## DEMOGRAPHIA

## Gross Domestic Product (GDP-PPP) <br> Estimates for <br> Metropolitan Regions in Western Europe, North America, Japan and Australasia



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GROSS DOMESTIC PRODUCT ESTIMATES: METROPOLITAN REGIONS In Western Europe, North America, Japan and Australasia

| Rank | Nation | Metropolitan Region | Population $(000,000)$ | GDP/Capita (000): \$US | Source Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | United States | San Francisco | 4.2 | \$62.3 | 1 |
| 2 | United States | Washington | 5.1 | \$61.6 | 1 |
| 3 | United States | San Jose | 1.7 | \$60.6 | 2 |
| 4 | United States | Boston | 4.4 | \$58.0 | 1 |
| 5 | United States | Seattle | 3.2 | \$54.4 | 1 |
| 6 | United States | Minneapolis-St. Paul | 3.1 | \$53.0 | 1 |
| 7 | United States | New York | 18.7 | \$52.8 | 1 |
| 8 | United States | Hartford | 1.2 | \$51.1 | 2 |
| 9 | United States | Denver | 2.3 | \$50.8 | 1 |
| 10 | United States | Philadelphia | 5.8 | \$50.5 | 1 |
| 11 | United States | Dallas-Fort Worth | 5.7 | \$50.1 | 1 |
| 12 | United States | Atlanta | 4.7 | \$47.8 | 1 |
| 13 | United States | Houston | 5.2 | \$47.4 | 1 |
| 14 | United States | San Diego | 2.9 | \$46.8 | 1 |
| 15 | United States | Chicago | 9.4 | \$45.6 | 1 |
| 15 | United States | Milwaukee | 1.5 | \$45.6 | 2 |
| 17 | United States | Los Angeles | 12.9 | \$45.3 | 1 |
| 18 | United States | Richmond | 1.2 | \$44.2 | 2 |
| 19 | United States | Indianapolis | 1.6 | \$44.1 | 2 |
| 20 | United States | Detroit | 4.5 | \$44.0 | 1 |
| 21 | United States | Nashville | 1.4 | \$43.6 | 2 |
| 22 | United States | Charlotte | 1.5 | \$43.5 | 2 |
| 23 | United States | Baltimore | 2.6 | \$43.3 | 1 |
| 24 | United States | Kansas City | 1.9 | \$43.2 | 2 |
| 25 | United States | Cincinnati | 2.1 | \$42.9 | 2 |
| 26 | France | Paris | 11.2 | \$42.7 | 1 |
| 27 | United States | Columbus | 1.7 | \$42.6 | 2 |
| 28 | United States | Providence | 1.6 | \$42.4 | 2 |
| 29 | United States | Cleveland | 2.1 | \$42.2 | 1 |
| 30 | United States | Portland | 2.1 | \$41.8 | 1 |
| 31 | United States | Sacramento | 2.0 | \$41.6 | 2 |
| 32 | United States | Birmingham | 1.1 | \$41.3 | 2 |
| 32 | United States | Louisville | 1.2 | \$41.3 | 2 |
| 34 | United States | Las Vegas | 1.6 | \$41.2 | 2 |
| 35 | United States | Memphis | 1.2 | \$40.9 | 2 |
| 35 | United States | St. Louis | 2.8 | \$40.9 | 1 |
| 37 | United States | Austin | 1.2 | \$40.6 | 2 |
| 38 | United States | Rochester | 1.0 | \$40.4 | 2 |
| 39 | United States | Jacksonville | 1.2 | \$40.3 | 2 |
| 40 | United States | Phoenix | 3.7 | \$39.9 | 1 |
| 41 | Australia | Perth | 1.5 | \$39.8 | 5 |
| 42 | United States | Virginia Beach | 1.6 | \$39.7 | 2 |
| 43 | United States | Salt Lake City | 1.0 | \$39.2 | 2 |
| 44 | Ireland | Dublin | 1.6 | \$38.9 | 1 |
| 44 | United Kingdom | London | 13.9 | \$38.9 | 7 |
| 46 | United States | New Orleans | 1.3 | \$38.8 | 2 |
| 46 | Canada | Calgary | 1.1 | \$38.8 | 4 |
| 48 | United States | Buffalo | 1.2 | \$38.7 | 2 |
| 49 | United States | Pittsburgh | 2.4 | \$38.6 | 1 |


| 50 | Germany | Munich | 6.1 | \$38.2 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51 | United States | Oklahoma City | 1.1 | \$38.0 | 2 |
| 52 | United States | Tampa-St. Petersburg | 2.6 | \$37.8 | 1 |
| 53 | Austria | Vienna | 2.2 | \$37.6 | 1 |
| 54 | United States | Miami | 5.4 | \$37.2 | 1 |
| 55 | United States | Orlando | 1.9 | \$36.9 | 2 |
| 56 | Sweden | Stockholm | 2.2 | \$36.7 | 1 |
| 57 | Italy | Milan | 7.4 | \$36.6 | 1 |
| 58 | Germany | Stuttgart | 2.7 | \$36.4 | 1 |
| 59 | United States | San Antonio | 1.9 | \$36.2 | 2 |
| 59 | France | Lyon | 1.6 | \$36.2 | 1 |
| 59 | Canada | Ottawa-Gatineau | 1.2 | \$36.2 | 4 |
| 62 | Belgium | Brussels | 3.8 | \$35.0 | 1 |
| 62 | Norway | Oslo | 1.7 | \$35.0 | 1 |
| 62 | Australia | Sydney | 4.2 | \$35.0 | 1 |
| 65 | Canada | Toronto | 4.7 | \$34.9 | 1 |
| 66 | Finland | Helsinki | 1.8 | \$34.0 | 1 |
| 67 | Germany | Frankfurt | 5.6 | \$33.6 | 1 |
| 68 | Denmark | Copenhagen | 2.4 | \$33.5 | 1 |
| 69 | Zurich | Switzerland | 2.5 | \$33.4 | 1 |
| 70 | Rome | Italy | 3.7 | \$33.1 | 1 |
| 71 | Netherlands | Amsterdam-Rotterdam | 7.5 | \$32.9 | 1 |
| 72 | Australia | Melbourne | 3.6 | \$32.7 | 1 |
| 72 | Germany | Nuremburg | 1.7 | \$32.7 | 10 |
| 74 | Canada | Edmonton | 1.0 | \$32.5 | 4 |
| 75 | United States | Riverside-San Bernardino | 3.8 | \$32.2 | 2 |
| 76 | Italy | Turin | 2.2 | \$32.0 | 1 |
| 76 | Canada | Vancouver | 2.0 | \$32.0 | 1 |
| 78 | Australia | Brisbane | 1.8 | \$31.6 | 5 |
| 79 | Germany | Hannover | 1.1 | \$31.4 | 10 |
| 80 | New Zealand | Auckland | 1.2 | \$31.2 | 1 |
| 81 | Germany | Hamburg | 4.6 | \$30.9 | 1 |
| 82 | Germany | Cologne-Bonn | 3.3 | \$30.8 | 10 |
| 83 | France | Toulouse | 1.1 | \$30.0 | 3 |
| 84 | Australia | Adelaide | 1.1 | \$29.9 | 5 |
| 85 | Japan | Tokyo-Yokohama | 34.2 | \$29.3 | 1 |
| 86 | Canada | Montreal | 3.4 | \$29.1 | 1 |
| 87 | Spain | Madrid | 5.6 | \$29.0 | 1 |
| 88 | Japan | Nagoya | 9.1 | \$28.9 | 1 |
| 89 | United Kingdom | Birmingham | 2.6 | \$27.8 | 1 |
| 90 | United Kingdom | Leeds | 2.1 | \$27.5 | 1 |
| 91 | Germany | Essen-Dusseldorf | 13.4 | \$27.4 | 1 |
| 92 | France | Marseille | 1.9 | \$27.2 | 3 |
| 93 | Portugal | Lisbon | 2.7 | \$27.1 | 1 |
| 94 | Japan | Osaka-Kobe-Kyoto | 17.0 | \$26.8 | 1 |
| 95 | United Kingdom | Manchester | 2.5 | \$26.6 | 1 |
| 96 | Spain | Bilbao | 1.1 | \$26.1 | 11 |
| 96 | United Kingdom | Glasgow | 2.3 | \$26.1 | 8 |
| 98 | Spain | Barcelona | 4.9 | \$26.0 | 1 |
| 99 | Japan | Shizuoka-Hamamatsu | 4.2 | \$25.7 | 6 |
| 100 | Germany | Saarbrucken | 1.1 | \$25.6 | 10 |
| 101 | United Kingdom | Newcastle | 1.4 | \$24.1 | 8 |
| 102 | France | Lille | 2.6 | \$23.7 | 1 |
| 103 | Japan | Hiroshima | 3.9 | \$23.6 | 6 |


| 104 | Japan | Sendai | 3.7 | $\$ 22.4$ | 6 |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 105 | Japan | Fukuoka-Kitakyushu | 5.1 | $\$ 22.3$ | 1 |
| 106 | Greece | Thessaloniki | 1.1 | $\$ 22.2$ | 3 |
| 106 | Spain | Valencia | 2.3 | $\$ 22.2$ | 1 |
| 108 | Japan | Sapporo | 5.6 | $\$ 22.1$ | 6 |
| 109 | United Kingdom | Sheffield | 1.3 | $\$ 21.8$ | 8 |
| 110 | Germany | Berlin | 6.0 | $\$ 21.3$ | 1 |
| 111 | Germany | Liepzig | 1.1 | $\$ 21.1$ | 10 |
| 112 | United Kingdom | Liverpool | 1.4 | $\$ 20.8$ | 8 |
| 113 | Greece | Athens | 3.9 | $\$ 20.1$ | 1 |
| 114 | Portugal | Porto | 1.3 | $\$ 19.0$ | 9 |
| 115 | Spain | Seville | 1.8 | $\$ 17.2$ | 11 |
| 116 | Italy | Naples | 3.1 | $\$ 17.1$ | 1 |

## See Notes and Cautions

# Gross Domestic Product (GDP-PPP) Estimates for Metropolitan Regions in Western Europe, North America, Japan and Australasia 

## NOTES AND CAUTIONS

## INTRODUCTION

This list provides 2002 estimates for the gross domestic product (GDP) of 116 metropolitan regions exceeding 1,000,000 population in Western Europe, Canada, the United States, Japan, Australia and New Zealand. ${ }^{1}$ The principal source of the data is the Organization for Economic Cooperation and Development (OECD) Competitive Cities in the Global Economy. ${ }^{2}$ This list uses OECD data for 63 metropolitan regions, including all but London. The list includes 52 additional metropolitan regions as well as an alternate estimate for London (see below). The purpose of the list is to provide a general, rather than precise comparison of data between metropolitan regions (see "Cautions," below)

## HIGHLIGHTS

- San Francisco is estimated to have the highest GDP per capita, followed by Washington and San Jose, all over $\$ 60,000$.
- The 25 metropolitan regions with the highest GDP per capita are in the United States, which also contains 39 of the 40 metropolitan regions with the highest GDP per capita. The lowest US GDP per capita is in Riverside-San Bernardino at \$32,200 (ranked $75^{\text {th }}$ ).
- Western Europe's highest GDP per capita is in Paris, at $\$ 42,700\left(\right.$ ranked $\left.26^{\text {th }}\right)$, followed by Dublin and London, which are tied with $\$ 38,900$ and ranked $44^{\text {th }}$.
- Japan's highest GDP per capita is in Tokyo-Yokohama, at \$29,300 (ranked $84^{\text {th }}$ ).
- Canada's highest GDP per capita is in Calgary, at $\$ 39,800\left(\right.$ ranked $46^{\text {th }}$ ).

[^0]- Australia's highest GDP per capita is in Perth, at $\$ 38,800$ (ranked $41^{\text {sf }}$ ). Perth has the highest estimated GDP per capita outside the United States and Paris.
- New Zealand's only metropolitan region with a population above 1,000,000, Auckland, has an estimated GDP per capita of $\$ 31,200$ and is ranked $80^{\mathrm{th}}$.


## GDP/Capita: Metropolitan Regions ESTIMATED



## CAUTIONS

The estimates not provided by OECD are scaled from similar data, either gross domestic product or personal income data from other sources.

Estimation Issues: These non-OECD estimates should be used with caution. In some cases, the estimation factors are for areas considerably larger than the metropolitan regions (such as states for Brisbane, Perth and Adelaide, Australia and prefectures for Sapporo, Sendai, Shizuoka-Hamamatsu and Hiroshima, Japan). Moreover, there is variation in the relationship between personal income per capita and gross domestic product per capita. ${ }^{3}$

The "Tyranny of Borders:" There is considerable variation in the geographical size and definitions of the metropolitan regions, driven by the availability of data. A number of metropolitan regions, such as Munich, Hamburg, Milan, Frankfurt and Sapporo are larger than conventional definitions, because economic data is not available in smaller more appropriate geographies. This "tyranny" of borders forces a combination of Fukuoka and Kitakyushu or Hamamatsu and Shizuoka (in the same prefectures); while the existence of economic data for smaller geographical areas makes it possible to maintain Washington and

[^1]Baltimore as separate metropolitan regions. In the case of Aichi, the use of the prefecture of Aichi is a reasonable approximation of a the metropolitan region, but a more precise definition would have included parts of Mie and Gifu prefectures, which could not be accomplished because the required economic data is not available below the prefecture level. The case of London, which required adjustment, is described below. Finally, it might be argued that in the United States a more appropriate geography would be the "consolidated statistical area," which includes more adjacent metropolitan statistical areas. OECD uses the metropolitan statistical area (as does this list), which is a generally reasonable approximation of metropolitan regions. ${ }^{4}$

London: The metropolitan region for London as defined by OECD was deemed to be far too small for reasonable comparison. It was limited to the London GLA area and as such excluded much of the metropolitan area (labor market). OECD used the smaller definition out of concern that the only available definitions were for too large an area. In fact, however, the data permits a metropolitan definition limited to the area of the historical counties bordering GLA. This metropolitan region appears to be no more excessive in size than the Munich, Hamburg or Essen-Dusseldorf metropolitan regions as defined by OECD. London was the only metropolitan region in the OECD listing that was materially smaller than conventional metropolitan definitions. Thus, the larger, definition, including adjacent counties was used in this listing.

## LABELING

The following metropolitan regions are labeled differently in this list than in the OECD list:

| OECD | Demographia |
| :--- | :--- |
| Aichi | Nagoya |
| Fukuoka | Fukuoaka-Kitakyushu |
| Randstad | Amsterdam-Rotterdam |
| Rhine-Ruhr | Essen-Dusseldorf |

## SOURCE NOTES

(See right most column of table)

## 1. OECD Competitive Cities in the Global Economy.

2. United States: Scaled based upon OECD reported U.S. GDP per capita average using differences in metropolitan area personal income per capita.
3. France: Scaled based upon OECD reported Paris GDP per capita using differences in NUTS GDP per capita from the European Union.

[^2]4. Canada: Scaled based upon OECD reported Canada GDP per capita average using differences in metropolitan area personal income per capita.
5. Australia: Scaled based upon OECD reported Sydney GDP per capita using differences in state personal income per capita.
6. Japan: Scaled based upon OECD reported Nagoya (Aichi) GDP per capita using differences in gross prefectural product per capita.
7. London: Scaled based upon OECD reported London GDP per capita, adding GDP per capita of historic counties bordering on GLA.
8. United Kingdom: Scaled based upon OECD reported Manchester GDP per capita using differences in NUTS GDP per capita from the European Union.
9. Portugal (Porto) Scaled based upon OECD reported Lisbon GDP per capita using differences in NUTS GDP per capita from the European Union.
10. Germany: Scaled based upon OECD reported Essen-Dusseldorf GDP per capita using differences in NUTS GDP per capita from the European Union.
11. Spain: Scaled based upon OECD reported Madrid GDP per capita using differences in NUTS GDP per capita from the European Union.

## COVER ILLUSTRATIONS

| Sapporo | Montreal | Munich |
| :---: | :---: | :---: |
| Chicago | Paris | Perth |
| Auckland | Fukuoka | Barcelona |


[^0]:    ${ }^{1}$ Adjusted for purchasing power parity (GDP-PPP).
    ${ }^{2}$ http://213.253.134.29/oecd/pdfs/browseit/0406041E.PDF.

[^1]:    ${ }^{3}$ In the United States the standard deviation is 8 percent.

[^2]:    ${ }^{4}$ One possible exception is the Los Angeles consolidated statistical area, which includes both the Los Angeles and Riverside-San Bernardino metropolitan statistical areas. The Riverside-San Bernardino area is the lowest income metropolitan region of more than 1,000,000 in the United States and use of the consolidated area designation would have dropped Los Angeles from $17^{\text {th }}$ to below $25^{\text {th }}$ in the ranking.

