

# OFFICIAL STATISTICS.

## COMMONWEALTH OF AUSTRALIA YEAR BOOK, 1901 to 1907,

With Corrected Statistics for Earlier Years.

### SECTION I. INTRODUCTION.

#### § 1. Development of State Statistics.

1. **Origin of Statistics in Australia.**—The earliest form of Government in each State of Australia was that of a "Crown Colony," in which the Governor, usually advised by a local Legislative Council, initially wholly nominee, but ordinarily partly nominee and partly elective, administered public affairs under direct instructions from the "Colonial Office" in London. For the information of this Office somewhat comprehensive annual returns were required. These were furnished in triplicate, on forms supplied by the Colonial Office itself, one being returned to that Office, a second being retained by the Governor, and the third remaining with the department responsible for the preparation of the return itself, or else with the Legislative Council referred to.

These returns, known as "Blue Books," were the forerunners of the present "Statistical Registers" of the Australian States, and it is in the work of preparing them that we find the germ of development of Statistics in Australia.

2. **Conditions of the Development of Statistics.**—As in almost every other country in the world,<sup>1</sup> the general situation did not primarily lend itself to the creation of a system having any pretension to uniformity. The limitations, from the standpoint of statistical technique, of the early records, arose from several causes. Not only was there no adequate machinery for the collection of data, and no professional control of the form of inquiry, but even the inquiries themselves were based upon a view directed rather to immediate administrative requirements, than to those arising from the developments likely to occur in the future. Again, the conditions of life in Australia were *toto cælo* different from those known to the officials who determined the form and extent of the statistical returns. While, therefore, one condition of a satisfactory statistic existed, viz., uniformity of statistical data, the other two did not exist, at any rate in their absolute integrity, viz.:—

- (i.) Uniformity of interpretation of the requirements, and
- (ii.) Uniform machinery for the collection of the desired particulars.

Again, no attempt was made to prepare, from time to time, a statistical survey of the affairs of this country as a whole. The "Blue Books" appear to have been regarded rather as documents for the guidance of the administrators in the Colonial Office than as contributions to a scheme of international statistic. Much the same view existed elsewhere.<sup>2</sup> And it is also to be remembered that, even as late as 1855, when the Crown

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1. See "Geschichte, Theorie, und Technik der Statistik," August Meitzen.—Prof. d. Staatswissenschaft, Univ., Berlin, 1891.

2. In Austria and Russia, for example, in earlier days. "Il était ordonné que ce travail ne serait communiqué qu'aux personnes qui en avaient le droit pour les besoins des Services publics," writes Bertillon in reference to the statistical service created on 6th April, 1829, in Austria. Vide "Statistique Administrative," par Dr. J. Bertillon, 1895, p. 17.

Colony system was first varied by granting responsible government to the Colonies of New South Wales, Victoria, and Tasmania, the total population of what is now the Commonwealth of Australia was only about 800,000, and that the administrative facilities did not lend themselves to that perfecting of statistical information which might be expected of older countries.

**3. The Granting of Responsible Government and its Effect.**—During the decade 1851-1860 responsible government was granted to each State, Western Australia excepted, the actual years being :—

New South Wales, Victoria, and Tasmania, 1855; South Australia, 1856; Queensland, as part of New South Wales, 1855; as an independent colony, 1859. Western Australia remained a Crown Colony till 1890.

With the advent of such government the "Blue Book" requirement of the Colonial Office necessarily ceased, the duty of compiling statistical information devolving, of course, on the local Governments. This tended to individualise it. Statistical information, whether for the "Blue Book" or for its successor, the "Statistical Register," was ordinarily prepared by an officer without special training in the technique of statistic, as a well-organised and scientifically elaborated method of recording and analysing the facts. There is reason to believe that not infrequently the returns were regarded as an unnecessary and troublesome incubus, hindering the discharge of ordinary duty. Thus the new "Statistical Register" was substantially the old "Blue Book," 'writ large.'

**4. Administrative Control of Statistical Compilation.**—The work of statistical publication devolved upon the departments dealing with Internal or Home Affairs, the Ministerial head of which was variously known as the Colonial Secretary or Chief Secretary, but the actual collecting and compiling was usually carried out by the various administrative departments directly concerned, as, for example, "Finance" by the Treasuries, "Trade" by the Customs Departments, etc. The drift into divergence of method, as between State and State, was inevitable.

**5. The Registrars-General and their Statistical Functions.**—The work of compiling the statistics of the several colonies was early relegated to the Registrars-General of Births, Marriages, and Deaths. In four out of the six States the officer who administers the Registration Act is now also Government Statistician, although the statistical staff in each State is practically distinct from the registration staff. A more particular account of the development is given under the heading of each State.

## § 2. The Statistical Bureaux of the Several States.

**1. New South Wales.**—On the separation of the Port Phillip District in 1851, the "Statistical Returns" of "New South Wales proper, only" were ordered by the Legislative Council to be printed on 28th July, 1852. They are a mere grouping of a number of independent returns, 1837 to 1851, according to the title, though in some instances the data go back to 1832.

In 1858 the Registrar-General of the State (Mr. C. Rolleston, afterwards C.M.G.) formulated a better scheme, and in "presenting . . . the new 'Statistical Register' . . . for the year 1858" made an important announcement regarding its scope and significance. He gave also, in tabular form, a statistical view of the progress of the State from 1821 to 1858. The report, dated 29th August, 1858, may be taken as the initiation, under the Registrar-General, of a formal organisation of official statistical compilation in New South Wales.

After the separation of Queensland, in 1859, the statistical information began to be given in somewhat greater fulness. A statistical register appeared each year, and separately a record of Vital Statistics.

In July, 1886, a Statistical Bureau was created and placed in charge of Mr. T. A. Coghlan, now I.S.O., F.S.S., etc., and Agent-General of New South Wales, the "Register" for that year being the first compiled in the Statistician's office.

Considerable improvements in the field of statistics were immediately effected by Mr. Coghlan, and an annual with the title "The Wealth and Progress of New South Wales"

was published at the end of the following year, in order to shew the progress and potentialities of the State as disclosed by the statistical record. General statistics were much elaborated under Mr. Coghlan's régime, and special attention was given to the record of progress in primary and manufacturing industries.

Mr. Coghlan's advent in the field of statistic led to a decided forward movement. In February, 1891, he issued a brief account, largely statistical, of Australasian affairs. Initially, this was a small octavo volume of 315 pp., with the title "The Seven Colonies of Australasia," and it attempted, with no small degree of success, the difficult task of enabling a comparative study to be made of the affairs of the different States of Australasia. Occasionally, also, it made comparisons with the data of foreign countries. These comparisons, however, were often limited by the want of a central agency with the necessary authority to bring about a real unification of statistical effort. In 1904 the title of the publication was changed to "Australia and New Zealand," that particular volume referring mainly to 1902-3, though occasionally also only to 1901.

Marked improvements were made in the Vital Statistics for 1894, the volume being published in 1896.

After Mr. Coghlan's departure in the early part of 1905, the Statistics of New South Wales were dealt with by Mr. W. H. Hall, F.S.S., as "Acting Government Statistician," till they were taken up in 1906 by the present "Director," H. C. L. Anderson, M.A., Univ. Syd. Mr. Hall, in 1906, published the "Official Year-Book of New South Wales" for 1904-5, departing considerably from the form of the previous publications.

2. **Victoria.**—The first Statistical Register of Victoria appears to have been issued by the Colonial Secretary, Captain W. Lonsdale, in November, 1851, but it was not till 21st September, 1854, when Mr. William Henry Archer, F.I.A., etc., Assistant Registrar of Victoria, issued his "humble attempt to commence a series of Registers . . . that may . . . faithfully reflect the progress of this extraordinary colony," that statistical compilation was in any adequate sense organised. The Register was a small octavo volume of 447 pp. The following year this "Statistical Register of Victoria" was increased to foolscap size, under the title "Statistics of the Colony of Victoria," and was published annually by the Registrar-General till 1873 (the 1872 issue). A Statistical Bureau was created in that year, and the late Henry Heylyn Hayter, C.M.G., Hon. Mem. S.S. Lond., etc., appointed "Government Statist," a position which he filled till his death on 23rd March, 1895.

Till 1873 the statistical publications in Victoria consisted of the yearly Register and occasional pamphlets known as "Progress and Statistics," "Notes of Progress," "Facts and Figures, Statistical and General," "Progress of Victoria," etc., but Mr. Hayter commenced at once the "Victorian Year Book," a modest volume of 114 pp., first issued in 1874, and which in 1887 was no less than 931 pp. On Mr. Hayter's death the office was, for a short time, filled by Mr. E. F. Owen, as Acting Government Statist, and by Messrs. J. J. Fenton and William McLean until the appointment of the present Statist, Mr. E. T. Drake, in January, 1906.

The regular statistical publications of Victoria now consist of the "Year Book," the "Statistical Register," and the "Quarterly Abstract." It is to Mr. Hayter's Year Book, which was continually being improved, and to his wide acquaintance with foreign statistics, that the development of Australian Statistic is largely due. That Mr. Hayter's work was widely honoured is manifest in the honorary memberships bestowed upon him by foreign societies.

3. **Queensland.**—Before the establishment of Queensland as a separate colony in 1859, the local statistical data were collected and published as part of the statistics of New South Wales. The official statistics were compiled by the Registrar-General, Mr. F. O. Darvall, with the assistance of Rev. R. Creyke, the first being for 1859-1860, about 50 pp. In 1866 a special "Statistical Clerk" was appointed (Mr. J. C. Whitley), and the size of the Register increased to 160 pp. In 1874 the title of the office was changed to "Compiler of General Statistics," a title retained till the appointment of the present "Government Statistician," Mr. Thornhill Weedon, F.S.S.

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1. See, for example, "The Progress of Victoria, a Statistical Essay," by William Henry Archer, Reg.-Gen. Vict., 1873, pp. 159.

The Statistical Register of Queensland bears the title "Statistics of the Colony (now "State") of Queensland." Year Books for 1896 and 1897 were published, in 1897 and 1898 respectively, by Mr. Thornhill Weedon, as "Compiler of General Statistics," under the title "Queensland Past and Present." They were essentially "epitomes of its resources and development." In 1901 a "Queensland Official Year Book" was issued, but has not since appeared. In 1905 and 1906 Mr. Weedon issued pamphlets of 36 and 44 pp., bearing the title "The A.B.C. of Queensland Statistics." They are of the nature of comparative tabulations, and shew the affairs of Queensland in relation to Australia generally.

4. **South Australia.**—The first statistical publication of South Australia, compiled from "authentic official records," appeared in 1854. It was published by Mr. O. K. Richardson, Acting Colonial Secretary. Under the title "Statistics of South Australia," annual records appeared for 1856 to 1858. In 1860, in response to the request of the Governor, the first number (1859) of the "Statistical Register" appeared. This, according to Mr. J. Boothby, then "Chief and Record Clerk" and afterwards "Government Statist," was "a preliminary step . . . taken toward that 'unity of system' acknowledged . . . to be of essential importance." The "Statistical Register," up to the 1875 issue, came from the "Chief Secretary's Office," but from 1876 onwards from the "Office of the Government Statist," which, however, is a part of the former. Mr. J. Boothby was "Government Statist" from 1863 till 1879; Mr. G. S. Wright was Acting from 1879 to 1882; Mr. H. J. Andrews was "Government Statist" from 1882 to 1889; and L. H. Sholl, I.S.O., has filled the position since, viz., from 8th May, 1890. Steps are now being taken to improve the organisation of the Statistical Bureau.

Two general official presentments of the affairs of South Australia have been made, viz.:—"South Australia, its History, Resources, and Productions," by W. Harcus, J.P., 1876, pp. 311; and "The Province of South Australia," by J. D. Woods, J.P., "with a Sketch of the Northern Territory by H. D. Wilson," 1894, pp. 446.

5. **Western Australia.**—The first manuscript "Blue Book" of Western Australia dates back to 1837, but no compilation of statistical data appears to have been printed till 1870. In 1882 Sir William C. F. Robinson, Governor, caused an "Abstract of Statistical Tables" for 1872-1881 to be prepared. This was followed by a "Statistical Return" for 1883, published in 1884, by Sir Malcolm Fraser, Colonial Secretary, a publication continued till 1886. A Report commenting on the "Blue Book" was issued, first in 1885, as a parliamentary paper, and continued till 1889, when it was included in the new "Year Book."

In 1884 The Rt. Hon. Sir John Forrest, P.C., G.C.M.G., LL.D., etc., then Commissioner of Crown Lands and Surveyor-General, issued a small pamphlet with the title "Notes on Western Australia, with Statistics for 1883," the precursor of the Western Australian Year Book. The first number of this publication, viz., for 1886, appeared in 1887. It was issued by the late Mr. G. C. Knight, Registrar-General; the 1889 issue was by Mr. W. A. Gale, Acting Registrar-General, and that for 1890 was by the present Government Statistician, Mr. Malcolm A. C. Fraser, F.S.S., etc. As first issued the Year Book contained 127 pp.; in 1904 it was 1283 pp.

The "Blue Book," which up to 1890 was issued from the Colonial Secretary's Office, was in that year transferred to the Registrar-General. On the 1st July, 1897, a Statistical Bureau was created as a branch of the Registrar-General's Department; the "Blue Book" was then superseded by the "Statistical Register." It was not till July, 1901, that the title "Government Statistician" was added to that of Registrar-General, the officer who now directs the statistical office, through, however, a distinctly organised statistical bureau. Its present publications are:—

1. Statistical Register of Western Australia.
2. Western Australian Official Year Book.
3. Monthly Statistical Abstract.
4. Quarterly Returns of Population and Vital Statistics.
5. Preliminary Crop and Live-Stock Returns.
6. Estimates of the Areas of Wheat, etc.
7. Breadstuff Statistics.

6. **Tasmania.**—Statistical Records were kept in Tasmania from as early as 1804, but those from that year to 1823 do not appear to have been published till 1856. The "Statistical Returns of Van Diemen's Land," from 1824 to 1839, were published as early as 1839 by John Montagu, and afterwards, ordinarily, biennially by the Colonial Secretary till 1853. In 1855 the register was known as the "Statistics of Tasmania" for the first time, and was compiled in the Private Secretary's Office and published by order of the Governor.

It was not, however, till 1st July, 1882, that a properly-constituted Statistical Bureau was established; this was the date of the appointment of the present "Government Statistician," R. M. Johnston, I.S.O., F.S.S., etc., who was also made Registrar-General of Births, Deaths, and Marriages. In 1882 Mr. Johnston published the "Statistics of the Colony of Tasmania" for 1881, with a Statistical Summary from 1816-1881. This Register has been continued since under the same title. The "Tasmanian Official Record" was issued for 1890 and 1891, and its title changed to "Handbook of Tasmania" in 1893. It has not been issued since.

7. **New Zealand.**—Although New Zealand is not a part of the Commonwealth of Australia, its affairs will be treated of to some extent in this publication.

Prior to 1858 statistical compilation in New Zealand was limited to particular parts of the territory, or to particular periods, but from 1858 to 1889 the annual statistical volume, then the only official statistical publication issued, attempted to embody a comprehensive and authoritative compilation of all statistical facts. This was compiled by the Registrar-General. In 1890 a "Report on the Statistics of New Zealand" was also published, which became, in 1892, the "New Zealand Official Handbook." The title of this was changed in the year following to the "New Zealand Official Year Book," a title still retained. The publications now issued are:—

- (i.) Statistics of New Zealand, and (ii.) New Zealand Official Year Book;
- (iii.) Fifty Years' Progress in New Zealand—all these are annual.
- (iv.) Municipal Handbook of New Zealand; Census Reports, etc.

The present Registrar-General, Mr. E. J. von Dadelszen, has a properly-organised statistical bureau in his department, one branch of his work being purely registrational, the other statistical.

### § 3. Co-ordination of Statistical Effort.

1. **Early Recognition of Need for Uniformity.**—As far back as 1854, William Henry Archer, then Assistant Registrar of Victoria, recognised the necessity for "the foundation of a broad statistical system." He had in mind the work of "such eminent Statists as Farr, Neison, Porter, Quételet, Dupin, Villermé, Hoffmann, Schubert, and Ramon de la Sagra." The State Governor (La Trobe) took a warm interest in the work of making Victorian Statistics worthy of the then state of development of the Science. Mr. Archer's influence affected the other colonies of Australia. In July, 1859, the Governor of South Australia proposed that there should be "not only unity in point of time, but also as regards system in the compilation" of the facts.<sup>2</sup> A hope was expressed that the three colonies should unite "not only in regard to the enumeration of the people, but to re-cast and assimilate, in concert, all 'Blue Book' and other statistics, on a scientific and practical basis;" and South Australia was invited by New South Wales to "join in such measures as may be calculated to secure uniformity in statistics of such importance."<sup>3</sup>

2. **Individualistic Tendencies of States.**—Notwithstanding this early recognition that the Statistics of Australia should be developed on a uniform plan, the autonomy of each State led to divergencies of domestic policy and practice. These divergencies tended also to manifest themselves in the statistical technique, as well as in the facts collated. Even where there seemed to be unity of action, or identity in the data to be collected,

1. See Preface to the first Statistical Register, Vict., 1854, p. ii.

2. Report by Mr. J. Boothby, p. iii. Statistical Register, S. Austr., 1859.  
Ibid.

the unity and identity were often more apparent than real. The comparative studies made by each Statistician revealed with more and more clearness, in proportion as they were thorough, the grave lack of uniformity in the statistical data and methods of the several States, however excellent these may have been considered alone.

3. **Conferences of Statisticians.**—Besides much interchange of idea, and many informal conferences on various branches of statistic, there were six professional conferences of the State Statisticians, for the purposes of reaching greater uniformity, as the list hereunder will show. These were followed by the Conference of November and December, 1906, presided over by the Commonwealth Statistician.

#### STATISTICAL CONFERENCES.

Date of Conference.	Place of Meeting.	Colonies or States represented.	Object of Conference.
October, 1861 ...	Melbourne	New South Wales, Queensland, South Australia, Victoria.	To secure uniformity in the collection and compilation of statistics.
January, 1875 ...	Hobart ...	New South Wales, South Australia, Tasmania, Victoria.	To secure uniformity in the collection and compilation of statistics.
March, 1890 ...	Hobart ...	New South Wales, South Australia, Tasmania, Victoria, New Zealand.	To secure uniformity in the collection and compilation of Census returns.
February, 1900	Sydney ...	New South Wales, Queensland, South Australia, Tasmania, Victoria, Western Australia, New Zealand.	To found a uniform basis for the estimation of population and to secure the collection and compilation of Census on uniform principles.
January, 1902 ...	Hobart ...	New South Wales, Queensland, South Australia, Tasmania, Victoria, Western Australia, New Zealand.	To secure uniformity in the preparation of statistical returns.
September, 1903	Melbourne	New South Wales, Queensland, South Australia, Tasmania, Victoria, Western Australia.	To secure uniform methods in the statistics of population.
Nov., Dec., 1906	Melbourne	<b>Commonwealth, and each State therein and New Zealand.</b>	<b>Co-ordination of the entire statistical effort of the Commonwealth and State Bureaux.</b>

4. **Results of Statistical Conferences.**—The main result of the various State conferences was to maintain a certain degree of *rappor*t between the State Statisticians, rather than to bring about any very fundamental advance in statistical method. Agreement was reached as to the ground to be covered by a form known as "Australasian Statistics," which gave to each State of the Commonwealth and to New Zealand the necessary knowledge of the affairs of every other part of Australasia. The conferences also secured a considerable degree of unity of method in connection with the various Censuses. But, as was said by the Commonwealth Statistician in his address to the State Statisticians in the Conference last above-mentioned, although the fundamental object in each instance "was to secure unity of statistical method," there was "still much to be achieved."<sup>1</sup> "The adoption of a sufficiently comprehensive set of statistical forms throughout Australia" would, it was said, "remove much of, if not all, the limitation that exists through diversity of method in the collection of statistical material," and though it would not "necessarily achieve a uniform degree of accuracy, it must, at least, tend toward the attainment thereof."

1. Report of Conference of Statisticians, 1906, p. 17, § 13.

## § 4. Uniformity in Statistic an Imperative Necessity.

1. **Uniformity an Essential.**—“Without uniformity there is no safety in Statistic,” says Dr. Bertillon in his discussion on the “absolute necessity for uniformity in Statistics.” In order to combine data, each term or category under which facts are enumerated must have an identical meaning for each region. The necessities of a good statistical organisation for any territory, large or small, are as follows:—

- (i.) Identity of categories under which facts are to be collated.
- (ii.) Substantial identity in method of collection.
- (iii.) Uniformity in the scheme of presentation.
- (iv.) As far as possible simultaneous collection of the facts in the different parts of the territory.

These desiderata are obvious, and though, academically, it is equally obvious that comparisons are valueless unless the data compared are of the same type, it by no means infrequently happens that aggregates are formed from, or comparisons are made with, dissimilar data. For example, unless two populations are similarly constituted as to sex and age, their birth and marriage rates are not immediately comparable; the relative sobriety of two peoples cannot be immediately determined from the police court records of drunkenness, where there are fundamental differences in the magisterial policy of dealing with offenders; failure of crops through drought cannot be compared where one territory enters all such instances as cases of lands lying fallow, and so on.

2. **Uniformity Demanded by Commonwealth Administration.**—In so far as Commonwealth administration is dependent upon a survey of the affairs of Australia, so is it urgent that the statistical compilation should be uniform in character. The well-being of the Commonwealth implies the well-being of its integral parts, viz., the several States therein, hence a federal purview of the development of those parts should not only be absolutely impartial, but also well founded. It is directly concerned with the good of the whole as well as that of the individual States. Thus the Commonwealth is materially interested in the whole of the available statistical data for each State, and must necessarily regard statistical uniformity as indispensable. Australia, with Tasmania, a territory of such dimensions that by far the greater part of Europe would lie within its boundaries, possessing, moreover, a range of latitude such that its climate, and consequently its productions, exhibit the most striking differences, possessing also diversified physical features and general characteristics, cannot, when examining its development, be regarded as a homogeneous unit. This makes uniformity of statistical method more than ordinarily important, and it is evident that a complete statistical record of the growth and condition of its population, and of all the features of the industrial, agricultural, and commercial effort, is essential for that critical review of its development and tendencies, without which it would be practically impossible for the Commonwealth Government to be adequately and accurately advised in connection with its administrative and legislative functions. Without a well-ordered record it could not well guard the destinies of Australia, or properly protect her interests.

Again, the development of any one part of the Commonwealth has either immediate reactions upon, or remotely affects all other parts, both in various ways and in differing degrees; and the function of examining these facts, with a view to maintaining federal interests, that is, of the States as a whole, clearly belongs to the Commonwealth Government. Such an examination demands as a basis at least a justly formed aggregation of the statistical data of each State.

It may be said, further, that the development of Australian trade with other countries renders it important that the statistical records of the Commonwealth should also afford adequate information as to the distribution and magnitude of its various productive activities, and that, too, from the standpoint of Australia as a political entity having a definite relation to the other parts of the British Empire, and to the outside

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1. “En dehors de l’uniformité, pas de salut en statistique.” *Statistique Administrative*, 1895, p. 8.

world generally. In fact, to put it briefly, Australia, in founding a satisfactory statistical technique, is merely establishing what every civilised nation has found to be an essential of good government.

**3. International Uniformity in Statistic.**—The great feature of the modern progress in statistics is the endeavour to so arrange its technique, to so determine its categories of inquiry and the forms in which its data are furnished, as to enable the affairs of any one nation to be justly compared with those of any other. This advance means that the trend of events, the development of the people and of their wealth, can be properly studied, not only as regards the several parts of a large territory, but also as regards the whole civilised world, only if the fundamental principles governing international statistics be rigorously observed. For this reason, in organising a federal bureau of statistics, it is most important that its methods should be based upon international precedents.

## § 5. Devolution of Census and Statistics to the Commonwealth.

**1. The Commonwealth Constitution in respect of Statistics.**—In the Imperial Act, 63° and 64° Victoriae, Cap. 12 (the "Act to constitute the Commonwealth of Australia," and generally known as the "Commonwealth of Australia Constitution Act"), Part V. of Chapter I. defines the Powers of the Parliament. Section 51 reads:—"The Parliament shall, subject to the Constitution, have power to make laws for the peace, order, and good government of the Commonwealth, with respect to—  
(*inter alia*) "(xi.) Census and Statistics."

**2. Exercise of Prerogative in Creating a Census and Statistics Bureau.**—After conferences with the State Governments the Commonwealth Government decided to exercise its power under the Constitution, so that the responsibility of matters concerning the taking of Censuses, and the compilation and publication of statistics, should devolve upon the Commonwealth Government itself. To this end it passed the "Census and Statistics Act of 1905," the importance of which will be clearly perceived as soon as its provisions are studied. Because of this importance the Act is reproduced here *in extenso*.

## § 6. The Census and Statistics Act of 1905.

**1. General Review of the Act.**—The Census and Statistics Act provides—(a) for the constitution of the administrative scheme through which it is to achieve its end; (b) for the taking of a decennial Census; and (c) for the collection of statistics generally. It requires, under penalties, that information demanded by the Statistician shall be furnished, whether for census or other statistical purposes, that in the prosecution of necessary inquiries he may enter and inspect factories, mines, workshops, etc., that he shall tabulate and publish statistical information collected.

**2. The Act.**—The following is the Act:—

### THE COMMONWEALTH OF AUSTRALIA CENSUS AND STATISTICS.

No. 15 of 1905. *An Act relating to the Census and Statistics of the Commonwealth.*  
Assented to 8th December, 1905.

**B**E it enacted by the King's Most Excellent Majesty, the Senate, and the House of Representatives of the Commonwealth of Australia as follows:—

#### PART I.—INTRODUCTORY.

1. This Act may be cited as the *Census and Statistics Act 1905*.
2. This Act is divided into parts as follows:

Part I.—Introductory. Part II.—Administration. Part III.—The Census.  
Part IV.—Statistics. Part V.—Miscellaneous.



3. In this Act, unless the contrary intention appears—

- “Commissioner for Affidavits” means a person authorised under the law of the Commonwealth or of a State to take affidavits or declarations.
- “Dwelling” means a building, erection, or tenement, whether permanent or temporary, which is wholly or partly used for the purpose of human habitation and includes any ship or other vessel in any port of the Commonwealth or in any inland waters thereof, or any ship or vessel registered in Australia on a passage between any two Commonwealth ports.
- “Factory” means any work, mill, or establishment, used for the purpose of manufacturing, treating or preparing any article.
- “Occupier” includes every governor, superintendent, officer-in-charge, or keeper, of any gaol, prison, hospital, lunatic asylum, or public or charitable institution.
- “The Statistician” means the Commonwealth Statistician.

#### PART II.—ADMINISTRATION.

4.—The Governor-General may appoint a Commonwealth Statistician, who shall have such powers and perform such duties as are conferred or imposed on him by this Act or the regulations.

5.—(1). The Statistician, in relation to any particular matters or class of matters or to any particular State or part of the Commonwealth, with the approval of the Minister, may by instrument under his hand, delegate any of his powers under this Act (except this power of delegation) so that the delegated powers may be exercised by the delegate with respect to the matters or class of matters or the State or part of the Commonwealth specified in the instrument of delegation.

(2). Every delegation shall be revocable in writing, at will, and no delegation shall affect the exercise or performance by the Statistician of any power or duty.

6.—(1). The Governor-General may enter into any arrangement with the Governor of any State providing for any matter necessary or convenient for the purpose of carrying out or giving effect to this Act and in particular for all or any of the following matters:—

- (a) The execution by State Officers of any power or duty conferred or imposed on any officer under this Act or the regulations;
- (b) The collection by any State Department or officer of any statistical or other information required for the purpose of carrying out this Act; and
- (c) The supplying of statistical information by any State Department or officer to the Statistician.

(2). All State Officers executing any power or duty conferred or imposed on any officer under this Act or the regulations, in pursuance of any arrangement entered into under this section, shall for the purposes of the execution of that power or duty be deemed to be officers under this Act.

7. Every officer executing any power or duty conferred or imposed on any officer under this Act or the regulations, shall, before entering upon his duties or exercising any power under this Act, make before a Justice of the Peace or Commissioner for Affidavits a declaration in accordance with the prescribed form.

#### PART III.—THE CENSUS.

8.—(1). The Census shall be taken in the year One thousand nine hundred and eleven and in every tenth year thereafter.

(2). The Census Day shall be a day appointed for that purpose by proclamation.

9. It shall be the duty of the Statistician, subject to the regulations and to the directions of the Minister, to prepare and issue forms and instructions, and take all necessary steps for the taking and collection of the Census.

10.—(1). For the purpose of taking the Census, a form called the Householder's Schedule shall be prepared, and left, in accordance with the regulations, at every dwelling throughout the Commonwealth.

(2). Where a dwelling is let, sub-let, or held in different apartments and occupied by different persons or families, each part so let, sub-let, or held and used for the purpose of human habitation shall be deemed a dwelling house.

11. Every occupier of a dwelling, with or for whom a Householder's Schedule has been left, shall, to the best of his knowledge and belief, fill up and supply therein, in accordance with the instructions contained in or accompanying the Schedule, all the particulars specified therein, and shall sign his name thereto and shall deliver the Schedule so filled up and signed to the Collector authorised to receive it. Penalty, £10.

12. The particulars to be specified in the Householder's Schedule shall include the particulars following:—

- (a) The name, sex, age, condition as to, and duration of, marriage, relation to head of the household, profession or occupation, sickness or infirmity, religion, education, and birthplace, and (where the person was born abroad) length of residence in Australia and nationality of every person abiding in the dwelling during the night of the Census Day;
- (b) The material of the dwelling and the number of rooms contained therein;
- (c) Any other prescribed matters.

13. It shall be the duty of each Collector if requested to assist occupiers of dwelling houses in filling up the Householder's Schedule, and to satisfy himself by inquiries from occupiers of dwellings or other persons that the Householder's Schedule has been correctly filled up.

14. Every person shall, to the best of his knowledge and belief, answer all questions asked him by a Collector necessary to obtain any information required to be filled up and supplied in the Householder's Schedule. Penalty, £10.

15.—(1). The Statistician shall obtain such returns and particulars as are prescribed with respect to persons who, during the night of the Census Day were not abiding in any dwelling.

(2). Every person shall, on being required by the Statistician so to do, furnish to the best of his knowledge and belief any prescribed particulars relating to persons who were not abiding on the night of the Census Day in any dwelling. Penalty, £10.

#### PART IV.—STATISTICS.

16. The Statistician shall, subject to the regulations and the directions of the Minister, collect, annually, statistics in relation to all or any of the following matters:—

- (a) Population;
- (b) Vital, social, and industrial matters;
- (c) Employment and non-employment;
- (d) Imports and exports;
- (e) Interstate trade;
- (f) Postal and telegraphic matters;
- (g) Factories, mines, and productive industries generally;
- (h) Agricultural, horticultural, viticultural, dairying, and pastoral industries;
- (i) Banking, insurance, and finance;
- (j) Railways, tramways, shipping, and transport;
- (k) Land tenure and occupancy; and
- (l) Any other prescribed matters.

17. For the purpose of enabling the statistics referred to in this Part of this Act to be collected, all prescribed persons shall, to the best of their knowledge, when required by the Statistician so to do, fill up and supply, in accordance with the instructions contained in or accompanying the prescribed form, the particulars specified in that form. Penalty, £10.

18. Every person shall, to the best of his knowledge and belief, answer all questions asked him by the Statistician or an officer authorised in writing by the Statistician, necessary to obtain any information required for the purposes of any statistics authorised by this Act to be collected. Provided that no prosecution for contravention of this section shall be instituted without the consent of the Minister. Penalty, £10.

19.—(1). For the purpose of making any inquiries or observations necessary for the proper carrying out of this Act, the Statistician or any officer authorised in writing by him may, at any time during working hours, enter any factory, mine, work-shop, or place where persons are employed, and may inspect any part of it, and all plant and machinery used in connection with it, and may make such inquiries as are prescribed or allowed by the regulation.

(2). No person shall hinder or obstruct the Statistician or any officer authorised in writing by him in the execution of any power conferred by this section. Penalty, £10.

20.—(1). The Statistician shall compile and tabulate the statistics collected pursuant to this Act and shall publish such statistics or abstracts thereof, as the Minister directs, with observations thereon.

(2). All statistics or abstracts prepared for publication and the Statistician's observations thereon (if any) shall be laid before both Houses of the Parliament.

#### PART V.—MISCELLANEOUS.

21. No person shall be liable to any penalty for omitting or refusing to state the religious denomination or sect to which he belongs or adheres.

22. No officer, after having taken the prescribed declaration, shall desert from his duty, or shall refuse or wilfully neglect, without just excuse, to perform the duties of his office. Penalty, £20.

23. No officer shall wilfully or without lawful authority alter any document or form under this Act or shall wilfully sign any untrue document or form. Penalty, £50.

24. No officer shall, except as allowed by this Act or the regulations, divulge the contents of any form filled up in pursuance of this Act, or any information furnished in pursuance of this Act. Penalty, £50.

25. Any person who forges, or utters knowing it to be forged, any form or document under this Act, shall be guilty of an indictable offence, and liable to imprisonment for a term not exceeding three years.

26. No person shall knowingly make in any form or document filled up or supplied in pursuance of this Act or in answer to any question asked him under the authority of this Act any statement which is untrue in any material particular. Penalty, £50.

27. The Governor-General may make regulations, not inconsistent with this Act, prescribing all matters and things which, by this Act, are required or permitted to be prescribed, or which are necessary or convenient to be prescribed for carrying out or giving effect to this Act.

### § 7. Creation of the Commonwealth Bureau of Census and Statistics.

1. **Appointment of Commonwealth Statistician and Staff.**—On 18th June, 1906, the first Statistician for the Commonwealth of Australia was appointed. Before creating the Commonwealth Bureau of Census and Statistics, the statistical work being done in the several States was examined. This work was carried out partly by the Commonwealth departments of Trade and Customs and that of Posts, Telegraphs, and Telephones, and partly by the State Statisticians. The principal professional officers of the Commonwealth Bureau had also to be selected.

The professional officers appointed to the command of the various greater divisions of statistic in this Bureau were:—

JOHN STONHAM, M.A., Sydney University (Chief Compiler).

HENRY SPONDLY, Zurich University.

CHARLES HENRY WICKENS, Associate of the Institute of Actuaries.

FREDERICK DALGLISH ROSSITER, M.A., Melbourne University.

EDWARD TANNOCH MCPHEE, Tasmanian Statistical Bureau.

Each of these officers had had long experience in the practical work of compiling, each possessed the requisite mathematical and linguistic attainments for the branches of

statistic with which he was called upon to deal, and each had special qualifications in particular branches of statistic.

**2. Organisation of the Bureau.**—Through the Foreign Office of the British Government the Commonwealth Statistician was placed in direct communication with the chiefs of statistical and similar departments throughout the world, and foreign Governments were asked—(a) to furnish their statistical publications, including such back numbers as could be spared; and (b) to enter into a general arrangement for exchange of publications. It would be impossible to speak too highly of the generous response which has been made to this request, a request to which a young country like Australia can make adequate return only in the somewhat distant future. Owing to this generous response the Library of the Bureau is now excellently furnished in respect of foreign publications: it possesses those of almost every country in the world. The necessary professional library and material equipment was also obtained, and the professional activity of the Bureau commenced by endeavouring to secure a higher degree of uniformity and accuracy in Australasian Statistics. This will again be referred to hereinafter.

**3. The Technical Library of the Bureau.**—Although the more purely technical portion of the Library of the Bureau has not reached normal requirements, the Commonwealth Government has made it possible to create a well-selected nucleus of works of reference, treatises on the technique of statistics in the several leading languages, dictionaries of languages, works on special branches of statistic, economics, finance and statecraft, actuarial and similar matters. The library has also been equipped with tolerably complete sets of the leading British and foreign journals of Statistical and Actuarial Science, and with necessary works on higher mathematics.

## § 8. The Statistical Conference of 1906.

**1. Personnel, etc., of Conference.**—A Conference of Statisticians was convened for the end of November, and actually met on the 30th of that month and the succeeding days till 8th December, inclusive. All the States were represented, as also New Zealand. The following was the personnel of the Conference:—

<i>Commonwealth of Australia</i>	...	G. H. KNIBBS, F.S.S., F.R.A.S., etc., Commonwealth Statistician, President of the Conference.
<i>New South Wales</i>	... ..	H. C. L. ANDERSON, M.A., Director of Intelligence Department and Bureau of Statistics.
<i>Victoria</i>	... ..	E. T. DRAKE, Government Statist.
<i>Queensland</i>	... ..	THORNHILL WEEDON, F.S.S., Government Statistician and Registrar-General.
<i>South Australia</i>	... ..	L. H. SHOLL, I.S.O., Chief Under-Secretary and Government Statistician.
<i>Western Australia</i>	... ..	C. H. WICKENS, A.I.A., late Actuary and Compiler, Government Statistician's Office, Perth, W.A.
<i>Tasmania</i>	... ..	R. M. JOHNSTON, F.S.S., I.S.O., etc., Government Statistician and Registrar-General.
<i>New Zealand</i>	... ..	E. J. VON DADELSZEN, Registrar-General and Government Statistician.

Before the Conference actually met, however, an exhaustive but rapid examination of the whole range of Australian Statistics was made by the Commonwealth Statistician, and over 150 forms for unifying statistical returns were prepared. On opening, an address was given pointing out the main object of the Conference, and in what way the Statistics of Australia could be fundamentally improved. Uniformity as regards method, matter, and time of collection was essential. The desirableness of giving some indication of the address is obvious, and, as it discloses the policy of the Bureau, necessary for public information in the wider sense.

2. **Abridged Extracts from Commonwealth Statistician's Address.**—The Conference met for the following specific purposes, viz.:—

- (i.) To determine, (a) the means by which uniformity in the statistical categories of the Australian State Bureaux, and an equal degree of accuracy in each could be secured; and (b) the methods of so collecting statistical information as to insure, with uniform categories and equally accurate aggregates, the greatest possible uniformity in the significance of statistical results.
- (ii.) To definitely fix the localities to which the various statistical aggregates shall apply.
- (iii.) To decide upon, (a) the best practical means of collecting statistical information regarding primary and secondary production and industry in all its bearings; (b) the best method of forming estimates of the quantity and value of production generally, and (c) the means of obtaining exact statistics relating to all matters of finance and economics generally.
- (iv.) To secure greater precision in each branch of vital statistics, and in statistics relating to social condition.
- (v.) To insure accuracy in estimating the fluctuation of population in the Australian States, and to secure a uniform practice in regard thereto.
- (vi.) To consider the means of obtaining accurate records of Interstate Trade.
- (vii.) To adopt a complete set of forms required for the collection of statistical data.
- (viii.) And to consider all other matters which may be necessary for giving full effect to the programme outlined.

The imperative necessity for uniformity, method, and order and date of compilation was referred to in the following terms:—

“It must be evident that statistical uniformity is an essential in regard to statistical data sought by the Commonwealth. In this there can be no *via media*.” . . . “At the present time no definite order of sequence has been adopted by all the States in issuing the various chapters of their Statistical Registers. Indeed, a State does not always pursue the same order in its successive issues. While this does not much matter from a purely State point of view, its persistence would strike at the very foundation of that principle of uniformity which must necessarily be the basis of Commonwealth statistical policy. If the Federal statistical aggregates are to be issued within a reasonable time, a definite order in the preparation of each branch of statistics’ must be followed . . . “The fundamental question for the consideration of the Conference is not the academic one, ‘whether it be possible to elaborate a set of ideally perfect forms,’ but the practical one, ‘whether the information can be collected through the various State Bureaux in accordance with the forms adopted,’ and in order that the proper advantage should be derived from the unification of statistical method throughout Australasia, it is necessary that the response of each State to the demand for statistical information should be co-extensive.

After paying a tribute to the excellent work done by the police as “enumerators with special qualifications,” and pointing out that in largely requisitioning their services, we are simply following the lead of advanced countries, reference was made to the need for greater attention to the localisation of statistical aggregates, in the following terms:—

“Every one who has closely studied statistics will recognise that to make statistical information precise, and to make it adequately informative, it will be necessary to do two things, viz.:—(a) Localise the collection of statistics so that they will refer to definite corresponding areas, and (b) So determine the boundaries of such areas that they shall be coterminous and fixed. Speaking generally, it may be said that, at the present time, the territorial divisions for different purposes pay little regard to each other; there has been no adequate attempt to so divide the Australian States that the larger divisions for any one purpose shall be coterminous with boundaries fixed for other purposes. In other words, the regional divisions for different purposes often have in general no definite relation to each other, nor do they embrace a whole number of smaller divisions with coterminous boundaries.”

It was pointed out as eminently desirable that, before the Census of 1911, the matter should be resolved. The various territorial sub-divisions existing are as follows:—

VARIOUS TYPES OF AREAS INTO WHICH THE STATES ARE DIVIDED.

Agricultural Areas and Districts	Municipalities
Boards of Advice Areas	Parishes and Hundreds
Board of Works Districts	Petty Sessions Districts
Boroughs	Police Districts
Circuits	Ports, Harbour Areas
Cities	Post Delivery Districts
Counties	Public Health Districts
Electoral (Commonwealth) Divisions and possibly Sub-Divisions, Polling Areas, etc.	Quarter Sessions Districts
Electoral (State) Districts, Provinces, Divisions, Sub-Divisions, etc.	Registration (Births, Deaths, and Marriages) Districts
Harbour Trust Areas	Road Districts
Irrigation Areas	School Board Districts
Land Boards and Survey Districts	Shires
Land Districts	States
Land Divisions	Stock Districts
Local Government Areas	Telegraph (Lineman's Sections)
Magisterial Districts	Telephone (Exchange) Areas
Meteorological Zones or Units	Towns
Mining Districts (various)	Vermin Destruction Districts
	Water Supply Areas.

It was urged that in order that "no ordinary statistical question regarding the distribution of the population, of its qualified voters, of its agricultural, commercial, industrial, mining, pastoral, or viticultural activities should remain unsusceptible of immediate and accurate answer," in order that all "specific forms of primary industry may be discussed in relation to means of communication," and in order that all questions relating to "the extent of our various natural resources, of deforestation and natural and artificial reforestation, of the probable consequences of water conservation and irrigation, and in fact any project for developing our territory, should be susceptible of analysis," it is necessary to definitively localise statistical aggregates.

Regarding simultaneity in the order of supply of information, the following was suggested, viz.:—

SUGGESTED ORDER IN WHICH INFORMATION SHALL BE SUPPLIED.

(i.) Population	(xiii.) Railways and Tramways
(ii.) Vital Statistics	(xiv.) Public Finance
(iii.) Education	(xv.) Private Finance (excl. Savings Banks)—
(iv.) Mining Industry	Building and Investment Societies
(v.) Law and Crime	Co-operative Societies
(vi.) Forestry and Fisheries	Companies
(vii.) Land Settlement	Industrial and Trade Unions
(viii.) Agriculture	Friendly Societies
(ix.) Pastoral Industry (including Dairy- ing)	Probates
(x.) Manufactories	(xvi.) Local Government
(xi.) Wages	(xvii.) Hospitals and Charities.
(xii.) Savings Banks	

In regard to Statistics of Trade and Customs, it was said that "an endeavour has been made to take account of the principles of classification agreed upon at the Hobart Conference of Statisticians in 1902. This classification has, however, not been generally followed by the State Bureaux, nor has it been possible to strictly adhere to it

now. Some advance towards the adoption of a better classification than a merely alphabetical one has, however, been made, as the following outline will shew. It aims at collecting commodities in large groups of analogous character."

## CATEGORIES OF ITEMS IN TRADE AND CUSTOMS STATISTICS.

Class No.	Class No.
(i.) Foodstuffs of Animal Origin, but excluding Living Animals	(xiv.) Metals, partly manufactured
(ii.) Foodstuffs of Vegetable Origin	(xv.) Metals (manufactured), including Machinery
(iii.) Beverages (non-alcoholic) and Substances used in making	(xvi.) Specie
(iv.) Spirits and Alcoholic Liquors, including Spirits for Industrial Purposes, and Pharmaceutical Preparations dutiable as Spirits	(xvii.) Leather and Manufactures of Leather, and substitutes therefor; also Indiarubber and India-rubber Manufactures
(v.) Tobacco and preparations thereof	(xxiii.) Wood and Wicker, raw and manufactured
(vi.) Live Animals	(xix.) Earthenware, Cements, China, Glass, and Stoneware
(vii.) Animal Substances (mainly unmanufactured) not Foodstuffs	(xx.) Paper and Stationery
(viii.) Vegetable Substances and Fibres	(xxi.) Jewellery, Timepieces, and Fancy Goods
(ix.) Apparel, Textiles, and Manufactured Fibres	(xxii.) Optical, Surgical, and Scientific Instruments
(x.) Oils, Fats, and Waxes	(xxiii.) Drugs, Chemicals, and Fertilizers
(xi.) Paints and Varnishes	(xxiv.) Miscellaneous
(xii.) Stones and Minerals used industrially	(xxv.) Excise.
(xiii.) Metals (unmanufactured) and Ores	

The value of a complete record of Interstate Trade in Australia was urged, and of treating shipping statistics in such a manner as to disclose the significance of the traffic, and of the various ports of call or destination.

The question of the Census was dealt with, but will be referred to elsewhere, viz., in dealing with the question of population.

**3. Resume of the Conference Resolutions.**—The details of the resolutions are rather of technical than general interest. The following indication of their main features will therefore be adequate for ordinary reference. The several provisions or requirements mentioned hereunder were unanimously affirmed as desirable:—

- (i.) In the interests alike of each State and the Commonwealth the collection and compilation of statistical information by the State Statistical Bureaux should be co-extensive, and, within the limits indicated by the adopted forms, uniform in respect of method and order and date of compilation; and each State Bureau should be equipped so as to make it possible to respond to this demand.
- (ii.) Excepting in the case of information confidentially collected, or compilation confidentially made for the State or Commonwealth Governments, the whole of the statistical information in each Statistical Bureau should be immediately available to the Commonwealth or State Statisticians.
- (iii.) In order to secure uniformity in the compilation and interpretation of statistical data, a complete scheme of instructions should be drafted by the Commonwealth Statistician for general adoption.
- (iv.) The classification of the International Institute of Statistics should be adopted.<sup>1,2</sup>
- (v.) A quinquennial enumeration of population is necessary owing to the rapid movement of population in Australia.
- (vi.) A monthly record of Interstate Trade should be furnished.

1. The Commonwealth Statistician was asked to translate the necessary nosological classification, which he has since done.

- (vii.) Statistics of production should be so published as never to disclose the operations of individual establishments, and, in general, in order to engender the necessary confidence in the minds of informants as to the strictly impersonal nature of statistical inquiries, and so secure readiness to furnish accurate information, the customary statistical practice of maintaining absolute secrecy should, under no circumstances, be departed from.
- (viii.) Statistical publications of the Commonwealth and States should be of uniform sizes, and uniform as to order of matter.
- (ix.) Trade Statistics should be published for each calendar year in accordance with the categories referred to (Sub-section 2) hereinbefore, and in statistics of export the State of origin should be shewn.
- (x.) All questions of mathematical method, mode of determining means, etc., shall be decided for all States by the Commonwealth Statistician.

Effect is gradually being given to these resolutions as opportunity offers; the Statistics of Trade and Customs, however, for 1906 have been published as heretofore under the alphabetical arrangement, in response to the urgent request of the Trade and Customs Department.

## § 9. Sources of Information.

**1. State Statistical Bureaux.**—The State Statistical Bureaux are now endeavouring, under the authority of the Census and Statistics Act, to collect and arrange all information under a common method and according to uniform categories. The State Bureaux will, therefore, have a double function, viz., they will collect—(a) for their immediate requirements as States, and (b) as integral parts of the Commonwealth. The collections are made—(i.) by the police, (ii.) by special collectors, (iii.) by direct demand for returns, and (iv.) by compilation from official departmental reports.

**2. Commonwealth and State Departments.**—All statistical compilations of Commonwealth and State Departments are forwarded as soon as published, and occasionally in manuscript prior to publication, to the "Commonwealth Bureau of Census and Statistics," for the purpose of facilitating official statistical compilation on behalf of the Commonwealth.

**3. Scientific and Technical Experts.**—The services of scientific and technical experts are requisitioned where necessary, so that the whole of the information published under the auspices of the Commonwealth will be as authoritative and accurate as it is possible to make it.

**4. Direct Inquiry by Commonwealth Bureau.**—Where necessary, direct demands for information will be made by the Commonwealth Bureau itself, in order to comply with the scope of statistical information authorised by the Act. These demands must, according to this Act, be complied with, but the conditions under which the demands will be made will, wherever possible, be such as to minimise the labour of responding thereto. Absolute secrecy as to the results of individual responses will also always be maintained, and the information collected by the Bureau be used *exclusively* for statistical purposes.