Controlling officer: the Director of Civil Engineering will account for expenditure under this Head.

Estimate 2001–02	**$869.1m**
Establishment ceiling 2001–02 (notional annual mid-point salary value) representing an estimated 1 550 non-directorate posts at 31 March 2001 reducing by nine posts to 1 541 posts at 31 March 2002	**$492.3m**
In addition there will be an estimated 35 directorate posts at 31 March 2001 and at 31 March 2002.	
Capital Account commitment balance	**$57.5m**

Controlling Officer's Report

Programmes

Programme (1) Tourism and Recreational Development	This programme contributes to Policy Area 5: Travel, Tourism and Consumer Protection (Secretary for Economic Services).
Programme (2) Port and Marine Facilities	This programme contributes to Policy Area 3: Air and Sea Communications (Secretary for Economic Services).
Programme (3) Site Formation and Reclamation	This programme contributes to Policy Area 22: Buildings, Lands and Planning (Secretary for Planning and Lands) and Policy Area 23: Environmental Protection and Conservation (Secretary for the Environment and Food).
Programme (4) Slope Safety and Geotechnical Standards **Programme (5) Geotechnical Services** **Programme (6) Supervision of Mining, Quarrying and Explosives**	These programmes contribute to Policy Area 27: Intra-Governmental Services (Secretary for Works).

Detail

Programme (1): Tourism and Recreational Development

	1999–2000 (Actual)	2000–01 (Approved)	2000–01 (Revised)	**2001–02 (Estimate)**
Financial provision ($m)	6.9	29.5 (+327.5%)	41.1 (+39.3%)	**42.2 (+2.7%)**

Aim

2 The aim is to plan, design and implement tourism and recreational developments in Northeast Lantau.

Brief Description

3 In accordance with the Government's decision to develop Northeast Lantau into a tourism and recreational area, the department undertook the planning and design of the site formation together with the associated infrastructure for the theme park development at Penny's Bay, Northeast Lantau. The Northshore Lantau Development feasibility study was substantially completed in 2000. The revised Outline Zoning Plan for Northshore Lantau was approved in March 2000, followed by endorsement of the Recommended Outline Development Plan in July 2000. Reclamation works for the theme park development commenced in May 2000. Detailed design for the first contract of the infrastructure associated with the theme park development also commenced in April 2000. The proposed roadworks for the theme park development were gazetted in July 2000.

4 The key performance measures relating to tourism and recreational development are:

Targets

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
complete the feasibility study for Northshore Lantau Development (%)	100	70	99	**100**
complete design and tender documents for the first contract of infrastructure works associated with the theme park development (%)†	100	—	30	**100**

† New target as from 2001.

Indicators

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
value of projects under planning and design ($m)	16,480	12,676	**9,174**
expenditure on works under construction ($m)	—	561	**2,217**

Matters Requiring Special Attention in 2001–02

5 During 2001–02, the department will:

- obtain authorisation for the proposed sewerage scheme for the theme park development;
- commence the construction of the proposed road works for the theme park development;
- commence detailed design for the Pa Tau Kwu Section of Chok Ko Wan Link Road; and
- commence construction of the first contract of infrastructure works for the theme park at Penny's Bay.

Programme (2): Port and Marine Facilities

	1999–2000 (Actual)	2000–01 (Approved)	2000–01 (Revised)	**2001–02 (Estimate)**
Financial provision ($m)	217.5	204.9 (–5.8%)	186.0 (–9.2%)	**196.9 (+5.9%)**

Aim

6 The aim is to implement the port development programme; to design, construct and maintain public marine facilities, including seawalls, mooring areas and piers; to maintain adequate water depth in navigation channels in the harbour; and to provide advice and service to other departments on matters relating to marine works.

Brief Description

7 The department continued to plan and design port development projects at Tseung Kwan O Area 131. It continued to plan, design and implement typhoon shelter projects to provide additional sheltered areas to cope with the anticipated demand.

8 In 2000, the department made satisfactory progress in the implementation of projects for improving marine facilities. The construction of the fire boat berth at West Kowloon Reclamation and the construction of the pier at Tai Pai Kok were completed. The department started the reconstruction of the pier at Tung Lung Chau and of the Pak Sha Wan public pier, and the planning of Lung Kwu Chau Jetty. The design for the Tang Lung Chau Dangerous Goods Anchorage and the sheltered boat anchorage at Tai O, and the planning and design for the re-construction of the existing piers at Hei Ling Chau, Tai Lam Chung, Tsing Shan Wan, Peng Chau, Cheung Chau, Kat O Chau and Wu Kai Sha continued.

9 The department completed the development of a tidal stream atlas and a wave atlas for Hong Kong waters. The compilation of a shoreline database commenced in end 1999.

10 The department satisfactorily maintained 115 kilometres of seawalls, 298 piers including franchised and licensed ferry piers, and all fairways, anchorage areas and major tidal river channels. Major structural repair works to 12 public piers continued. Maintenance of the immersed tubes of Hung Hom Cross Harbour Tunnel commenced in end 1999.

11 The department continued to check submissions for private marine facilities and to provide advice to other departments on matters relating to marine works. The targets in 2000 for inspection of piers and timely provision of responses to enquiries on information about marine facilities were met.

12 The key performance measures relating to port and marine facilities are:

Targets

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
inspect each public pier (urban: twice a year; rural: once a year) (%)	100	100	100	**100**
respond to enquiries on information about marine structures and facilities within eight days (%)	100	100	100	**100**

Indicators

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
expenditure on maintenance works and maintenance dredging ($m)	80	80	**90**
submissions processed and advice provided	2 500	2 423	**2 400**
length of seawalls maintained (kilometres)	105	115	**115**
number of piers maintained	297	298	**298**
value of marine facilities projects under planning and design ($m)	2,880	2,473	**2,485**
value of port projects under planning and design ($m)	31,150	32,901	**32,993**
expenditure on marine facilities construction works ($m)	26	37	**43**
expenditure on port construction works ($m)	57	8	**1**
expenditure on maintenance and marine facilities construction works/post ($m)	0.5	0.7	**0.8**
expenditure on port construction works/post ($m)	4.4	3.5	**3.3**

Matters Requiring Special Attention in 2001–02

13 During 2001–02, the department will:

- continue to maintain public marine facilities and fairways;
- continue to maintain the immersed tubes of Hung Hom Cross Harbour Tunnel; and
- commence the re-construction of the public piers at Tai Lam Chung, Hei Ling Chau and Tsing Shan Wan.

Programme (3): Site Formation and Reclamation

	1999–2000 (Actual)	2000–01 (Approved)	2000–01 (Revised)	**2001–02 (Estimate)**
Financial provision ($m)	138.0	169.4 (+22.8%)	166.8 (–1.5%)	**166.1 (–0.4%)**

Aim

14 The aim is to undertake site formation and reclamation projects required for development; to advise and comment on land formation proposals; to ensure adequate provision of facilities for reception of inert construction and demolition materials as public fill in reclamation projects.

Brief Description

15 In 2000, the department implemented land formation projects, forming 37.2 hectares of land to cope with development needs. Various new land formation projects were under planning. These included the land formation at Chai Wan (north of Pamela Youde Hospital), Sham Tseng, Cha Kwo Ling and Kennedy Town (Lung Wah Street) to provide land for housing developments; the site formation to provide a total of eight sites for school developments; the environmental impact assessment study on demolition of the Kwai Chung and Kennedy Town Incineration Plants; the roads and drainage works in Tseung Kwan O Town Centre South; and the land formation at North Tsing Yi. Design for the land formation at Anderson Road, Jordan Valley (near Choi Wan Road), and Sai Kung Area 4 continued. A number of land formation projects, including those at Tseung Kwan O Area 137 (Stages 1 and 2), Fanling Area 36 (Phases 1 and 2), West Kowloon Reclamation (Southern), Yung Shue Wan (Phase 1), Tuen Mun Area 38 (Stage 2) and Pak Shek Kok were under construction. The land formation projects at Tuen Mun Area 38 (Stage 1) and Hung Shui Kiu Area 13 were completed. The land contamination study at North Tsing Yi commenced in June 2000.

16 The department operated three public filling areas at Jordan Road Reclamation Phase III, Tseung Kwan O and Pak Shek Kok and a public fill stockpiling area at Mui Wo. The fourth public filling area at Tuen Mun Area 38 (Stage 2) will be put into operation in mid 2001. The department continued to identify opportunities to maximise the use of public fills in reclamation projects.

17 The department continued to operate the barging points at Sha Tin and Tseung Kwan O. The barging point at Tuen Mun Area 38 commenced operation in July 2000. The department completed studies and started detailed design for a network of long-term barging facilities on Hong Kong Island by 2004. To maintain adequate outlets on Hong Kong Island for construction and demolition materials prior to commissioning of the long-term facilities, two short-term facilities at Quarry Bay and Sai Ying Pun were commissioned in December 1999.

18 Detailed design for the environmental improvement works to Shing Mun River using bioremediation technique was completed.

19 The key performance measures relating to site formation and reclamation are:

Targets

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
issue dumping licence within six days (%)†	100	95	97	**100**
recover construction and demolition material as public fill for reclamation (%)	80	78	80	**80**

† Target has been improved from seven days to six days as from 2000. The figure for 1999 is related to previous target.

Indicators

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
area of land formed (hectares)	38	37.2	**47.2**
road constructed/widened for development (metres)	1 910	100	**1 275**
value of land formation projects under planning and design ($m)	10,490	13,505	**13,243**
expenditure on construction for land production ($m)	510	409	**436**
area of land formed/post (square metres)	3 170	3 235	**4 100**
expenditure on land production works/post ($m)	3.1	2.7	**2.9**
volume of public fill accepted in public filling areas (million cubic metres)	5.9	6.1	**5.2**

Matters Requiring Special Attention in 2001–02

20 During 2001–02, the department will:

- start the operation of the temporary sorting facilities at Tuen Mun Area 38 (Stage 2) public filling area;
- commence the land formation at Jordan Valley (near Choi Wan Road) for housing development;
- commence the detailed design for the demolition of the Kennedy Town Incineration Plant;
- commence site investigation for implementing the long-term barging facilities at Kwai Chung;
- commence a study on the long term arrangements to accommodate inert construction and demolition materials and dredged mud;
- commence planning for the site formation at the former Mount Butler Quarry for housing development;
- commence the detailed design and site investigation for the land formation at Cha Kwo Ling and Kennedy Town (Lung Wah Street) for housing deveolpment;
- commence the detailed design of the land formation at Woodside, Quarry Bay and Tseung Kwan O Area 72 for school developments;
- commence environmental impact assessment study and site investigation for the land formation under the Yung Shue Wan development, engineering works, phase 2;
- complete the detailed design for the land formation at Kennedy Town (Victoria Road) for school development; and
- commence the bioremediation treatment works to Shing Mun River.

Programme (4): Slope Safety and Geotechnical Standards

	1999–2000 (Actual)	2000–01 (Approved)	2000–01 (Revised)	**2001–02 (Estimate)**
Financial provision ($m)	320.1	275.9 (–13.8%)	292.5 (+6.0%)	**271.0 (–7.4%)**

Aim

21 The aim is to check the geotechnical aspects of designs for building and civil engineering works; to identify and register man-made slopes and retaining structures; to implement the 10-year (2000–2010) Extended Landslip Preventive Measures (LPM) Programme; to investigate serious landslides; to identify squatter dwellings which are especially vulnerable to landslides during heavy rainfall; to undertake public education related to slope safety; to set standards for geotechnical work; to provide advisory services to private slope owners on slope maintenance and improvement; and to audit slope maintenance by government departments.

Brief Description

22 A Slope Safety Strategic Plan has been developed and adopted by the department to guide further development of the slope safety regime. Regarding landslip risk control, the checking of geotechnical aspects of construction works continues to be the foremost duty in terms of staff deployed. Geotechnical checks were made on 12 930 design proposals in 2000. The department assisted the Buildings Department to set up and maintain a list of Registered Specialist Contractors for ground investigation field work, and standards of ground investigation for private buildings were promulgated. During 2000, a total of $850 million was spent on the LPM Programme, with upgrading works completed on 250 government slopes and safety screening studies completed on 300 private slopes. The 10-year Extended LPM Programme has commenced. Serious landslides occurring in 2000 were investigated as part of the long-term implementation of the landslide investigation initiative commencing from 2000. The department inspected about 5 000 squatter structures in 2000 and made rehousing recommendations on slope safety grounds.

23 The department continued the public education campaigns on slope maintenance and slope safety warnings. The messages of personal precautionary measures during landslip warnings and the problems of unauthorised cultivation on slopes have been amplified by frequent television broadcasting of announcements of public interest. To further enhance public education on slope safety, an independent review of the public education work to formulate a long-term strategy will be completed in 2001. The Community Advisory Unit continued to provide advice to private slope owners helping them maintain and improve their slopes. Public access to information on the 54 000 slopes in the computerised Slope Information System (SIS) has been enhanced by launching the English and Chinese versions of the SIS on the internet in March 1999 and March 2000 respectively. First round audits of government slope maintenance works have been completed and improvements identified have been substantially implemented by maintenance departments; the second round audits will commence in early 2001. The results of research work on slope safety and other geotechnical topics were disseminated through the publication of geotechnical reports. Guidelines for natural terrain hazard studies were issued for trial use by the profession, and study of the natural terrain hazards in the Tsing Shan Foothill area commenced. A review of landslide debris-resisting barrier design has been completed to provide guidance on the design of such protective measures. A publication entitled Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls has been prepared to facilitate good aesthetic design of slopes and retaining walls. A Highway Slope Manual was published in December 2000. A model specification for soil testing is being prepared.

24 The key performance measures in respect of slope safety and geotechnical standards are:

Targets

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
provide information about a slope within five days of an application (%)	100	100	100	**100**

Indicators

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
new slope features registered	500	620	**500**
detailed stability studies completed on government slopes	255	250	**250**
slopes and structures upgraded	267	250	**250**
safety screening studies of private slopes	291	309	**300**
value of LPM ($m)	820	850	**830**
value of LPM/post ($m)	4.00	4.00	**4.00**
submissions checked	12 194	12 930	**12 650**
submissions checked /post	117	111	**124**
inspections of active construction sites	1 090	1 475	**1 500**
guidance documents produced	34	23	**25**

Matters Requiring Special Attention in 2001–02

25 During 2001–02 the department will:

- assist government departments in prioritising slopes for maintenance action and carrying out audits to maintenance standards;
- strengthen the education campaign on slope safety;
- continue to closely monitor construction safety measures in slope works with a view to further reducing construction accidents;
- develop a natural terrain landslip risk management strategy;
- enhance the advisory services provided to private slope owners on slope maintenance and improvement; and

- ensure adequate geotechnical input to slope design and construction by professionally qualified geotechnical engineers.

Programme (5): Geotechnical Services

	1999–2000 (Actual)	2000–01 (Approved)	2000–01 (Revised)	**2001–02 (Estimate)**
Financial provision ($m)	141.2	143.2 (+1.4%)	131.6 (–8.1%)	**127.6 (–3.0%)**

Aim

26 The aim is to provide ground investigation, materials testing, geological survey and other geotechnical services; and to manage Hong Kong's fill resources and mud disposal capacity.

Brief Description

27 In 2000, the department met its targets in respect of geotechnical services. The term contracts for ground investigation, soil and rock testing and geophysical survey let in 1999 continued to provide services to other government departments. In addition, two new replacement term contracts, one for ground investigation and one for soil and rock testing, were let in 2000 to continue to provide services specifically for housing-related infrastructure projects. The Public Works Laboratories (PWL) continued to serve the construction industry by undertaking some 400 000 tests on construction materials. It also sought new accreditation for a number of tests on rock from the Hong Kong Laboratory Accreditation Scheme (HOKLAS) of the Hong Kong Accreditation Service. Research and development activities of the PWL centred on properties of concrete and the ignition method of determination of bitumen content. In 2000, the department completed a study of borehole geophysical techniques. Two geophysical methods that would help identify weak soils were introduced for use in selected landslide and slope studies. A magnetic survey was completed for the whole of Hong Kong waters, and provided an improved regional perspective on faults and other geological structures. Two new geological memoirs, which present a comprehensive review of the geology of Hong Kong, were published. The department provided geotechnical advisory services to government departments on a wide range of projects. The Geotechnical Information Unit in the Civil Engineering Library served about 12 000 customers during the year.

28 In connection with the management of Hong Kong's fill resources and mud disposal capacity, the department, on behalf of the Marine Fill Committee, continues to undertake a series of geotechnical, environmental and ecological studies to examine the effects of the dredging and disposal activities, and to investigate possible ways to avoid or minimise adverse effects on the marine environment. Phase VI of the study on environmental and ecological studies for sand dredging and mud disposal, technical assessment of potential sand sources and collection of information for increased use in Hong Kong projects of outside sand sources was completed. The disposal strategy and site selection for contaminated mud for the next ten years was studied between February 1999 and December 2000. Implementation of a centralised monitoring scheme for disposal of uncontaminated mud commenced in October 1999. Internet version of the fill management database has been revamped and improved, including new search functions.

29 The key performance measures in respect of geotechnical services are:

Targets

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
provide assistance at the registration counter of the Civil Engineering Library within ten minutes waiting time (%)	100	100	100	**100**
provide information about geology and natural resources within five days of a request (%)	100	100	100	**100**

Indicators

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
ground investigation and laboratory soil and rock testing term contracts:			
total expenditure ($m)	130	150	**150**
total length of drilling carried out in soil (m)	10 500	16 000	**12 000**
total length of drilling carried out in rock (m)	5 200	8 000	**5 000**
triaxial testing of soil specimens tested (No.)	970	1 600	**1 500**
material tests conducted in the PWL and in contract laboratories managed by the PWL (thousand)	360	410	**380**

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
land-use planning and engineering feasibility study advisory cases handled	1 577	1 400	**1 400**
geotechnical engineering advisory cases handled	389	420	**420**
advisory cases handled/post	27	21	**21**
value of fill management investigations and studies ($m)	6	7	**9**
fill management reports and major papers	39	28	**25**

Matters Requiring Special Attention in 2001–02

30 During 2001–02, the department will:

- develop alternative management options for disposal of contaminated mud;
- implement a centralised monitoring and management scheme for disposal of uncontaminated mud;
- continue assessments of marine fill resources to support infrastructure development;
- meet the new requirements of HOKLAS regarding accredited tests; and
- review the operation of the PWL and explore alternative means of providing a quality testing service.

Programme (6): Supervision of Mining, Quarrying and Explosives

	1999–2000 (Actual)	2000–01 (Approved)	2000–01 (Revised)	**2001–02 (Estimate)**
Financial provision ($m)	63.2	69.2 (+9.5%)	67.0 (–3.2%)	**65.3 (–2.5%)**

Aim

31 The aim is to supervise contracts for quarrying in Hong Kong; to enforce the Mining Ordinance; to enforce the Dangerous Goods Ordinance in connection with the use of explosives; and to safeguard the public from the misuse of explosives.

Brief Description

32 Satisfactory progress was made by the department in respect of supervision of mining and quarrying in 2000. The Mines and Quarries Division continued to supervise the Lam Tei Quarry Contract and the rehabilitation contracts for Shek O Quarry, Lamma Quarry and Anderson Road Quarry. The department issued permits under the Sand Ordinance for the importation and transportation of sand, and regulated the use of site crushers on both public and private construction sites. Regular inspections of quarry sites were maintained to enforce safety regulations.

33 Satisfactory progress was made by the department in respect of supervision of the use of explosives during the year. To protect the public from the misuse of explosives, the department maintains strict control over the storage, handling, transportation and use of explosives and pyrotechnics from their manufacture or importation to their firing on construction sites or discharge points.

34 The key performance measures in respect of supervision of mining, quarrying and explosives are:

Targets

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
issue a Sand Removal Permit within two days of an application which has satisfied government requirements (%)	100	100	100	**100**
issue a Licence to Manufacture Explosives within three days of an application, where prelicensing requirements have been satisfied (%)†	100	100	100	**100**
issue a Permit to Remove Explosives within one day of an application (%)	100	100	100	**100**
issue a Licence to Store Explosives within four days of an application where prelicensing requirements have been satisfied (%)	100	100	99	**100**

	Target	1999 (Actual)	2000 (Actual)	**2001 (Plan)**
issue a Licence to Use Explosives within four days of an application where prelicensing requirements have been satisfied (%)	100	100	98	**100**
endorse Licence to Import or Export Explosives within one day of an application (%)	100	100	100	**100**
issue a Mine Blasting Certificate within three days of an applicant passing an examination (%)	100	100	100	**100**

† The target up to 2000 was four days, on which the figures for 1999 and 2000 are based.

Indicators

	1999 (Actual)	2000 (Actual)	**2001 (Estimate)**
aggregates processed by contract quarries (million tonnes)	8.2	6.9	**6.0**
revenue from royalty and rental payments ($m)	24.4	23.8	**22**
Sand Removal Permits issued	232	200	**200**
quarrying and rock crushing contracts supervised	4	4	**4**
safety inspections of quarries	48	48	**48**
tonnes of explosive consumed	2 790	3 250	**3 000**
number of blasting activities	8 350	6 880	**5 000**
inspections of blasting sites	715	1 280	**1 200**
inspections of pre-licensed sites, magazines, manufacturing plants and stores, and pyrotechnics	1 380	1 840	**1 800**
inspections/post	350	280	**270**
warnings issued	21	14	**14**
licences and permits granted	11 080	10 500	**10 000**
licences and permits renewed	175	200	**200**
number of permits to use pyrotechnics processed	180	210	**210**
tonnes of explosives delivered from government explosives depots	615	720	**700**
tonnes of explosives delivered/post	9	9	**9**
number of deliveries of explosives	2 480	2 900	**3 000**
number of deliveries of explosives/post	34	37	**37**

Matters Requiring Special Attention in 2001–02

35 During 2001–02, the department will:

- assist the Information Technology and Broadcasting Bureau in providing training and formulating guidelines and criteria on the use of pyrotechnics and explosives in film making;
- review and revise the Dangerous Goods Ordinance together with the Security Bureau and other departments (i.e. Fire Services Department, Electrical and Mechanical Services Department and Marine Department); and
- complete the study on the need for future quarrying in Hong Kong.

ANALYSIS OF FINANCIAL PROVISION

Programme	1999–2000 (Actual) ($m)	2000–01 (Approved) ($m)	2000–01 (Revised) ($m)	**2001–02 (Estimate) ($m)**
(1) Tourism and Recreational Development	6.9	29.5	41.1	**42.2**
(2) Port and Marine Facilities	217.5	204.9	186.0	**196.9**
(3) Site Formation and Reclamation	138.0	169.4	166.8	**166.1**
(4) Slope Safety and Geotechnical Standards	320.1	275.9	292.5	**271.0**
(5) Geotechnical Services	141.2	143.2	131.6	**127.6**
(6) Supervision of Mining, Quarrying and Explosives	63.2	69.2	67.0	**65.3**
	886.9	892.1 (+0.6%)	885.0 (–0.8%)	**869.1 (–1.8%)**

Analysis of Financial and Staffing Provision

Programme (1)

Provision for 2001–02 is $1.1 million (2.7%) higher than the revised estimate for 2000–01. This is mainly due to increased provision for creation of two posts for the theme park development at Penny's Bay.

Programme (2)

Provision for 2001–02 is $10.9 million (5.9%) higher than the revised estimate for 2000–01. This is mainly due to increased provision for a net creation of four posts for the maintenance of the Cross Harbour Tunnel and the fenders for franchised and licensed ferry piers, partly offset by the deletion of three posts under the Enhanced Productivity Programme.

Programme (3)

Provision for 2001–02 is $0.7 million (0.4%) lower than the revised estimate for 2000–01. This is mainly due to savings of allowance and operating expenses identified under the Enhanced Productivity Programme and the deletion of one post relating to development of housing sites.

Programme (4)

Provision for 2001–02 is $21.5 million (7.4%) lower than the revised estimate for 2000–01. This is mainly due to decrease in capital expenditure and deletion of three posts under the Enhanced Productivity Programme and deletion of one time-limited post for the Airport Core Programme.

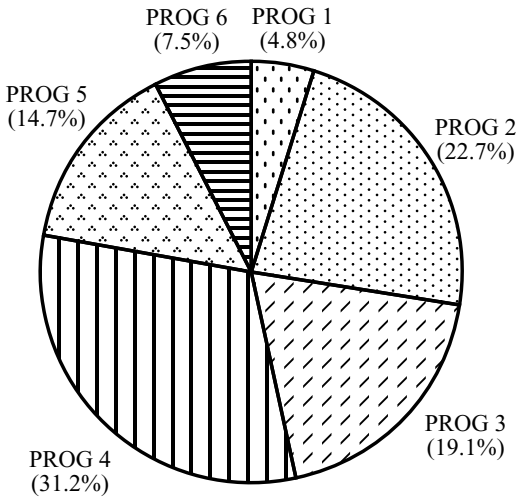
Programme (5)

Provision for 2001–02 is $4.0 million (3.0%) lower than the revised estimate for 2000–01. This is mainly due to the deletion of one post under the Enhanced Productivity Programme and deletion of two time-limited posts for the Airport Core Programme.

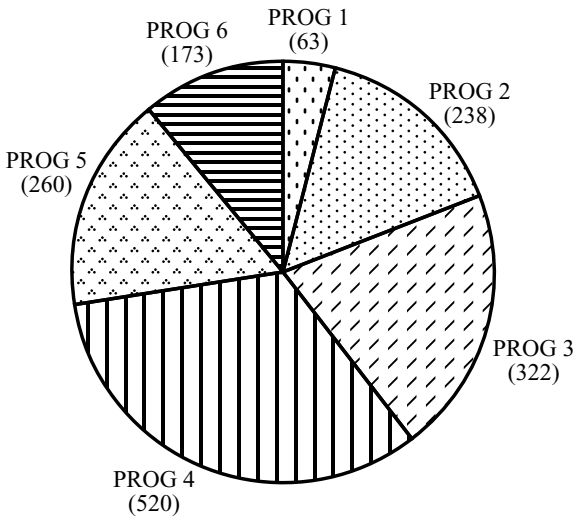
Programme (6)

Provision for 2001–02 is $1.7 million (2.5%) lower than the revised estimate for 2000–01. This is mainly due to deletion of four posts under the Enhanced Productivity Programme.

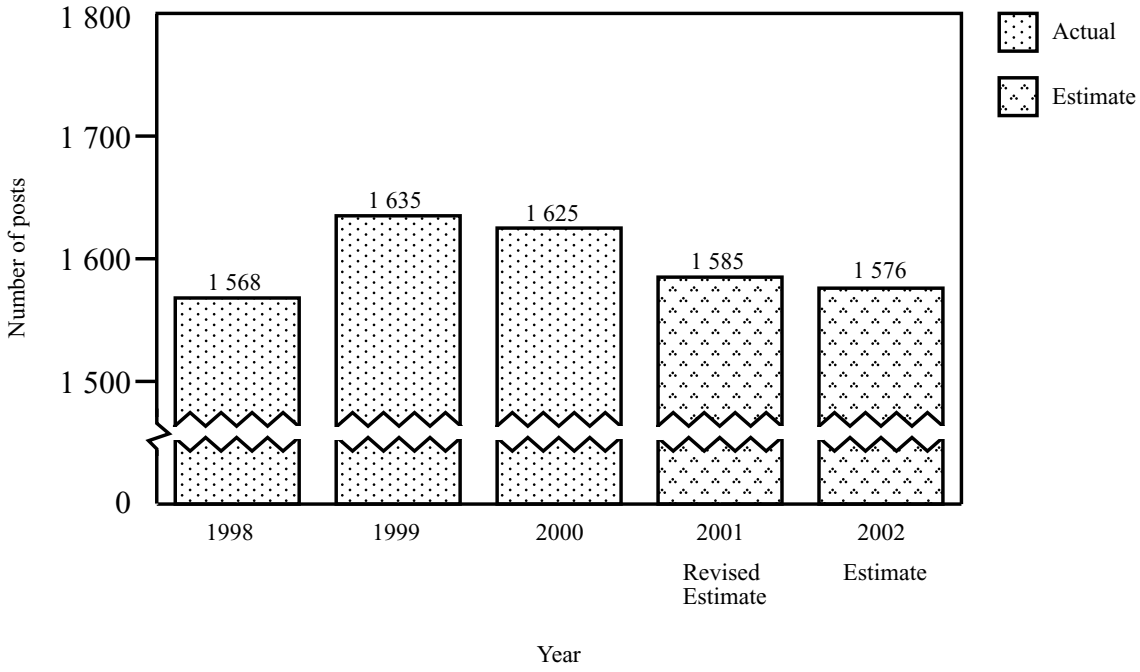
Allocation of provision to programmes (2001-02)



Staff by programme (as at 31 March 2002)



Changes in the size of the establishment (as at 31 March)



Sub-head (Code)		Actual expenditure 1999–2000	Approved estimate 2000–01	Revised estimate 2000–01	**Estimate 2001–02**
		$' 000	$' 000	$' 000	**$'000**
	Recurrent Account				
	I — Personal Emoluments				
001	Salaries	617,252	634,397	634,397	**623,836**
002	Allowances	23,841	30,634	25,000	**21,848**
007	Job-related allowances	1,408	1,859	1,859	**1,859**
	Total, Personal Emoluments	642,501	666,890	661,256	**647,543**
	III — Departmental Expenses				
121	Contract maintenance	89,601	107,486	107,486	**117,649**
149	General departmental expenses	71,862	86,759	85,289	**90,220**
	Total, Departmental Expenses	161,463	194,245	192,775	**207,869**
	Total, Recurrent Account	803,964	861,135	854,031	**855,412**
	Capital Account				
	I — Plant, Equipment and Works				
603	Plant, vehicles and equipment	4,900	—	—	**2,695**
661	Minor plant, vehicles and equipment (block vote)	2,668	3,531	3,531	**400**
	Total, Plant, Equipment and Works	7,568	3,531	3,531	**3,095**
	II — Other Non-Recurrent				
700	General other non-recurrent	75,023	25,694	25,694	**9,517**
841	Minor consultancy studies (block vote)	338	1,748	1,748	**1,060**
	Total, Other Non-Recurrent	75,361	27,442	27,442	**10,577**
	Total, Capital Account	82,929	30,973	30,973	**13,672**
	Total Expenditure	886,893	892,108	885,004	**869,084**

Details of Expenditure by Subhead

The estimate of the amount required in 2001–02 for the salaries and expenses of the Civil Engineering Department is $869,084,000. This represents a decrease of $15,920,000 against the revised estimate for 2000–01 and of $17,809,000 against actual expenditure in 1999–2000.

Recurrent Account

Personal Emoluments

2 Provision of $647,543,000 for personal emoluments represents a decrease of $13,713,000 against the revised estimate for 2000–01.

3 The establishment at 31 March 2001 will be 1 583 permanent posts and two supernumerary posts. It is expected that a net nine permanent posts will be deleted in 2001–02.

4 Subject to certain conditions, the controlling officer may under delegated powers create or delete non-directorate posts during 2001–02, but the notional annual mid-point salary value of all such posts must not exceed $492,330,000.

5 Provision of $21,848,000 under *Subhead 002 Allowances* is for standard allowances and the following non-standard allowance —

	Rate
Post allowance for Survey Officers and Senior Survey Officers in the land and engineering streams	monthly allowance equal to the officer's next increment.

The decrease of $3,152,000 (12.6%) against the revised estimate for 2000–01 is mainly due to decreased requirement for overtime allowances.

6 Provision of $1,859,000 under *Subhead 007 Job-related allowances* is for standard job-related allowances.

Departmental Expenses

7 Provision of $117,649,000 under *Subhead 121 Contract maintenance* includes provision for maintaining public filling areas, seawalls and piers, and for maintenance dredging at navigational channels, drainage outfalls and typhoon shelters. The increase of $10,163,000 (9.5%) over the revised estimate for 2000–01 is mainly due to increased provision for the maintenance of the Cross-Harbour Tunnel and the maintenance of fenders for franchised and licensed ferry piers.

8 Provision of $90,220,000 under *Subhead 149 General departmental expenses* represents an increase of $4,931,000 (5.8%) over the revised estimate for 2000–01. This is mainly due to provision for employing non-civil service contract staff.

Capital Account

Plant, Equipment and Works

9 Provision of $400,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of $3,131,000 (88.7%) against the revised estimate for 2000–01. This is mainly due to decreased requirement for new or replacement equipment.

Other Non-Recurrent

10 Provision of $1,060,000 under *Subhead 841 Minor consultancy studies (block vote)* is for engaging consultants to conduct minor studies costing above $100,000 but not exceeding $2,000,000 each. The decrease of $688,000 (39.4%) against the revised estimate for 2000–01 is mainly due to decrease in requirements.

Capital Account

Commitments

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2000	Revised estimated expenditure for 2000–01	Balance
			$' 000	$' 000	$' 000	$' 000
603		*Plant, vehicles and equipment*				
	324	Replacement of air handling units and fan coil units at Public Works Central Laboratory	2,695	—	—	2,695
700		*General other non-recurrent*				
	523	Quantitative risk assessment of landslide hazard	8,500	5,062	1,100	2,338
	524	Consultancy service for developing an improved process in assessing slope stability	115,500	108,209	6,509	782
	525	Consultancy service for developing measures in enhancing statutory geotechnical control over private slopes and developments	41,700	16,695	2,900	22,105
	526	Consultancy service for identifying the maintenance responsibility of man-made slopes	73,600	64,418	6,498	2,684
	527	Study on the use of prescriptive measures in slope improvement works	5,000	2,436	750	1,814
	528	Provision of warning signs in squatter areas	5,000	1,828	258	2,914
	529	Improvement of landslip warning system	7,500	6,583	470	447
	530	Engaging professional services to develop educational toolkits on slope maintenance and slope safety	2,300	1,995	200	105
	531	Preparation of a highway slope manual	5,000	1,707	1,000	2,293
	532	Mineralogical and strength testing of clay-rich weathered rocks	2,400	998	360	1,042
	533	Evaluation of downhole geophysical and optical methods for ground investigation	5,060	4,308	150	602
	534	Monitoring of uncontaminated mud disposal area at South Cheung Chau and East Ninepins	7,800	1,366	2,899	3,535
	535	Monitoring of uncontaminated mud disposal area at north of Lantau and south of Tsing Yi	17,100	308	2,600	14,192
			296,460	215,913	25,694	54,853
		Total	299,155	215,913	25,694	57,548