activity days applies to all people of all ages and includes degrees of illness and incapacitation which are not severe enough to result in absence from work. Work days lost and restricted activity days could respectively be valued at $40-$50 per day and $10-$20 per day to provide a range, the latter being the (U.S.) average gross daily earning in the private nonagriculture sector in 1980.

Other measures of the value of health effects can be obtained from changes in medical expenditures for health care. In addition, the costs, (e.g., relocation) incurred to avoid unhealthy situations can also be used.

7.3.6 Visibility

The conceptually correct procedure for valuing changes in visibility is to estimate the willingness-to-pay in each region (Rowe and Chestnut 1981). The demand curve for an individual site would relate the number of days of satisfactory visibility to the price of these days, assuming no changes in such things as income and tastes (Figure 7-4). If the number of days of satisfactory visibility is OA, the value of visibility is the entire area under the demand curve, because there is no expenditure for visibility. This assumes the initial level of visibility is maintained.

Using a dose-response relationship specified by the effects group, a reduction in LRTAP with improved visibility increases the number of days of satisfactory visibility. This results in a movement along the demand curve. The net economic benefit is the increase in willingness-to-pay as measured by the entire area under the demand curve.

The problem with this theoretical approach for valuing visibility, as with many environmental goods, is due to its special status as a "public good." There are no markets for which prices and demand curves can be directly obtained. Thus, imputed market and nonmarket approaches are proposed as valuation techniques in this field.

The imputed market approach (hedonic prices/demand analysis) uses existing market data, in cases where the selection of a market good may vary with visibility levels, (e.g., the choice of residential location). This approach further assumes that the intensity of these preferences is revealed by individuals' behaviour and their demand for associated market goods (e.g., how much more individuals pay for homes in neighbourhoods with clean air, and the degree to which vacationers change their travel plans reveal how much they value visibility). Technical measures of pollution concentrations or visibility levels must be reasonable representations of the environmental attributes that individuals value. These measures must be able to be used to identify that part of an individual's behaviour attributable to the component of environmental quality being studied.