

Economic Impact Scenario Summary

Estimate of economic impacts from business adoption of eSolutions for selected geographies and industry profiles.

- These estimates are intended to provide guidance on the scale of economic impacts possible from meaningful use of broadband.

- SNG's evidence-based approach enables evaluation based on the best research available applied to selected geographic profiles.



Dashboard Metrics

Measure	Impact
Businesses Adopting	6,027
Annual GDP	\$ 443.0 M
Annual Tax Revenues	\$ 16.60 M
Total Jobs	6,541

Select a State Select a County (Leave blank for entire state; Select Multiple for more than one county)

Scenario Parameters	Inputs and outputs
Target Profile	
State	North Carolina
County	All
Total Households ⁽⁹⁾	3,745,155
Total Businesses (all industries/sizes) ^(3, 4)	215,477
Selected Industries (Max. of 10)	Accommodation & Food Services Administrative & Support Services Construction Finance & Insurance Health Care & Social Assistance Other services (exc. public admin) Professional & Technical Services Real Estate Retail Trade Wholesale Trade
Selected Employment Range	Less than 20
Total Businesses (selected industries/sizes)	165,728
% of Selected Industries	86.8%
% of ALL businesses	76.9%
Total Employment of Selected Industries ⁽²⁾	2,220,104
Selected Industries % of Total Employment	80.9%
Adoption Scenario	
Selected eSolutions (Max. of 5)	Selling goods or services Web site for organization Advertising and promotion Deliver services and content Customer service and support
Number of Selected eSolutions	5
% Increase in adoption	5.0%
Estimates of Direct Impacts from Adoption ⁽⁵⁾	
Total number of businesses adopting eSolutions	6,027
% of Total businesses in selected industries	3.6%
Total number of new eSolutions adoptions	16,865
Average new eSolutions per business adopting	2.8
Total incremental Revenue from new eSolutions	\$352,000,000
Total incremental Cost Savings from new eSolutions	\$22,100,000
Total incremental Direct Impact	\$374,100,000
Direct Impact Metrics	
Total annual revenues for adopting businesses	\$2,810,000,000
Total annual operating expenses for adopting businesses	\$1,610,000,000
Operating expenses as percentage of revenues	57.3%
Aggregate percent increase in revenues	12.5%
Aggregate percent cost savings	1.4%
Average incremental revenue per business adopting	\$58,400
Average cost saving per business adopting	\$3,660
Economic Impact Assessment ⁽⁶⁾	
Total Direct Output - Selected industries	\$374,000,000
Total Indirect Output - All Industries	\$155,000,000
Total Induced Output - All Industries	\$209,000,000
Total Incremental Output	\$738,000,000
Total Direct Jobs	3,897
Total Indirect Jobs	1,026
Total Induced Jobs	1,649
Total Incremental Job Creation ⁽⁶⁾	6,541
Total Incremental GDP ⁽⁷⁾	\$443,000,000
Total Incremental Household Earnings	\$228,000,000
Total Incremental State and Local Taxes	\$16,600,000
Total Incremental Federal Taxes	\$22,300,000
Economic Impact Metrics	
Average total incremental output per adopting business	\$123,000
Average direct jobs per adopting business	0.6
Average indirect and induced jobs per adopting business	0.4
Average incremental total taxes per adopting business	\$6,450
Average incremental GDP per adopting business	\$73,600
Average incremental Household Earnings	\$61

Scenario Parameter Selections			
Adopting	Select up to 10 Industries ^(3,4)	All Businesses ⁽⁴⁾	Rank
421	<input checked="" type="checkbox"/> Accommodation & Food Services	19,823	6
359	<input checked="" type="checkbox"/> Administrative & Support Services	12,065	8
	<input type="checkbox"/> Agriculture / Forestry / Fishing	787	16
	<input type="checkbox"/> Arts, Entertainment & Recreation	3,520	13
887	<input checked="" type="checkbox"/> Construction	20,863	5
	<input type="checkbox"/> Educational Services	2,587	15
348	<input checked="" type="checkbox"/> Finance & Insurance	13,031	7
786	<input checked="" type="checkbox"/> Health Care & Social Services	22,986	3
	<input type="checkbox"/> Information	3,388	14
	<input type="checkbox"/> Manufacturing / Processing	8,787	11
797	<input checked="" type="checkbox"/> Other services (exc. public admin)	22,703	4
754	<input checked="" type="checkbox"/> Professional & Technical Services	23,155	2
329	<input checked="" type="checkbox"/> Real Estate	10,327	10
972	<input checked="" type="checkbox"/> Retail Trade	34,198	1
	<input type="checkbox"/> Transportation & Warehousing	5,407	12
374	<input checked="" type="checkbox"/> Wholesale Trade	11,850	9
6,027		215,477	
Adopting	Select Employment Ranges	All Industries ⁽⁴⁾	% of Bus.
3941	<input checked="" type="checkbox"/> 1 - 4	114,200	52.8%
1298	<input checked="" type="checkbox"/> 5 - 9	42,028	19.5%
788	<input checked="" type="checkbox"/> 10 - 19	28,248	13.1%
	<input type="checkbox"/> 20 - 49	19,808	9.3%
	<input type="checkbox"/> 50 - 99	6,472	3.1%
	<input type="checkbox"/> 100 - 249	3,353	1.6%
6027		214,109	
Select Number of eSolutions			
AND % Increase in adoption ⁽¹⁰⁾		5	
		5%	

Selecting Industries

Select up to 10 industries with sufficient businesses to provide a base for increasing adoption of new online business practices (eSolutions). A base of 1,500 Total Businesses (selected industries/sizes) is recommended for a reliable estimate of impacts.

Multiple county selections may be required to provide a base of business population sufficient for estimating the financial, economic, and employment impacts. Business populations are provided for guidance.

The estimated number of businesses adopting new eSolutions are shown for each industry selected.

Select target business sizes using employment size ranges from 1 up to 249 employees. Counts are provided for all industries listed above.

Selection of businesses with 250 employees or more is not provided due to insufficient data for analysis of this segment.

(Leave blank to manually select eSolutions below)

OR Select up to 5 eSolutions and % increase in adoption

Adoptions	eSolutions	% Increase ⁽¹⁰⁾	Not Using
3990	<input type="checkbox"/> Selling goods or services		45.7%
	<input type="checkbox"/> Purchasing goods or services		18.3%
1712	<input type="checkbox"/> Web site for organization		12.2%
3090	<input type="checkbox"/> Advertising and promotion		29.9%
5241	<input type="checkbox"/> Deliver services and content		55.3%
2832	<input type="checkbox"/> Customer service and support		29.0%
	<input type="checkbox"/> Banking and financial		24.4%
	<input type="checkbox"/> Research by staff		10.1%
	<input type="checkbox"/> Electronic document transfer		10.5%
	<input type="checkbox"/> Supplier communication and coordination		17.1%
	<input type="checkbox"/> Access government information		15.7%
	<input type="checkbox"/> Government transactions		30.3%
	<input type="checkbox"/> Staff training and skills development		25.5%
	<input type="checkbox"/> Teleworking		43.8%
	<input type="checkbox"/> Accessing collaborative tools		29.6%
	<input type="checkbox"/> Social networking		28.6%
	<input type="checkbox"/> Multimedia content or service creation		49.4%

Selecting eSolutions

eSolutions are typical business practices that can be enabled or enhanced through online methods.

Option 1 - Auto Selection

Select the number of eSolutions to include and the percent increase in adoption. The most impactful eSolutions will be automatically selected.

Option 2 - Manual Selection

Select up to 5 eSolutions and the target percent increase in adoption for each.

With either option the target increase in adoption is applied to each selected industry. Estimated new adoptions are shown for each selected eSolutions.

16865 Selected Counties (Multiple Selection) All Businesses ⁽⁴⁾

1
2
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14
15

Notes

- Industry profiles are based on USCB County Business Patterns (2013)
- Employment is total for all business sizes. USCB CBP data does not provide a breakdown by employment size range.
- Analysis does not include Public Administration sector (not included in USCB CBP data)
- Mining, Utilities, and Management of Companies are not included for selection due to small numbers of businesses.
- Direct financial impacts for eSolutions adoption are based on SNG research
- Direct, indirect, and induced job impacts are based on I-O modeling and are one-time impacts based on stimulus from new adoptions.
- GDP and Tax impacts are based on I-O modelling
- I-O model uses nominal statewide BEA factors as a proxy for estimation
- Household counts are from USCB 2010 census data
- Percent increase applied to percentage of businesses not currently using the eSolutions, by industry and size.
- Financial impacts are annualized based on fully realized benefits from new adoptions.

Nominal Tax Rates Used *

State & Local	
Individual Income Tax	3.4%
Corporate Income Tax	0.4%
Sales & Other Indirect Taxes	1.5%
Federal	
Individual Income Tax	6.2%
Corporate Income Tax	0.8%
Other Taxes	0.4%

* Applied to gross output or gross income