

and practices. Wellington also conducts regular public satisfaction surveys on its various services, whilst the Parks and Gardens Business Unit has started to conduct its own visitor surveys to provide direct feedback on its problems and successes. Similarly, the Department of Park Development in Tokyo has recently adopted Internet surveys backed by site surveys on specific initiatives as a means to monitor public opinion on public open space management.

Open space maintenance

Different policy aspirations and responsibilities for open space management eventually make themselves felt on the ground through day-to-day maintenance and periodic reinvestment. Maintenance processes relate to the ongoing care of public open spaces to maintain their quality. Reinvestment processes relate to the far less frequent decisions to totally or partially renew public open space infrastructure. In this area, the exact nature of the delivery processes are inevitably shaped by the specific nature of each open space, whilst their effectiveness depends on how well they adapt to each local situation.

Maintenance delivery

The large majority of time, resources and expertise of the eleven cities' public open space managers was spent on maintenance work, which, because of its widespread impact, has potentially a much greater contribution to make to environmental quality than comparatively rare reinvestment activities. To guide this process a number of the cities prepare specific maintenance plans to guide the operational delivery of open space management. Such plans allow long-term maintenance priorities to be established and properly resourced, and for key policy priorities to be interpreted in the context of everyday responsibilities. In Århus, maintenance is undertaken on the basis of four maintenance districts, and a general park maintenance plan, in combination with detailed maps of each locality. This provides the basis for operational work. In Paris, maintenance plans are prepared based on the natural agendas of gardens and plants and on reports by caretakers and park security staff. However, the most sophisticated maintenance planning approaches are found in Melbourne, Wellington and Groningen.

Parks Victoria's levels of service (LOS) framework is a key management tool used to establish the 'optimum' quantity and mix of visitor services, given forecasts of user demand and availability of resources. It uses data on visitors, on the park assets and on available resources to define service

standards across the different park settings, ensure that resourcing decisions match visitors' demands and to balance those against the capacity of Parks Victoria to meet them. Through the process, the system defines the kinds of maintenance services applicable to each park (see Box 8.7).

The Asset Management section of the Wellington Parks and Gardens Unit uses asset management software to programme maintenance, inspections, replacement and funding under a number of asset management plans (Box 8.5). These plans have improved the ability to recognise trends in the performance of open space facilities and equipment. Links between the council's GIS database and the asset management database has proved particularly useful in helping to locate and check overlapping areas of responsibility.

In Groningen, the BORG system uses visualised maintenance scenarios in the form of actual images of how an open space should look, depending on the level of quality and intensity of the maintenance regime selected (see Box 8.4). Intended results of management action can then be assessed and discussed by experts and lay people. The system allows different types of open spaces to be managed to suit their particular requirements.

Each city organised the routine delivery of open space maintenance in their own way. In Paris, approaches to maintenance are decided at a more strategic level by staff managers in the Department of Parks and Gardens. Much of the work is based on routine patterns, but the strategic approach means that the department is also able to react promptly to emergencies and can quickly re-design routines and practices and re-deploy staff.

In Århus, operational staff of the Natural Environment Directorate (NED) are subdivided into four district groups. Within each district, smaller groups are responsible for specific geographic areas. Annual meetings between district staff help to link site-level action to overall citywide plans and policies. Similarly, Minneapolis is divided into four districts to facilitate maintenance in a large and diverse park system, and maintenance at the level of individual parks is carried out by park keepers assigned to specific geographical areas.

Although the Parks and Environment Secretariat (SMMA) is directly responsible for open space maintenance in Curitiba, the task is shared with the Public Works Secretariat (SMOP) and the service units of eight district administrations. These agencies have specialised teams to look after streets and squares and are contracted by SMMA to do so. SMMA directly maintains the larger parks and woods. Responsibility for day-to-day management programmes in Groningen lies with the Public Green Space Team. Their job is to ensure that aspirations laid down in the management quality plan are fulfilled through proper specifications, monitoring contractors work, and supervising jobs. Target specifications are formulated locally on the basis of BORG parameters and the expertise of municipal staff.