Project Overview

The World Cities Project (WCP) originated as a joint research project between the International Longevity Center—USA and New York University's Robert F. Wagner Graduate School of Public Service. It has since grown to include the active involvement of the ILC-France, ILC-Japan, and ILC-UK. Also the City of Paris Department of Health and Social Affairs, the London Regional Office of the British National Health Service, the Tokyo Metropolitan Government Bureau of Health and Social Welfare, and the New York City Department of Aging and Department of Health have provided important support to the project. The project compares health, social services, and quality of life for persons aged 65 and over in the four largest urban agglomerations in the countries belonging to the Organization for Economic Cooperation and Development (OECD): New York, Paris, Tokyo and London.

Although these four cities have been the subject of numerous studies in the fields of architecture and urban planning, there have been few comparative studies of health and social services. Additionally, the WCP introduces a spatial perspective to more conventional economic and demographic analyses of population aging and longevity issues. Most comparative analyses of health systems focus on national averages that mask important variations within smaller jurisdictions. In contrast, the WCP relates smaller, more comparable units providing notable advantages for cross-national learning.
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WCP GEOGRAPHIC UNITS

New York City: Urban Core = Manhattan; First Ring = Bronx, Brooklyn, Queens, & Staten Island.
Paris: Urban Core = 20 Arrondissements; First Ring = Hauts-de-Seine, Seine-St. Denis, and Val de Marne (3 departments).
London: Urban Core = Inner London (14 boroughs plus City of London); First Ring = Outer London (18 boroughs).
Tokyo: Urban Core = 11 inner wards; First Ring = 12 outer wards.

POPULATION

POPULATION (MILLIONS) AND DENSITY (PERSONS PER SQ. MILE)

<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>Core Density</th>
<th>First Ring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC (2000)</td>
<td>1.5</td>
<td>69,873</td>
<td>6.5</td>
<td>8.0</td>
</tr>
<tr>
<td>Paris (1999)</td>
<td>2.1</td>
<td>51,835</td>
<td>4.0</td>
<td>6.2</td>
</tr>
<tr>
<td>London (1998 EST.)</td>
<td>2.7</td>
<td>21,639</td>
<td>4.4</td>
<td>7.2</td>
</tr>
<tr>
<td>Tokyo (1995)</td>
<td>2.0</td>
<td>30,476</td>
<td>5.9</td>
<td>8.0</td>
</tr>
</tbody>
</table>

PERCENT FOREIGN BORN POPULATION

<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>First Ring</th>
<th>Core</th>
<th>First Ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC (2000)</td>
<td>27.3%</td>
<td>36.4%</td>
<td>33.1%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Paris (1999)</td>
<td>22.7%</td>
<td>20.4%</td>
<td>26.6%</td>
<td>23.8%</td>
</tr>
<tr>
<td>London (1991)</td>
<td>27.8%</td>
<td>18.0%</td>
<td>40.8%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Tokyo (1998)</td>
<td>3.0%</td>
<td>1.6%</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Note on Foreign Born data: In Tokyo there is no data on foreign born, only for “foreigners”.

Note on Territories: Figures from 1990.
**Resources**

**Physician Density - Per 10,000**

<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>First Ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC (1995)</td>
<td>71.2</td>
<td>33.9</td>
</tr>
<tr>
<td>Paris (1998)</td>
<td>74.5</td>
<td>34.9</td>
</tr>
<tr>
<td>London (2000)</td>
<td>36.9</td>
<td>10.3</td>
</tr>
<tr>
<td>Tokyo (1998)</td>
<td>70.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

**Acute Hospital Beds – Per 1,000**

<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>First Ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC (1997)</td>
<td>8.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Paris (1995)</td>
<td>9.6</td>
<td>6.3</td>
</tr>
<tr>
<td>London (1999/00)</td>
<td>3.7</td>
<td>1.4</td>
</tr>
<tr>
<td>Tokyo (2000)</td>
<td>12.8</td>
<td>4.6</td>
</tr>
</tbody>
</table>

**Physician Density**
The density of physicians in Manhattan, Paris and Inner Tokyo is roughly the same – approximately 70 (per 10,000 population) which is more than twice that in the respective first rings.

**Hospitals as Exporters**
Hospitals in these urban cores are significant exporters to their surrounding regions. For example, in Manhattan and Paris, resident admissions to all hospitals represent only about one-half of all hospital admissions.

**Nursing Home Beds – Per 1,000 Aged 65+**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33.3</td>
<td>22.8</td>
<td>15.8</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Note on Nursing Home data: Paris includes Parisians in nursing home beds outside of Paris. Due to social hospitalization in Tokyo, long term bed counts substitute nursing home beds and therefore, the number of nursing home beds may be underestimated.

**Population Health**

**Life Expectancy at Birth**

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan (1990)</td>
<td>66.6</td>
<td>77.6</td>
</tr>
<tr>
<td>Paris (1991)</td>
<td>72.6</td>
<td>80.8</td>
</tr>
<tr>
<td>Inner London</td>
<td>73.1</td>
<td>79.3</td>
</tr>
<tr>
<td>(1991)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner Tokyo</td>
<td>76.5</td>
<td>82.8</td>
</tr>
<tr>
<td>(1996)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remaining Years of Life at 65**

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan (1990)</td>
<td>15.7</td>
<td>19.5</td>
</tr>
<tr>
<td>Paris (1991)</td>
<td>16.8</td>
<td>20.8</td>
</tr>
<tr>
<td>Inner London</td>
<td>14.5</td>
<td>18.6</td>
</tr>
<tr>
<td>(1991)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner Tokyo</td>
<td>16.5</td>
<td>21.1</td>
</tr>
<tr>
<td>(1995)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Inequality**
Manhattan is characterized by the highest level of inequality in the distribution of income.

**Infant Mortality per 1,000, 1989 and 1996**

<table>
<thead>
<tr>
<th>Year</th>
<th>Manhattan</th>
<th>Paris</th>
<th>Inner London</th>
<th>Inner Tokyo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>12.1</td>
<td>7.3</td>
<td>9.3</td>
<td>4.7</td>
</tr>
<tr>
<td>1996</td>
<td>6.0</td>
<td>4.7</td>
<td>6.9</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**Birth Rates**
Birth rates are roughly the same in Manhattan and Paris (around 48 per 1000 females aged 15-45), highest in Inner London (64.6) and lowest in Inner Tokyo (30.2).

**Tuberculosis Rates per 100,000**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24.3</td>
<td>49.0</td>
<td>39.0</td>
<td>53.9</td>
</tr>
</tbody>
</table>

1989 Figures, 1996 Figures
Each year is based on an average of 3 years from 1988-90 and 1995-97
**Older Persons**

**Population of Older Persons**

<table>
<thead>
<tr>
<th></th>
<th>65+</th>
<th>85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan (2000)</td>
<td>12.2%</td>
<td>1.7%</td>
</tr>
<tr>
<td>NYC First Ring</td>
<td>11.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Paris (1999)</td>
<td>15.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Paris First Ring</td>
<td>12.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Inner London (1998 est.)</td>
<td>11.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Outer London</td>
<td>13.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Inner Tokyo (1995)</td>
<td>15.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Outer Tokyo</td>
<td>13.1%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

**Institutionalization (1990)**

Five percent of Manhattan’s 75+ population lives in a nursing home or care facility compared to 3.8% in Paris and 2.5% in Inner London.

**Mobility Limitations (1990/1991)**

Twenty-four percent of Manhattantites aged 75+ report mobility limitations in leaving their homes. In Paris this rate is 21% (1995). In the United States, a person has a mobility limitation if he/she answer “yes” to the following question: “Because of a health condition that has lasted for 6 or more months, does the person have any difficulty going outside the home alone, for example, to shop or visit a doctor’s office?” In France this disability is the combination of two questions: “Do you need someone’s help to leave home, or do you not leave home?”

**Population Projections for Persons 60+ in 2015**

<table>
<thead>
<tr>
<th>Manhattan</th>
<th>Paris</th>
<th>Inner London (2011)</th>
<th>Inner Tokyo</th>
</tr>
</thead>
<tbody>
<tr>
<td>19%</td>
<td>20%</td>
<td>14%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Tokyo is most rapidly aging of the four cities. In 2015 over one-third of Inner Tokyo’s population will be aged 60+.

**Productive Aging %65+ in Labor Force, 1990-91 (Tokyo 1997)**

![Image showing productivity aging percentages for different cities]

**Living Alone Aged 85+ 1990-91 (Tokyo 1996)**

![Image showing living alone percentages for different cities]
**HEALTH SERVICES**


**MORTALITY**
Manhattan residents exhibit higher mortality for acute myocardial infarction, all ischemic heart disease, and hypertensive disorders than Paris residents.

**ADMISSION FOR ACUTE MYOCARDIAL INFARCTION**
MANHATTAN-PARIS: 1998/1999 AVERAGE

**CORONARY ARTERY ANGIOPLASTY**
MANHATTAN-PARIS 1997-1999 AVERAGE

**CORONARY BYPASS**
Although, coronary bypass is performed at higher rates in Paris than Manhattan for men ages 45-74, there is no significant difference in the rate for men ages 75-84, and a higher rate in Manhattan among men ages 85 and above.

**CORONARY ARTERY BYPASS**
MANHATTAN-PARIS: 1997-1999 AVERAGE
REFERENCES:

POPULATION
1990 Population (Millions) and Density (Persons per Square Mile) of Core and First Ring:
NYC: Census 2000 Summary File 1
Paris: INSEE 1995, Projection OMPHALE
London: Office for National Statistics 1991

Percent Foreign Born Population (1990):
NYC: Foreign born information is from Census 2000 Supplementary Survey, Total Population data comes from the Census 2000 Summary File 1
Paris: INSEE 1990

RESOURCES
Physician Density – Per 10,000:
NYC: NYDE, NYSDOH, 1995
Paris: Ministere de l'Emploi et de la Solidarite - SESI - repertoire ADELI au 1er janvier 98
London: London Health Observatory 2000

Acute Hospital Beds – Per 1,000:
NYC: Total includes chronic care, hospice, and other data not shown on table. Source: Health Care Annual, UHF, 1997
London: London Health Observatory 2000
Tokyo: List of Medical Facilities 2000 from Bureau of Public Health, TMG

Nursing Home Beds – Per 1,000 Aged 65+:
London: The Kings Fund 1992

OLDER PERSONS
Population of Older Persons:
NYC: Census 2000 Supplementary Survey Summary Tables
Paris: INSEE 1999

Productive Ageing %65 + In Labor Force (1990):
NYC: Public Use Micro Date Sample 1990
Paris: INSEE 1990
Tokyo: Population Census of Japan 1997

Living Alone Aged 85+ (1990):
NYC: Public Use Micro Date Sample 1990
Paris: INSEE 1990
London: London Research Center 1991

POPULATION HEALTH
Life Expectancy at Birth:
NYC: NYCDOH, 1991, 1995. Life expectancy numbers are 1990 data from the National Center for Health Statistics
Paris: INSEE 1991
London: Office for National Statistics 1991

Life Expectancy at 65:
NYC: NYCDOH, 1991, 1995. Life expectancy numbers are 1990 data from the National Center for Health Statistics
Paris: INSEE
London: Office for National Statistics 1991

Infant Mortality per 100,000, 1989 and 1996:
London: Office for National Statistics 1991 Births, Deaths Data

Tuberculosis Rates per 1,000:
NYC: New York State Department of Health/County Health Indicator Profiles 1998
Paris: Ministere des Affaires Sociales, de la Sante et de la Ville. INSERM 1997
London: University of Nottingham

HEALTH SERVICES
Rate of Acute Hospital Admissions/Discharges by Age Groups:
Manhattan: SPARCS 1997

Admission for Acute Myocardial Infarction Manhattan –Paris:
1998/99 Average:
Manhattan: SPARCS 1998/99

Coronary Artery Angioplasty Manhattan-Paris 1997-1999 Average:
Manhattan: SPARCS 1997/98/99

Coronary Artery Bypass Manhattan-Paris 1997-1999 Average:
Manhattan: SPARCS 1997/98/99