# NOVEMBER 2016 CONSTRUCTION AT \$1,182.1 BILLION ANNUAL RATE 

The U.S. Census Bureau of the Department of Commerce announced today that construction spending during November 2016 was estimated at a seasonally adjusted annual rate of $\$ 1,182.1$ billion, 0.9 percent ( $\pm 1.5 \%)^{*}$ above the revised October estimate of $\$ 1,171.4$ billion. The November figure is 4.1 percent ( $\pm 2.0 \%$ ) above the November 2015 estimate of \$1,135.5 billion.

During the first 11 months of this year, construction spending amounted to $\$ 1,070.9$ billion, 4.4 percent ( $\pm 1.0 \%$ ) above the $\$ 1,025.5$ billion for the same period in 2015.

## PRIVATE CONSTRUCTION

Spending on private construction was at a seasonally adjusted annual rate of $\$ 892.8$ billion, 1.0 percent ( $\pm 1.5 \%$ )* above the revised October estimate of $\$ 884.3$ billion. Residential construction was at a seasonally adjusted annual rate of $\$ 462.9$ billion in November, 1.0 percent ( $\pm 1.3 \%$ )* above the revised October estimate of $\$ 458.2$ billion. Nonresidential construction was at a seasonally adjusted annual rate of $\$ 429.9$ billion in November, 0.9 percent ( $\pm 1.5 \%)^{*}$ above the revised October estimate of $\$ 426.2$ billion.

## PUBLIC CONSTRUCTION

In November, the estimated seasonally adjusted annual rate of public construction spending was $\$ 289.3$ billion, 0.8 percent ( $\pm 2.5 \%)^{*}$ above the revised October estimate of $\$ 287.1$ billion. Educational construction was at a seasonally adjusted annual rate of $\$ 71.6$ billion, 2.1 percent ( $\pm 2.5 \%$ )* above the revised October estimate of $\$ 70.1$ billion. Highway construction was at a seasonally adjusted annual rate of $\$ 94.6$ billion, 1.1 percent ( $\pm 5.4 \%$ )* above the revised October estimate of \$93.6 billion.

## December 2016 data will be released on February 1, 2017 at 10:00 A.M. EST. For more detailed data and methodologies, go to our website: http://www.census.gov/constructionspending

To receive the latest updates on the Nation's key economic indicators, download the America's Economy app for Apple and Android smartphones and tablets.

## EXPLANATORY NOTES

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take 2 months to establish an underlying trend for total construction and as long as 8 months for specific categories of construction. The statistics in this release are estimated from several sources and surveys and are subject to sampling variability as well as nonsampling error including bias and variance from response, nonreporting, and undercoverage. Estimates of the standard errors are provided in Table 3. Whenever a statement such as "2.3 ( $\pm 3.1$ ) percent above" appears in the text, this indicates the range ( -0.8 to +5.4 percent) in which the actual percent change is likely to have occurred. All ranges given are 90 percent confidence intervals and account only for sampling variability. If a range does not contain zero, the change is statistically significant. If it does contain zero, the change is not statistically significant; that is, it is uncertain whether there was an increase or decrease. Statistics for the current month are preliminary estimates subject to revision in following months as additional data become available. The average absolute percent changes from preliminary estimate to first revision for the major seasonally adjusted components are as follows: total construction, 0.93 percent; private construction, 1.02 percent; and public construction, 1.35 percent.

[^0]Table 1. Value of Construction Put in Place in the United States, Seasonally Adjusted Annual Rate (Millions of dollars. Details may not add to totals due to rounding.)

| Type of Construction | $\begin{array}{r} \text { Nov } \\ 2016^{p} \end{array}$ | $\begin{gathered} \text { Oct } \\ 2016^{r} \end{gathered}$ | $\begin{array}{r} \text { Sep } \\ 2016^{r} \end{array}$ | $\begin{array}{r} \text { Aug } \\ 2016 \end{array}$ | $\begin{array}{r} \text { Jul } \\ 2016 \end{array}$ | $\begin{array}{r} \text { Nov } \\ 2015 \end{array}$ | Percent change Nov 2016 from - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{array}{r} \text { Oct } \\ 2016 \end{array}$ | $\begin{array}{r} \text { Nov } \\ 2015 \end{array}$ |
| Total Construction | 1,182,097 | 1,171,436 | 1,164,432 | 1,166,513 | 1,160,407 | 1,135,470 | 0.9 | 4.1 |
| Residential | 469,669 | 464,890 | 457,243 | 462,870 | 462,614 | 456,116 | 1.0 | 3.0 |
| Nonresidential | 712,427 | 706,546 | 707,189 | 703,643 | 697,793 | 679,354 | 0.8 | 4.9 |
| Lodging | 29,005 | 27,135 | 28,968 | 28,089 | 27,544 | 22,592 | 6.9 | 28.4 |
| Office | 76,197 | 74,688 | 74,571 | 72,177 | 70,325 | 59,742 | 2.0 | 27.5 |
| Commercial | 76,081 | 75,862 | 74,655 | 74,753 | 72,674 | 67,680 | 0.3 | 12.4 |
| Health care | 41,789 | 41,823 | 42,911 | 42,570 | 40,745 | 42,434 | -0.1 | -1.5 |
| Educational | 92,402 | 90,131 | 88,996 | 88,470 | 86,453 | 84,728 | 2.5 | 9.1 |
| Religious | 3,675 | 3,346 | 3,683 | 3,911 | 3,791 | 3,675 | 9.8 | 0.0 |
| Public safety | 8,071 | 8,335 | 7,963 | 7,830 | 8,005 | 8,468 | -3.2 | -4.7 |
| Amusement and recreation | 22,489 | 22,178 | 21,775 | 21,947 | 21,673 | 19,867 | 1.4 | 13.2 |
| Transportation | 42,232 | 42,646 | 41,104 | 40,514 | 43,839 | 46,170 | -1.0 | -8.5 |
| Communication | 18,667 | 19,398 | 18,617 | 19,037 | 19,023 | 21,650 | -3.8 | -13.8 |
| Power | 92,645 | 92,076 | 95,665 | 97,109 | 97,983 | 93,420 | 0.6 | -0.8 |
| Highway and street | 94,821 | 93,761 | 91,854 | 87,551 | 87,901 | 85,812 | 1.1 | 10.5 |
| Sewage and waste disposal | 21,032 | 21,393 | 20,909 | 21,489 | 20,894 | 22,776 | -1.7 | -7.7 |
| Water supply | 12,017 | 12,048 | 11,765 | 11,660 | 11,341 | 12,529 | -0.3 | -4.1 |
| Conservation and development | 8,101 | 7,709 | 7,387 | 7,313 | 7,061 | 8,196 | 5.1 | -1.2 |
| Manufacturing | 73,204 | 74,017 | 76,368 | 79,223 | 78,543 | 79,616 | -1.1 | -8.1 |
| Total Private Construction ${ }^{1}$ | 892,820 | 884,332 | 883,604 | 888,423 | 884,852 | 853,658 | 1.0 | 4.6 |
| Residential | 462,906 | 458,160 | 450,972 | 456,206 | 456,586 | 449,493 | 1.0 | 3.0 |
| New single family | 247,575 | 243,292 | 236,691 | 236,988 | 238,595 | 249,828 | 1.8 | -0.9 |
| New multi-family | 61,870 | 63,604 | 61,458 | 61,059 | 59,698 | 55,908 | -2.7 | 10.7 |
| Nonresidential | 429,913 | 426,172 | 432,632 | 432,217 | 428,265 | 404,165 | 0.9 | 6.4 |
| Lodging | 28,714 | 26,841 | 28,663 | 27,811 | 27,208 | 22,135 | 7.0 | 29.7 |
| Office | 68,131 | 66,863 | 66,515 | 64,025 | 62,651 | 52,008 | 1.9 | 31.0 |
| Commercial | 72,804 | 72,602 | 71,358 | 71,406 | 70,063 | 65,024 | 0.3 | 12.0 |
| Health care | 33,100 | 33,170 | 34,058 | 33,566 | 32,443 | 33,986 | -0.2 | -2.6 |
| Educational | 20,796 | 20,005 | 20,435 | 19,236 | 19,018 | 17,280 | 4.0 | 20.3 |
| Religious | 3,675 | 3,346 | 3,683 | 3,911 | 3,791 | 3,667 | 9.8 | 0.2 |
| Amusement and recreation | 12,629 | 12,415 | 12,350 | 12,410 | 11,955 | 10,298 | 1.7 | 22.6 |
| Transportation | 12,656 | 12,415 | 11,936 | 11,622 | 13,053 | 13,993 | 1.9 | -9.6 |
| Communication | 18,573 | 19,291 | 18,539 | 18,875 | 18,910 | 21,495 | -3.7 | -13.6 |
| Power | 85,286 | 84,864 | 88,664 | 90,021 | 90,229 | 84,030 | 0.5 | 1.5 |
| Manufacturing | 72,710 | 73,532 | 75,589 | 78,434 | 77,978 | 78,992 | -1.1 | -8.0 |
| Total Public Construction ${ }^{2}$ | 289,277 | 287,104 | 280,828 | 278,090 | 275,556 | 281,812 | 0.8 | 2.6 |
| Residential | 6,763 | 6,730 | 6,271 | 6,664 | 6,028 | 6,623 | 0.5 | 2.1 |
| Nonresidential | 282,514 | 280,374 | 274,557 | 271,427 | 269,528 | 275,189 | 0.8 | 2.7 |
| Office | 8,066 | 7,825 | 8,055 | 8,152 | 7,674 | 7,734 | 3.1 | 4.3 |
| Commercial | 3,277 | 3,261 | 3,298 | 3,347 | 2,611 | 2,656 | 0.5 | 23.4 |
| Health care | 8,689 | 8,653 | 8,853 | 9,004 | 8,302 | 8,448 | 0.4 | 2.9 |
| Educational | 71,606 | 70,126 | 68,560 | 69,234 | 67,435 | 67,448 | 2.1 | 6.2 |
| Public safety | 7,975 | 8,245 | 7,870 | 7,739 | 7,900 | 8,391 | -3.3 | -5.0 |
| Amusement and recreation | 9,860 | 9,763 | 9,425 | 9,537 | 9,718 | 9,569 | 1.0 | 3.0 |
| Transportation | 29,576 | 30,232 | 29,168 | 28,892 | 30,786 | 32,177 | -2.2 | -8.1 |
| Power | 7,359 | 7,212 | 7,001 | 7,088 | 7,753 | 9,390 | 2.0 | -21.6 |
| Highway and street | 94,628 | 93,594 | 91,676 | 87,360 | 87,704 | 85,631 | 1.1 | 10.5 |
| Sewage and waste disposal | 20,683 | 21,028 | 20,517 | 21,096 | 20,491 | 22,410 | -1.6 | -7.7 |
| Water supply | 11,881 | 11,898 | 11,639 | 11,528 | 11,192 | 12,016 | -0.1 | -1.1 |
| Conservation and development | 8,035 | 7,651 | 7,334 | 7,222 | 6,948 | 8,076 | 5.0 | -0.5 |

${ }^{\mathrm{p}}$ Preliminary ${ }^{\mathrm{r}}$ Revised
${ }^{1}$ Includes the following categories of private construction not shown separately:
public safety, highway and street, sewage and waste disposal, water supply, and conservation and development.
${ }^{2}$ Includes the following categories of public construction not shown separately:
lodging, religious, communication, and manufacturing.

| Type of Construction | $\begin{array}{r} \text { Nov } \\ 2016^{p} \end{array}$ | $\begin{array}{r} \text { Oct } \\ 2016^{r} \end{array}$ | $\begin{gathered} \text { Sep } \\ 2016^{r} \end{gathered}$ | $\begin{array}{r} \text { Aug } \\ 2016 \end{array}$ | $\begin{array}{r} \text { Jul } \\ 2016 \end{array}$ | $\begin{array}{r} \text { Nov } \\ 2015 \end{array}$ | Year-to-date |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{array}{r} \text { Nov } \\ 2016 \end{array}$ | $\begin{array}{r} \text { Nov } \\ 2015 \end{array}$ | Percent change |
| Total Construction | 99,303 | 106,085 | 107,285 | 109,097 | 106,633 | 94,876 | 1,070,858 | 1,025,539 | 4.4 |
| Residential | 38,736 | 42,183 | 41,785 | 43,206 | 43,577 | 37,415 | 426,884 | 406,881 | 4.9 |
| Nonresidential | 60,567 | 63,902 | 65,500 | 65,891 | 63,057 | 57,461 | 643,974 | 618,658 | 4.1 |
| Lodging | 2,458 | 2,355 | 2,502 | 2,441 | 2,315 | 1,931 | 24,855 | 19,823 | 25.4 |
| Office | 6,434 | 6,555 | 6,736 | 6,367 | 6,070 | 5,052 | 62,928 | 50,511 | 24.6 |
| Commercial | 6,532 | 6,918 | 6,846 | 6,779 | 6,364 | 5,747 | 67,817 | 61,474 | 10.3 |
| Health care | 3,546 | 3,607 | 3,871 | 3,709 | 3,445 | 3,603 | 37,958 | 37,511 | 1.2 |
| Educational | 7,167 | 7,520 | 7,973 | 9,066 | 8,933 | 6,534 | 82,205 | 77,330 | 6.3 |
| Religious | 307 | 306 | 338 | 361 | 334 | 311 | 3,459 | 3,381 | 2.3 |
| Public safety | 705 | 713 | 767 | 691 | 665 | 728 | 7,415 | 8,025 | -7.6 |
| Amusement and recreation | 1,895 | 1,990 | 1,948 | 1,954 | 1,900 | 1,676 | 19,968 | 18,297 | 9.1 |
| Transportation | 3,711 | 3,914 | 3,807 | 3,732 | 3,897 | 4,024 | 39,344 | 41,962 | -6.2 |
| Communication | 1,738 | 1,705 | 1,659 | 1,696 | 1,555 | 1,977 | 17,391 | 18,478 | -5.9 |
| Power | 8,122 | 8,162 | 8,114 | 8,143 | 8,091 | 8,209 | 87,335 | 84,384 | 3.5 |
| Highway and street | 8,202 | 9,958 | 10,450 | 10,382 | 9,462 | 7,216 | 85,475 | 83,873 | 1.9 |
| Sewage and waste disposal | 1,797 | 2,020 | 1,939 | 2,009 | 1,857 | 1,957 | 20,715 | 22,447 | -7.7 |
| Water supply | 1,032 | 1,111 | 1,053 | 1,040 | 1,003 | 1,073 | 10,993 | 12,220 | -10.0 |
| Conservation and development | 674 | 619 | 775 | 643 | 580 | 679 | 7,004 | 7,393 | -5.3 |
| Manufacturing | 6,248 | 6,450 | 6,722 | 6,880 | 6,587 | 6,745 | 69,113 | 71,549 | -3.4 |
| Total Private Construction ${ }^{1}$ | 75,179 | 79,281 | 79,301 | 80,435 | 79,535 | 71,585 | 805,257 | 757,517 | 6.3 |
| Residential | 38,165 | 41,584 | 41,204 | 42,617 | 43,043 | 36,853 | 420,949 | 400,843 | 5.0 |
| New single family | 21,725 | 22,201 | 22,103 | 22,170 | 22,039 | 21,868 | 224,156 | 214,521 | 4.5 |
| New multi-family | 5,217 | 5,517 | 5,289 | 5,425 | 4,976 | 4,720 | 55,777 | 47,638 | 17.1 |
| Nonresidential | 37,014 | 37,698 | 38,097 | 37,818 | 36,491 | 34,733 | 384,307 | 356,674 | 7.7 |
| Lodging | 2,434 | 2,331 | 2,476 | 2,418 | 2,287 | 1,893 | 24,532 | 19,299 | 27.1 |
| Office | 5,770 | 5,896 | 5,962 | 5,651 | 5,414 | 4,415 | 55,777 | 43,135 | 29.3 |
| Commercial | 6,235 | 6,650 | 6,516 | 6,472 | 6,154 | 5,504 | 64,780 | 59,070 | 9.7 |
| Health care | 2,831 | 2,899 | 3,044 | 2,936 | 2,750 | 2,905 | 30,114 | 29,696 | 1.4 |
| Educational | 1,635 | 1,645 | 1,700 | 1,786 | 1,756 | 1,337 | 17,404 | 15,595 | 11.6 |
| Religious | 307 | 306 | 338 | 361 | 334 | 311 | 3,459 | 3,372 | 2.6 |
| Amusement and recreation | 1,045 | 1,088 | 1,074 | 1,061 | 1,037 | 854 | 10,786 | 8,827 | 22.2 |
| Transportation | 1,202 | 1,187 | 1,091 | 1,056 | 1,167 | 1,289 | 11,382 | 12,407 | -8.3 |
| Communication | 1,730 | 1,696 | 1,652 | 1,683 | 1,545 | 1,965 | 17,269 | 18,324 | -5.8 |
| Power | 7,542 | 7,515 | 7,507 | 7,502 | 7,428 | 7,451 | 79,443 | 74,603 | 6.5 |
| Manufacturing | 6,207 | 6,409 | 6,658 | 6,814 | 6,540 | 6,693 | 68,516 | 70,938 | -3.4 |
| Total Public Construction ${ }^{2}$ | 24,125 | 26,804 | 27,984 | 28,662 | 27,099 | 23,291 | 265,601 | 268,022 | -0.9 |
| Residential | 571 | 599 | 581 | 589 | 533 | 562 | 5,935 | 6,038 | -1.7 |
| Nonresidential | 23,554 | 26,205 | 27,403 | 28,073 | 26,565 | 22,728 | 259,667 | 261,984 | -0.9 |
| Office | 664 | 658 | 774 | 716 | 656 | 637 | 7,151 | 7,376 | -3.1 |
| Commercial | 297 | 269 | 330 | 308 | 210 | 243 | 3,037 | 2,404 | 26.3 |
| Health care | 715 | 707 | 827 | 773 | 696 | 698 | 7,845 | 7,815 | 0.4 |
| Educational | 5,532 | 5,875 | 6,273 | 7,280 | 7,177 | 5,197 | 64,801 | 61,735 | 5.0 |
| Public safety | 696 | 705 | 759 | 683 | 658 | 722 | 7,335 | 7,825 | -6.3 |
| Amusement and recreation | 850 | 902 | 874 | 893 | 863 | 822 | 9,182 | 9,470 | -3.0 |
| Transportation | 2,509 | 2,727 | 2,716 | 2,676 | 2,730 | 2,735 | 27,962 | 29,555 | -5.4 |
| Power | 580 | 648 | 608 | 641 | 663 | 757 | 7,892 | 9,782 | -19.3 |
| Highway and street | 8,180 | 9,942 | 10,430 | 10,365 | 9,445 | 7,194 | 85,258 | 83,554 | 2.0 |
| Sewage and waste disposal | 1,768 | 1,986 | 1,904 | 1,974 | 1,823 | 1,925 | 20,371 | 22,197 | -8.2 |
| Water supply | 1,020 | 1,097 | 1,041 | 1,028 | 991 | 1,027 | 10,857 | 11,691 | -7.1 |
| Conservation and development | 669 | 614 | 770 | 635 | 571 | 669 | 6,935 | 7,281 | -4.8 |

${ }^{\mathrm{p}}$ Preliminary ${ }^{\mathrm{r}}$ Revised
${ }^{1}$ Includes the following categories of private construction not shown separately:
public safety, highway and street, sewage and waste disposal, water supply, and conservation and development.
${ }^{2}$ Includes the following categories of public construction not shown separately: lodging, religious, communication, and manufacturing.

Table 3. Coefficients of Variation and Standard Errors by Type of Construction (Percent)

| Type of Construction | Coefficient of variation |  | Standard error |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Monthly estimate | Year-to-date estimate | Year-to-date change | Month-to-month change | Month-to-month change from prev. <br> year |
| Total Construction | 0.9 | 0.5 | 0.6 | 0.9 | 1.2 |
| Residential | 4.6 | 3.7 | 4.3 | 2.6 | 5.9 |
| Nonresidential | 0.9 | 0.5 | 0.6 | 0.9 | 1.2 |
| Lodging | 2.0 | 1.5 | 2.2 | 1.1 | 2.7 |
| Office | 2.7 | 2.2 | 2.4 | 3.6 | 4.9 |
| Commercial | 3.0 | 1.4 | 1.8 | 1.3 | 2.7 |
| Health care | 2.2 | 1.6 | 2.2 | 2.3 | 3.1 |
| Educational | 2.1 | 1.3 | 1.9 | 1.3 | 2.9 |
| Religious | 7.3 | 4.9 | 6.3 | 3.6 | 7.9 |
| Public safety | 3.1 | 2.2 | 2.5 | 2.4 | 4.0 |
| Amusement and recreation | 3.6 | 2.3 | 3.1 | 4.5 | 7.7 |
| Transportation | 1.8 | 1.2 | 1.6 | 1.4 | 2.7 |
| Communication | NA | NA | NA | NA | NA |
| Power | 0.4 | 0.3 | 0.4 | 0.2 | 0.7 |
| Highway and street | 3.6 | 1.6 | 2.1 | 3.3 | 4.7 |
| Sewage and waste disposal | 3.5 | 2.3 | 2.7 | 2.6 | 3.9 |
| Water supply | 4.4 | 2.4 | 3.5 | 3.8 | 5.4 |
| Conservation and development | 3.8 | 2.7 | 3.3 | 2.5 | 4.6 |
| Manufacturing | 0.9 | 0.9 | 0.9 | 0.8 | 1.1 |
| Total Private Construction | 1.0 | 0.6 | 0.8 | 0.9 | 1.3 |
| Residential | 5.0 | 1.1 | 1.3 | 0.8 | 1.4 |
| New single family | 5.0 | 4.0 | 6.8 | 6.0 | 6.0 |
| New multi-family | 5.8 | 5.4 | 4.3 | 1.8 | 5.4 |
| Nonresidential | 1.0 | 0.6 | 0.8 | 0.9 | 1.3 |
| Lodging | 2.0 | 1.6 | 2.2 | 1.1 | 2.8 |
| Office | 3.1 | 2.4 | 2.8 | 4.1 | 5.6 |
| Commercial | 3.1 | 1.4 | 1.8 | 1.3 | 2.7 |
| Health care | 2.7 | 2.0 | 2.8 | 2.8 | 3.9 |
| Educational | 3.1 | 2.2 | 3.0 | 2.2 | 3.9 |
| Religious | 7.3 | 4.9 | 6.3 | 3.6 | 7.9 |
| Amusement and recreation | 3.5 | 2.7 | 3.7 | 2.0 | 5.0 |
| Transportation | 4.9 | 3.3 | 4.2 | 1.7 | 4.4 |
| Communication | NA | NA | NA | NA | NA |
| Power | 0.3 | 0.2 | 0.3 | 0.2 | 0.6 |
| Manufacturing | 1.0 | 0.9 | 0.9 | 0.8 | 1.1 |
| Total Public Construction | 1.4 | 0.8 | 1.0 | 1.5 | 2.0 |
| Residential | 4.6 | 3.7 | 4.3 | 2.6 | 5.9 |
| Nonresidential | 1.5 | 0.8 | 1.0 | 1.5 | 2.0 |
| Office | 3.2 | 2.6 | 3.3 | 3.0 | 5.3 |
| Commercial | 9.9 | 8.4 | 14.6 | 4.9 | 18.9 |
| Health care | 2.9 | 2.3 | 2.8 | 2.2 | 4.0 |
| Educational | 2.4 | 1.5 | 2.2 | 1.5 | 3.5 |
| Public safety | 3.1 | 2.2 | 2.5 | 2.5 | 4.0 |
| Amusement and recreation | 6.1 | 3.9 | 4.6 | 9.0 | 14.6 |
| Transportation | 1.9 | 1.3 | 1.7 | 1.6 | 3.0 |
| Power | 4.6 | 3.3 | 2.9 | 3.1 | 3.5 |
| Highway and street | 3.6 | 1.6 | 2.1 | 3.3 | 4.8 |
| Sewage and waste disposal | 3.5 | 2.3 | 2.7 | 2.6 | 4.0 |
| Water supply | 4.5 | 2.4 | 3.7 | 3.9 | 5.7 |
| Conservation and development | 3.9 | 2.7 | 3.3 | 2.5 | 4.6 |

NA Not applicable


[^0]:    * $90 \%$ confidence interval includes zero. The U.S. Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

