included in GST on final sale
Income Taxes	<u>\$10,600</u>	<u>\$27,700</u>
<b>Total</b>	<b>\$14,400</b>	<b>\$27,700</b>

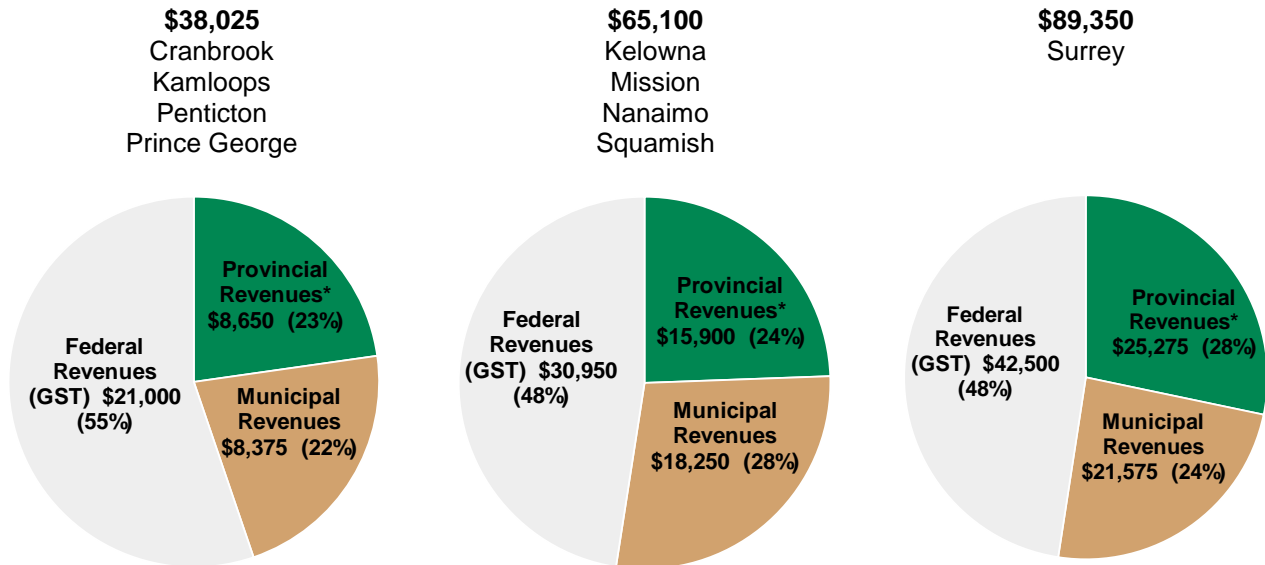
Construction of a single-family home was estimated to generate total monetary benefits of:

- Between \$92,500 (basic scenario) and \$108,450 (additional charges scenario) in Cranbrook, Kamloops, Penticton and Prince George.
- Between \$128,700 (basic scenario) and \$130,800 (additional charges scenario) in Kelowna, Mission, Nanaimo and Squamish.
- Between \$188,100 (basic scenario) and \$193,300 (additional charges scenario) in Surrey.

Figure 4 illustrates the average government revenues generated from the construction and sale of a townhome unit for each group of communities from the basic scenario. Direct levies averaged \$38,025 in Cranbrook, Kamloops, Penticton and Prince George, \$65,100 in Kelowna, Mission, Nanaimo and Squamish, and \$89,350 in Surrey.

**Figure 4: Government Revenues from Construction of a Townhome Unit (Basic Scenario)**

**Average Fees and Taxes Levied on Construction of a Townhome Unit (Basic Scenario)**



\*Property Transfer Tax and Electrical Permit

**Additional Government Revenues**

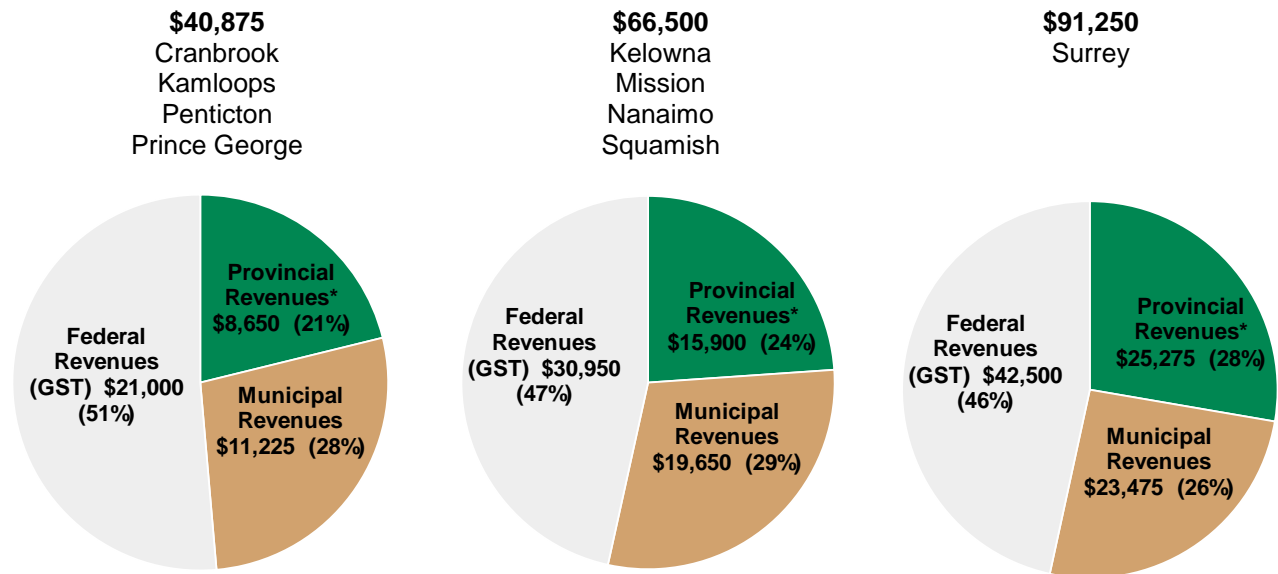
	Provincial	Federal
Sales Taxes (Materials)	\$2,600	Included in GST on final sale
Income Taxes	\$7,250	\$18,975
<b>Total</b>	<b>\$9,850</b>	<b>\$18,975</b>



Figure 5 illustrates the average government revenues generated from the construction and sale of a townhome unit for each group of communities from the additional charges scenario. Direct levies averaged \$40,875 in Cranbrook, Kamloops, Penticton and Prince George, \$66,500 in Kelowna, Mission, Nanaimo and Squamish, and \$91,250 in Surrey.

**Figure 5: Government Revenues from Construction of a Townhome Unit (Additional Charges Scenario)**

**Average Fees and Taxes Levied on Construction of a Townhome Unit (Additional Charges Scenario)**



\*Property Transfer Tax and Electrical Permit

**Additional Government Revenues**

	Provincial	Federal
Sales Taxes (Materials)	\$2,600	Included in GST on final sale
Income Taxes	<u>\$7,250</u>	<u>\$18,975</u>
<b>Total</b>	<b>\$9,850</b>	<b>\$18,975</b>

Construction of a townhome unit was estimated to generate total monetary benefits of:

- Between \$66,850 (basic scenario) and \$69,700 (additional charges scenario) in Cranbrook, Kamloops, Penticton and Prince George.
- Between \$93,925 (basic scenario) and \$95,325 (additional charges scenario) in Kelowna, Mission, Nanaimo and Squamish.
- Between \$118,175 (basic scenario) and \$120,075 (additional charges scenario) in Surrey.

## APPENDIX A – CHARACTERISTICS OF THE ARCHETYPES

Table 16 shows the characteristics of a single-family home and a townhome that were used in this study. Table 17 shows the sale price per square foot that was used for the calculation of property transfer tax and GST.

**Table 16: Single-Family Home and Townhome Characteristics**

Characteristic	Single-Family Home	Townhome (per unit)
<b>Number of Units</b>	\$0	4
<b>Lot Size (square footage)</b>	5,500 – 6,500	4,000-4,200
<b>Square footage</b>	2,400	1,800
<b>Bedrooms</b>	4	3
<b>Kitchen</b>	1	1
<b>Full bathrooms (includes shower/tub)</b>	3	2
<b>Half bathroom (toilet and sink)</b>	1	1
<b>Number of carports/garages</b>	1	1
<b>Sanitary and Water</b>		
<i>Toilets</i>	4	3
<i>Sinks and Tubs</i>	9	7
<b>Plumbing Fixtures</b>		
<i>Water Heater</i>	1	1
<i>Radon Pipe</i>	1	1
<b>Appliances (requiring plumbing connection)</b>		
<i>Laundry (washer and dryer)</i>	2	1
<i>Kitchen (dishwasher)</i>	1	1
<b>Central Vacuum and Security</b>		
<i>Central Vacuum</i>	1	1
<b>Building Fire Protection</b>		
<i>Hose Bibs</i>	2	2
<b>Heating Appliances</b>		
<i>Furnace</i>	1	1
<b>Rating of Electrical Work (Amperes)/Value of Electrical Work</b>	126 Amperes – 200 Amperes	\$15,000

**Table 17: Sale Price per Square Foot by Community**

	Single Family-Home	Townhome
<b>Cranbrook</b>	\$220	\$211
<b>Kamloops</b>	\$271	\$250
<b>Kelowna</b>	\$354	\$347
<b>Mission</b>	\$333	\$306
<b>Nanaimo</b>	\$292	\$278
<b>Penticton</b>	\$271	\$250
<b>Prince George</b>	\$229	\$222
<b>Squamish</b>	\$458	\$444
<b>Surrey</b>	\$521	\$472

## APPENDIX B – PROVINCIAL REVENUE CALCULATION

Table 18 shows the estimated total construction cost for a single-family home and townhome, and the estimated breakdown of expenses used to develop the estimates of provincial revenues.

**Table 18: New Home Construction Costs and Expenditure Breakdown**

	Single-family Home	Four-Unit Townhome
Square feet	2,400	7,200
Cost per square foot	\$175	\$160
Total construction cost	\$420,000	\$1,152,000
<b>Expense Breakdown</b>		
Labour	20%	20%
Contractors	35%	35%
Materials	35%	35%
Equipment and Other	10%	10%

The total construction cost and expense breakdown were applied to Statistics Canada's residential building construction multipliers to estimate the provincial sales taxes, provincial income taxes, and the number of FTEs.

Employment is reported at the direct and indirect level.

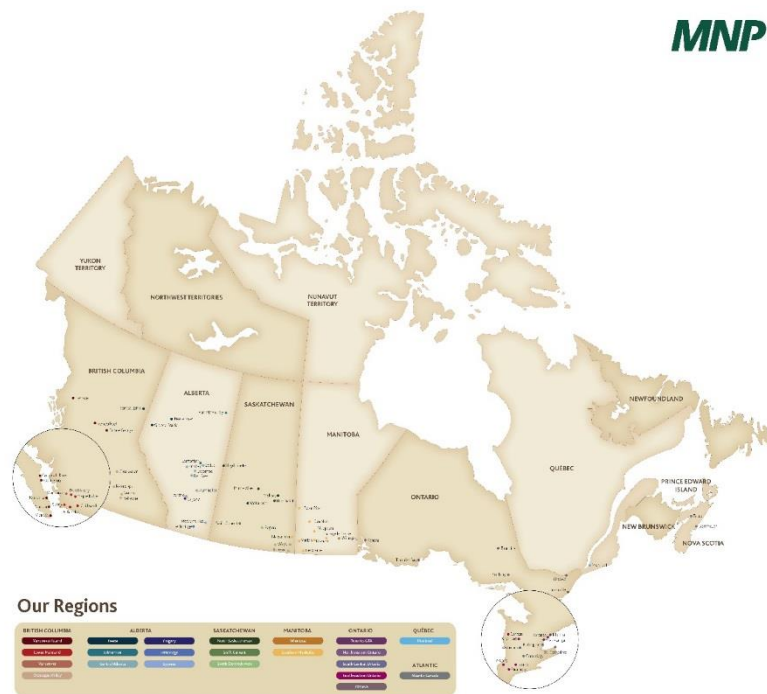
- **Direct impacts** are changes that occur in "front-end" businesses that would initially receive expenditures and operating revenue as a direct consequence of the operations and activities of a facility.
- **Indirect impacts** arise from changes in activity for suppliers of the "front-end" businesses.

## APPENDIX C – ABOUT MNP

MNP is the fastest growing major chartered accountancy and business advisory firm in Canada. Founded in 1958, MNP has grown to more than 70 offices and 4,000 team members across Canada. In British Columbia, MNP has more than 800 staff located in 19 offices throughout the province. The map below shows our office locations.

MNP provides a wide range of accounting, finance and business advisory services to clients. These include:

- Assurance
- Taxation
- Corporate Finance
- Mergers and Acquisitions
- Enterprise Risk Services
- Forensic Accounting
- Consulting
- Insolvency and Corporate Recovery
- Succession
- Valuations and Litigation Support



### About MNP's Economics and Research Practice

Economic and industry studies are carried out by MNP's Economics and Research practice. Based in Vancouver, the Economics and Research practice consists of a team of professionals that has a successful track record of assisting clients with a wide variety of financial and economic impact studies. Our work has encompassed a wide range of programs, industries, company operations and policy initiatives and has helped clients with decision-making, communication of economic and financial contributions, documentation of the value of initiatives and activities and development of public policy.