

Introduction

Since 2008, NAIOP has conducted this study for purposes of estimating the annual economic contribution of commercial real estate development to the U.S. economy. The study uses key data sets from the U.S. Census Bureau and McGraw-Hill Construction. It applies several processes and methodologies to take “snapshots” of the commercial real estate development industry from various angles and across several scales.

At the largest scale, the study calculates the contribution of building and nonbuilding construction to the U.S. economy for the year in review. The product types included in this broad measure are residential, nonresidential and infrastructure projects in the construction pipeline, based on U.S. Census data on the value of construction put in place. Appropriate multipliers supplied by the Bureau of Economic Analysis are applied to reflect the effects of construction expenditures on U.S. gross domestic product (GDP), the associated generation of new personal earnings and the jobs supported by these direct expenditures. (See Table 1.)

Table 1
Economic Contributions to the U.S. Economy from Building and Nonbuilding Construction

Year	Direct Expenditures (In Billions of Dollars)	Total Economic Contribution ¹ to GDP (In Trillions of Dollars, Includes Multiplier Effect)	Percent Contribution to U.S. GDP	Personal Earnings ² (In Billions of Dollars, Excludes Multiplier Effect)	Jobs Supported ³ (In Millions, Includes Multiplier Effect)
2013	\$898.4	\$2.77	16.5%	\$877.4	21.0
2012 ⁴	857.0	2.65	16.3	836.9	20.1
2011	787.4	2.27	15.0	677.0	17.2
2010	803.6	2.31	15.9	691.0	17.6
2009	907.8	2.90	20.5	870.0	24.0
2007	1,160.0	3.97	28.8	1,225.0	33.2

Sources: U.S. Census, Value of Construction Put in Place; GMU Center for Regional Analysis

¹ The total value of goods and services generated directly and indirectly as a result of construction and related expenditures within the U.S.

² The additional earnings (wages and salaries) generated within the U.S. from construction and related expenditures.

³ The jobs supported by the spending and re-spending of direct expenditures for all phases of development and operations.

⁴ Revised 2012 data for construction spending and GDP.

Note: Data includes residential and nonresidential buildings as well as infrastructure such as water, sewer, highways and power.

Zeroing in exclusively on commercial real estate — the core of this study — the analysis begins with McGraw-Hill Construction data relating to square footage and values for office, industrial, warehouse and retail projects. It examines expenditures made during four distinct phases of the development process, including pre-construction (soft costs), site development, on-site construction (hard costs) and tenant improvements. (Financing fees, insurance and taxes are not included in this analysis within the soft construction category, because they have little immediate economic impact.) This study also examines the contribution of building operations, which is reported as a stand-alone phase that follows development. These impacts are shown for the estimated 363.6 million square feet of buildings constructed in 2013. (See Table 2.)

Appropriate multipliers are applied to the direct expenditures to calculate the contribution to U.S. GDP, personal earnings and jobs supported during each distinct development phase. Apartment and hotel properties are not included in these calculations. (See Table 2.)

The full measure of the economic impact of office, industrial, warehouse and retail construction includes all of the expenditures associated with each phase of the development process. In addition to the wide range of on-site construction services, these expenditures also support a wide range of professional and business services, including:

- Architecture and engineering services;
- Legal services;
- Marketing and management services;
- Grading, paving and landscaping services;
- Site engineering services; and
- Interior design and construction services.

This combination of spending for pre-construction, construction and post-construction activities required to deliver buildings ready for occupancy represents the development industry's total direct contribution to the national, state and local economies. It provides the appropriate basis for calculating the economic impacts of this spending as represented by its contribution to GDP, personal earnings (wages and salaries) and employment.

Table 2
Economic Contributions to the U.S. Economy from Development of Commercial Real Estate Buildings

		Development Phases					Operations Phase
		Pre-Construction	Construction			Totals	Post-Construction
		Soft Construction (Soft Costs)	Site Development	Hard Construction (Hard Costs)	Tenant Improvements		Building Operations
		architecture, engineering, legal, marketing, management, administration	grading, paving, landscaping, roadway, parking, off-site improvements	labor, materials, construction management	interior design and construction (excludes furniture and equipment)		maintenance, repairs, custodial, utilities, property management
Direct Expenditures (In Billions of Dollars)	2013	\$19.66	\$21.07	\$61.65	\$21.84	\$124.22	\$1.11
	2012	15.88	17.34	49.18	17.73	100.13	0.96
	2011	13.42	15.45	47.83	15.58	92.28	0.80
	2010	13.11	13.99	41.72	13.05	81.87	0.73
In 2013, direct expenditures of \$124.22 billion contributed \$376.35 billion to U.S. GDP.							
Total Economic Contribution¹ to GDP (In Billions of Dollars, Includes Multiplier Effect)	2013	53.73	65.00	190.22	67.40	376.35	3.07
	2012	43.39	53.51	151.75	54.71	303.36	2.64
	2011	34.37	44.53	137.82	44.91	261.63	2.05
	2010	33.58	40.30	120.21	37.61	231.70	1.86
In 2013, direct expenditures of \$124.22 billion generated \$120.02 billion in personal earnings in the U.S.							
Personal Earnings² (In Billions of Dollars, Includes Multiplier Effect)	2013	17.91	20.57	60.21	21.33	120.02	0.97
	2012	14.46	16.94	48.03	17.32	96.75	0.83
	2011	11.23	13.29	41.15	13.40	79.07	0.61
	2010	10.97	12.03	35.89	11.23	70.12	0.54
In 2013, direct expenditures of \$124.22 billion supported 2.81 million jobs to the U.S. economy.							
Jobs Supported³ (Includes Multiplier Effect)	2013	361,866	493,314	1,443,779	511,530	2,810,510	24,285
	2012	292,219	406,107	1,151,784	415,236	2,265,346	20,929
	2011	259,805	339,156	1,049,630	341,981	1,990,572	15,600
	2010	253,838	306,953	915,518	286,413	1,762,722	13,114

Sources: NAIOP, McGraw-Hill Construction Analytics, and GMU Center For Regional Analysis

¹ The total value of goods and services generated directly and indirectly as a result of construction and related expenditures within the U.S.

² The additional earnings (wages and salaries) generated within the U.S. from construction and related expenditures.

³ The jobs supported by the spending and re-spending of direct expenditures for all phases of development and operations.

Note: Data includes office, industrial, warehouse/flex and retail buildings under construction in the year indicated and excludes existing inventory. Operations figures are based on buildings delivered in the year indicated.

This year, the study also examines the economic contributions of existing building operations. Based on the existing stock of commercial buildings, totaling 43.9 billion square feet in 2013, direct expenditures totaled \$134.3 billion, contribution to GDP came in at \$370.9 billion, personal earnings (wages and salaries paid) totaled \$116.8 billion and 2.9 million jobs were supported. (See Table 3.)

Table 3
Economic Contributions to the U.S. Economy from Operations of Existing Buildings, 2013
(In Billions of Current Year Dollars)

Year	Total Square Feet (In Billions)	Direct Expenditures for Building Operations	Total Economic Contribution ¹ to GDP	Personal Earnings ²	Jobs Supported ³ (In Millions)
2013	43.934	\$134.3	\$370.9	\$116.8	2.941
2012	43.208	134.5	371.5	117.0	2.945
2011	42.098	140.7	366.6	107.6	2.758
2010	42.008	134.8	342.4	100.2	2.413

Sources: BOMA; CoStar; Delta Associates; GMU Center for Regional Analysis

¹ The total value of goods and services generated directly and indirectly as a result of building operating expenditures within the U.S.

² The earnings generated within the U.S. from direct expenditures for building operations.

³ The jobs supported by the spending and re-spending of direct outlay associated with building operations.

Note: Building operations include maintenance repair, cleaning, utilities, security, building management and administrative expenses; column values may not add up to overall totals due to rounding; see Appendix G for state and building type data.

Combining the economic contributions of new development with operation of existing buildings in 2013, direct expenditures of \$258.5 billion resulted in the following economic contributions to the U.S. economy:

- Contributed \$747.25 billion to U.S. GDP;
- Generated \$236.8 billion in personal earnings; and
- Supported a total of 5.7 million jobs.