Optimizing Economic Equity through the Use of Pricing Premiums and Discounts

John L. Crompton

Executive Summary

Amelioration of economic inequality is a central tenet of the social justice movement. This paper demonstrates the potential role of park and recreation pricing policies in exacerbating or ameliorating social injustice. Tension in public sector pricing invariably revolves around reconciling pricing's two guiding concepts of fairness: The Benefit Principle, which states that each taxpayer's or service user's contribution should reflect the benefits he or she receives from a service; and The Ability to Pay Principle which requires that no residents should be excluded from participation because they lack the funds to do so. Operationalizing the Ability to Pay Principle requires offering discounts to the economically disadvantaged, unemployed residents, children, and large households. Principles, rationales, administrative mechanisms, and challenges associated with implementation for each of these concepts are discussed.

Social injustice is exacerbated when regressive property and sales taxes are used to subsidize recreation participants who are not economically disadvantaged. This occurs in contexts where the economically disadvantaged are relatively infrequent users of recreation programs. In those situations, both the Ability to Pay and the Benefit Principles are abrogated.

Similarly, when discounts are provided to groups that are not economically disadvantaged, the subsidies usually are paid for by regressive property and sales taxes. Seniors are the most prominent cohort to whom inappropriate discounts are provided. All financial indicators show that, on average, they have greater assets and more income than non-seniors. Nevertheless, in many communities, discounts are available; indeed, the trend has been to incrementally lower the age at which “seniors” become eligible for discounts. Situations in which multi-use passes exacerbate income inequality are also discussed. Strategies for removing these sources of social injustice are suggested.

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Both the Ability to Pay and the Benefit Principle direct that social justice is served when agencies capture consumers’ surplus through the use of premiums. This may be done when individual users pay for extra benefits in the form of reservations, peak time use, receiving a higher quality offering than the regular service provides, or by bids/auctions designed to offer an improved service. It is also justified when nonresidents use public facilities.

**Keywords**

Pricing, discounts, premiums, Ability to Pay Principle, Benefit Principle

**Introduction**

The key descriptors of social justice are “equality” and “fairness” (O’Brien, 2011). In recent eras, the term has been used in a wide range of contexts including environmental, race, gender and human exploitation. However, in its earliest forms, it was primarily concerned with income inequality, and in contemporary U.S. society an explicit central tenet is to redistribute resources to those who are disadvantaged by the capitalist market economy. The term indicates that advocates deem this redistribution to be a matter of justice, rather than of welfare or charity (Scott, 2014; Jackson, 2005). The purpose of this paper is to demonstrate the potential role of park and recreation pricing in exacerbating or ameliorating social injustices.

Tension in public sector pricing debates invariably stems from the challenge of optimizing pricing’s two guiding concepts of fairness: The Benefit Principle (sometimes called the User Pay Principle) and the Ability to Pay Principle. The Benefit Principle states that each taxpayer’s or service user’s contribution should reflect the benefits he or she receives from a service, whereas The Ability to Pay Principle recognizes that, as far as possible, no residents should be excluded from participating because they lack the funds to do so.

This conundrum was prominent in Adam Smith’s foundation treatise on capitalism (1776) in which he directed “all are obligated to contribute in proportion to their respective [benefits]” (p. 825), observing that “it seems scarce possible to invent a more equitable way of maintaining public works” (p. 725). At the same time, he recognized “the subjects of every state ought to contribute towards the support of government, as nearly as possible, in proportion to the revenue which they respectively enjoy under the protection of the state” (p. 825).

Operationalization of the Benefit Principle suggests that where benefits are perceived to accrue to a large number of users or a large proportion of non-users, costs proportionate to those benefits should be borne by a community’s tax revenues. However, when benefits accrue to a relatively small proportion of taxpayers who are users, the principle should pay for them rather than taxpayers. However, this has to be reconciled with the Ability to Pay Principle that directs the price or amount of tax to be paid should reflect people’s different ability to pay.

The structure of this paper is shown in Figure 1. The opening section identifies the four main target groups for whom discounted prices should be offered in accordance with the Ability to Pay Principle. The principle is abused, resulting in a distorted price system, when regressive taxes are used to support services whose participants predom-
inantly are not economically disadvantaged, and when discounts are inappropriately offered to residents who are not economically disadvantaged. In accordance with the Benefit Principle, the final section identifies six potential vehicles for capturing consumers’ surplus.

**Operationalizing the Ability to Pay Principle**

If discounts are not given to those who do qualify as economically disadvantaged, then not only are residents unjustly excluded from a service, but also revenues are forgone. The conventional view is that program discounts for low-income residents guided by the Ability to Pay Principle inevitably result in trade-offs with the Benefit Principle, since they reduce revenue and necessitate more tax support (Scott, 2014).

**Figure 2**

*Optimizing Revenues by Responding to Differential Price Elasticities at a Swimming Pool*
However, Figure 2, which undergirds the rationale for discounts and premiums, illustrates that often this is not the case, because low income residents have a different price elasticity than other groups. If a discount price exceeds the variable cost of delivering a service, then revenue accruing from those who pay it who would not otherwise participate at the regular price is a net gain. Crompton (2015) offers the following example to illustrate the point:

A large outdoor public swimming pool that opens for the summer months charges an admission price of $7 per person for all who are 4 years of age or older. On average, the pool receives 200 visits a day. Almost all its costs are fixed...For an economically disadvantaged family of five, $35 for admission is not feasible, so they are excluded. If a discounted price of $3 is made available, so the family of five pays $15, then an additional 100 visits a day from among this group would occur. That would translate to over $2,000 a week in additional net revenue the park and recreation agency would receive which would not be forthcoming without the discount. (p. 3)

To facilitate the Ability to Pay Principle, there are four groups of potential users for whom it is usually appropriate for agencies to offer price discounts: Low-income participants, unemployed residents, children, and large households. When establishing discounts, three questions need to be addressed: First, how are each of these groups defined, which determines who qualifies for the discount? Second, what should be the magnitude of the discount? Third, how should it be implemented?

**Low-Income Residents**

The term “economically disadvantaged” is nebulous and question-begging. Irrespective of their income level, most people could claim to be economically disadvantaged because there is always something they cannot afford. Inevitably, this makes establishing a qualifying benchmark income level that defines who is “poor” controversial, while verifying and auditing compliance with it creates additional layers of intrusive harassment and administrative effort. Accordingly, recreation agencies typically adopt criteria that are already used by others to determine who is eligible for discounts. This minimizes their administrative costs and avoids the passionate emotions and political arguments that frequently accompany such decisions.

Schools, through their subsidized meal programs, welfare and unemployment agencies are all likely to have established criteria. Since the public response to poverty is multidimensional involving multiple social service agencies, coordination with them to alert their clients to a recreation department’s discounted programs would enhance awareness. While legal constraints likely prevent them from releasing the names of eligible clients to a recreation agency, they can advise their clients on how to access a department’s offerings, or by mailing out or otherwise disseminating an agency’s discount passes to their clienteles.

The mechanisms used to implement discounts should be discreet, automatic and pre-emptively offered by the department. Other participants and front-line service personnel should not be able to readily identify discount recipients. The optimum approach is to send applications for a discount card, or the card itself, giving discounts for a specified period—usually three months—to all households with children on subsidized school meals or with adults on welfare. An alternative is to use geographic
pricing. This recognizes that purchasing power and price elasticity in geographical neighborhoods in a city are different, so it is inappropriate to charge the same price for a service in all neighborhoods.

Traditional “ask and you shall receive” approaches are unlikely to be successful in reaching the economically disadvantaged, because they exacerbate perceptions of stigma. It is humiliating to have to ask staff for a fee waiver; request a scholarship provided by civic groups, partner businesses, or welfare agencies; or seek “sweat equity, in-kind” work opportunities in lieu of paying the full price. To preserve their dignity, many will elect not to make such a request. Further, to seek this assistance requires a level of confidence who are economically disadvantaged do not possess.

It would be an abrogation of the Benefit Principle to offer free access. Like all residents, the economically disadvantaged pay a portion of an agency’s services through taxes, so they have a right to access those services. However, by using a service, they receive increments of benefit that their non-user disadvantaged peers do not receive. Hence, they should be required to make an additional payment. Further, making a payment may enhance an individual’s sense of self-esteem and social responsibility.

**Unemployed Residents**

Involuntary unemployment is devastating to most who experience it. Often it leads to deterioration in mental and physical health and, especially among the young, disruptive social behavior. It has been noted that, “Participation in recreational programs cannot be a satisfactory substitute for a job. What work removes, leisure cannot replace” (Glyptis, 1989, p. 158). However, if financial barriers are removed, it seems likely that recreation programs can partially mitigate the adverse effects of unemployment because:

The losses incurred in unemployment are closely matched in typical motivations for taking part in leisure activities. Quests for identity, purpose, activity, social contacts, self-confidence, self-esteem, relaxation and physical and mental well-being—and even at the most basic level, the search for something to do—are the established stock-in-trade of the psychology of leisure. If unemployment leaves these needs unmet, leisure ought partly at least to be able to fulfill them. (Glyptis, 1989, p. 92)

Thus, at a minimum, recreation programs can fill time; offer relief from boredom; and if they are regularly scheduled, give some structure, order, and routine to each day. Beyond this, they have the potential to mitigate the isolation and exclusion caused by removal or disruption of social networks with work colleagues, and to provide a sense of purpose and associated accomplishment that may help sustain self-esteem.

The unemployed are different from other groups discussed in this paper in that their need for financial assistance often is relatively short-term and their level of need varies widely. For some, unemployment is financially devastating, while others have sufficient financial resources that they are only marginally impacted (Havitz, Morden, & Samdahl, 2004). However, it seems likely that a majority of unemployed would be responsive to price discounts. As Glyptis (1989) reported, “Income is a prime constraint on their leisure. Far from taking on new and varied leisure interests to absorb the time freed from work, financial restrictions mean that for most unemployed people, previous leisure patterns are curtailed” (p. 158).
Discounts are most commonly offered through a multi-use pass entitling the unemployed to discounted access for a three-month renewable period, proactively distributed “automatically” to the unemployed. Distribution of unemployed passes is most often done by park and recreation departments establishing working relationships with unemployment agencies that can proactively distribute passes to their clients. If extensive paperwork and bureaucratic hassle are involved, that the program will not work.

Size of the discount is consistent with that given to low income groups. Some agencies have limited such a pass to the unemployed person, but it should embrace the person’s children and partner since the adverse financial impact is felt by all members of a family. Others have confined its use to off-peak times. Again, this is self-defeating, because it means the unemployed have difficulty using facilities in the evenings and weekends with family and friends who are working.

**Children**

Prior to 1980, the norm among recreation agencies was to give “half price for children” discounts to all under 18 years old, in essence, through high school. Subsequent pressures to generate revenue have resulted in this magnitude of discount surviving in relatively few jurisdictions. Its erosion follows the aggressive actions of commercial theme parks and waterparks, which typically limit free admissions to those under 3; give 10% discounts to children aged 3 to 8 or 10; and charge full adult price for those older than age 8 or 10 (Crompton, 2014). Their actions have made it easier for public recreation agencies to reduce the eligibility age and discount amount, because they have changed the reference price expectancy of many.

In 2017, 17.5% of young people under the age of 18—about 12.8 million individuals—lived in households with incomes below the federal poverty level (U.S. Census Bureau, 2018a), suggesting a relatively high proportion among this age cohort are likely to respond to discounts.

In the past half-century, an earthquake has shaken the family structure and fractured it. The deterioration of children’s economic well-being has been a consequence of this. In 1960, only 9% of children were living with a single parent, but by 2018, this number increased to 28% (U.S. Census Bureau, 2018b). The negative relationship between single-family homes and child poverty is shown in Table 1 (Gabe, 2011). It illustrates that children under 18 living in families headed by single mothers with no spouse present are especially at risk of being poor. While, 23% of children lived in female-headed families, the table shows that children in such families accounted for 53.5% of all children in households below the poverty level.

Among agencies that have maintained substantial discounts for youth, debate often shifts to whether they should be admitted free of charge. There are strong arguments against this. Children are likely to require more careful supervision and inflict more damage on a facility than adults, so the costs associated with servicing them often are greater. Further, it is argued that if parents are not prepared to demonstrate their support by at least partially offsetting a program’s costs, it is unreasonable of them to expect people of similar economic status without children in the program to recognize it as worthy of subsidy through the regressive tax system.
There are two additional rationales for supporting substantial discounts for children. First, some argue that leisure literacy is as important to a satisfying life as reading, writing, and numerical literacy. It is contended that the absence of such skills in some cases will lead to deviant behavior that inflicts greater costs on society. A second rationale stems from a consistent finding that, for the most part, people’s leisure interests and skills are established by the time they leave high school or college (Scott & Willis, 1998). Hence, by investing in youth through giving them meaningful discounts, park and recreation agencies are nurturing their future clienteles.

In recent decades, the norm among park and recreation agencies has been to yield to the pressures to generate more revenue by reducing both the age of eligibility for discounts and their magnitude. However, the data show a relatively large proportion of children reside in economically disadvantaged households, which suggests there is a strong case for returning to the “half-price” norm of yesteryear and for restoring the 18 and under age qualification for discounts.

### Large Households

“The family that plays together, stays together” is a cherished aphorism of recreation agencies. Traditionally, they have offered a family pass, because larger families have more expenses to meet so if all else is equal, then larger families are economically disadvantaged compared to smaller families.

The definition of “family” is becoming increasingly amorphous and challenging to operationalize, because an expanding number of permutations are now included under the rubric of “family.” Consider, for example, the following description of one family: “An uneasy ensemble of two sons from her two previous husbands, a daughter and son from his second marriage, ex-spouses with varying degrees of involvement, the partners of ex-spouses, and the bemused in-laws” (Angier, 2013, p. 24).

In response to this challenge, the unit has been redefined as full-time residents of a household rather than a family. Three variations of the household pass are widely used: (i) It is limited to no more than two adults and two children, but additional children can be added at (say) half the price of a regular children’s pass; (ii) the pass may include up to (say) six people who live at the same physical address; or (iii) those who are included must be listed as dependents on income tax returns. Many agencies (including my city) do not verify the legitimacy of groups claiming large household discounts. Rather than subject all to an embarrassing verification process, they rely on the honor system and accept any abuse as a reasonable cost of doing business.

### Table 1

<table>
<thead>
<tr>
<th>Family Living Arrangements: Where Poor Children Live</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Married-couple families</td>
<td>35.3 %</td>
</tr>
<tr>
<td>Never married, female head</td>
<td>29.5 %</td>
</tr>
<tr>
<td>Separated, spouse absent, female head</td>
<td>12.1 %</td>
</tr>
<tr>
<td>Divorced female head</td>
<td>10.6 %</td>
</tr>
<tr>
<td>Widowed female head</td>
<td>1.3 %</td>
</tr>
<tr>
<td>Male-headed families, spouse absent</td>
<td>7.0 %</td>
</tr>
<tr>
<td>Live apart from parents with other relatives</td>
<td>4.2 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53.5 %</td>
</tr>
</tbody>
</table>
Using Regressive Taxes to Support Services whose Participants Predominantly are not Economically Disadvantaged

In the U.S., federal and state income tax systems require residents to pay a higher percentage in taxes as their income increases. This is progressive taxation, designed to collect resources from wealthier individuals and redistribute them in the form of public services to those who are economically disadvantaged (Figure 3). It is consistent with the Ability to Pay Principle in that those who have more income make a larger contribution to services financed by the government.

**Figure 3**
Comparing Percentages of Income Paid in Different Taxes in Five Quintile Income Cohorts: Averages for All States

Whereas progressive income taxes are the federal government’s main source of revenues, local and state governments rely primarily on regressive property and sales taxes, respectively (Malm & Kant, 2013; U.S. Census Bureau, 2013), that is, although all pay the same tax rates, those with lower incomes pay a higher percentage of their income in taxes, which is inconsistent with the Ability to Pay Principle. The impacts of these taxes on different income cohorts are shown in Figure 3 (Davis et al., 2013). The property tax is the preeminent source of local government revenues from which allocations for parks and recreation are made. On average it accounts for 72% of those revenues (U.S. Bureau of Census, 2017c). General sales taxes typically range from 4% to 9% among the states, with 1% to 2% allocated to local jurisdictions.

Unless everyone receives benefits exactly proportionate to the amount he or she pays in taxes, income redistribution occurs in the provision of every government-supplied service. The key question is: Is the redistribution congruent, or in conflict with, generally held social and ethical values? If regressive taxes are used to support services used by residents who are not economically disadvantaged, there is inappropriate income redistribution which abrogates both the Ability to Pay and the Benefit Principles.

When higher prices are proposed for recreation services, it is common for some elected officials to oppose such an action, because they believe it would impose hard-
ship on lower income groups. However, this is predicated on the assumption that substantive numbers of those who are economically disadvantaged use recreation services, and in most communities this assumption is false. Use tends to be heavily weighted to middle and upper-income segments of the public, most of whom would be unlikely to forgo these public offerings if a break-even price was charged. (Clawson & Knetsch 1966; Crompton & Bonk, 1980; Crompton & Lamb, 1987; Holmes, Christie, & Higgens, 2000; LaPage, 1995).

The use of regressive property and sales taxes to fund park and recreation services often results in wealthier segments of society being supported by those at the lower end of the income scale. This has been termed “a distorted price system” (Thompson, 1986). It results in a perverse income or benefit redistribution. The distortion is illustrated by the “line of incongruity” in Figure 4. It shows that although a tax subsidy may ostensibly be justified by claiming it assists the economically disadvantaged, in reality the main beneficiaries often are higher income groups. The serrated lines in Figure 4 indicate that low income groups should receive a subsidy in accordance with the Ability to Pay Principle, but other groups should pay for benefits they receive in accordance with the Benefit Principle.

**Figure 4**

*A Distorted Price System*

<table>
<thead>
<tr>
<th>Economically Disadvantage</th>
<th>Middle and Upper Income Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subsidy</strong></td>
<td><strong>Breakeven</strong></td>
</tr>
<tr>
<td></td>
<td>Line of Incongruity</td>
</tr>
</tbody>
</table>

This distortion leads to the conclusion that if a break-even price is charged, then it alleviates some of the financial burden on those with low incomes, provided they are not users of the service. Hence, the appropriate policy is to charge the break-even price to higher income cohorts and meet the Ability to Pay Principle by giving discounts to low-income users, rather than offering the service to all at a reduced price regardless of income. This gives lower income groups the option of whether they want to use a service, rather than requiring them (and non-users in all other income cohorts) to pay for a service they don’t use through the regressive tax system.
There appear to be three reasons why these price distortion inequities have prevailed for so long. First, the contention that raising prices will reduce the financial burden on the economically disadvantaged ostensibly is counterintuitive. Second, price changes are frequently incremental building on existing historical prices. Thus, if inequities from past decisions relating to who benefits and who pays were never addressed then they are perpetuated. Finally, there is the political reality that any time a substantial price increase is proposed, users who will be adversely affected by it may protest sufficiently vigorously that elected officials and managers are dissuaded from pursuing such an action. Whatever the reason, if prices for many recreation programs were raised, it would alleviate the inappropriate income redistribution.

**Providing Discounts to Residents who are not Economically Disadvantaged**

The inappropriateness of discounts for seniors (Crompton, 2013a, 2016a) and those who purchase a multi-use pass (Crompton, 2013b, 2016b) has been documented by the author elsewhere, so only summaries of those analyses are presented here. In each case, both the Ability to Pay and the Benefit Principle are abused.

**Seniors**

The financial transformation of seniors has been one of this country’s great national achievements in the past 60 years. In 1959 when the federal government first developed and published its measure of poverty, it reported that 35.2% of those over 65 were living below the poverty level. By 2017, the percentage had fallen to 9.2%, which was lower than the 11.2% of those in the 18-65 age cohort who were below the poverty level (U.S. Census Bureau, 2018c). Both the median annual income (U.S. Census Bureau, 2017a) and the net worth of senior households (U.S. Census Bureau, 2017b) are substantially above the national average.

While their incomes have increased, seniors’ costs of living are generally lower than those of non-seniors. A large majority have neither child-rearing expenses nor work-related expenses such as commuting costs. More than 80% of them are homeowners, and most are likely to have paid off their mortgage by age 65 (U.S. Census Bureau, 2017b), so their accommodation expenses are limited to taxes and maintenance. In addition, many local jurisdictions have enacted legislation that freezes the property taxes paid by seniors on their homes at the amount paid when they reach age 65. Thus, while the inevitable future year annual increases in tax rates and appraised values (at a minimum to cover higher costs of services caused by inflation) result in all property owners other than seniors paying higher taxes, seniors remain unaffected.

Traditionally, 65 was the age at which people were defined as senior citizens, because it was the age at which full Social Security payments could be obtained. This suggests that when the Social Security age for full payment was raised to 66 in 2009 and when it is raised to 67 in 2027, then recreation agencies’ definition of seniors would also be raised, but no such linkage has occurred. The per capita median income of those in the 65-74 age cohort is 14% above the national average, while among those 75 and over, it falls to 84% and is lower than all other age groups except the 15-24 cohort (U.S. Census Bureau, 2017a). This suggests if senior discounts are to be retained, then the eligibility age should be 75.
While these data suggest the rational decision would be to raise the eligibility age for defining a senior from 65 to 75, few, if any, leisure agencies have done this. Rather, the inequity has been exacerbated by many agencies reducing the eligibility age. In some instances, 62 has been adopted, since this is the earliest age at which people can elect to initiate their Social Security payments if they are prepared to accept 80% of what they could claim at 66. Other common definition ages are 60, which reflects when withdrawals can be made from 401(k) retirement plans without penalty; 55 which is a common age at which retirees from the military, police, fire, and those with union negotiated contracts can retire with full pension and health benefits; and 50, which is the definition for membership in the American Association of Retired People (AARP).

The U.S. still has a poverty problem, but it is pervasive across all age groups and is not selectively concentrated among seniors. Hence, the ultimate goal of recreation agencies should be to end discounts for adults that are defined by age, and offer them to all those who are economically disadvantaged. To offer price discounts to the non-poor elderly is unfair both to the non-elderly and to low income elderly. It requires all of these groups to reach into their wallets so seniors who are not economically disadvantaged may save money.

The economic case against senior discounts is clear and unequivocal. The inappropriateness of such undiscriminating subsidies is heightened when the source of the subsidy is regressive property or sales taxes, which comprise most of the general fund revenues in local jurisdictions.

However, their long tradition has created a strong reference point. As a result, many seniors expect to receive discounts; believe they are “fair”; and view removing them as an attack on their “rights.”

In the case of new services, the obvious strategy is to avoid the problem by not offering senior discounts in the beginning so no reference point or expectation is created. The most effective strategies for changing seniors’ contention that removing their discounts is “unfair” is to reframe the context in which they are viewed by providing detailed financial information of their changed status compared to other age groups; by comparing an agency’s discounts with those offered by private leisure service providers; and by shifting their participation to off-peak times.

**Review Multiple Use Passes**

Annual, seasonal, or multi-use passes are offered by almost all recreation agencies for facilities such as swimming pools, golf courses, and art complexes. There are situations in which they are appropriate. However, they frequently abrogate the Ability to Pay and Benefit Principles because, contrary to those guidelines, their discounts often go to those who can most afford to pay and/or who receive the most benefits.

Those who purchase passes receive two increments of financial benefit that do not accrue to those who pay a per-visit price. First, if a per-visit subsidy is calculated by dividing costs by number of visits, then because they have more visits frequent users receive a greater proportion of the aggregate subsidy. Second, pass holders invariably pay a lower per-visit fee. Both of these outcomes abuse the Benefit Principle, since pass holders are paying less than their equitable share of the costs. Further, these beneficiaries are likely to be relatively wealthy, because the economically disadvantaged are less likely to be able to afford the substantial up-front payment needed to purchase a pass. Thus, the Ability to Pay Principle also is abused.
In the case of some facilities, such as swimming pools, public park and recreation agencies often are essentially monopolists in that they are the only provider of those services in the community. The purchasers of multi-use passes, by definition, are likely to be the most avid and committed users. Thus, given the lack of other suppliers, if passes were eliminated, there is a high probability that most multi-pass users would visit just as frequently and pay the regular per-visit price.

There are two strategies that might mitigate the multiple pass inequity. First, replace the multi-use pass with a frequent purchase card. For example, after five visits, the sixth is free. Second, an alternative version is to count single visits toward the cost of a multi-use pass. When the threshold is reached, then the multi-use pass is issued so all subsequent visits are free. Both of these approaches mitigate abuse of the Ability to Pay Principle by ensuring that lower income users who cannot afford the upfront fee are not discriminated against.

**Capture Consumers’ Surplus with Premiums**

The consumers’ surplus (Figure 2) can be captured by premiums. The conceptual rationale for this is two-fold. First, premiums for those willing to pay for increments of benefits beyond the standard offering is consistent with the Benefit Principle. In this context, premiums are appropriate for those who want to save their time by making a reservation, use a facility or program at peak times, desire a higher quality offering than the regular service provides, and engage in auctions or bidding processes to secure more benefit.

The second rationale for premiums is that agencies are taxpayers’ agents, so when public assets are not fully accessible to residents, they have an obligation to maximize their revenue potential. This rationale underlies the justification for premiums for non-residents.

**Premiums for Additional Increments of User Benefits**

**Reservations.** The price people pay to engage in a recreational experience includes their time as well as their money. Lack of time is consistently cited as a major reason people give for not participating more in a leisure activity. A key decision criterion on whether or not to participate often is: “Will I give up two hours to travel to the activity, engage in it, and travel back?” rather than, “Will I pay the $5 or $10 price to participate?”

Whenever time savings can be offered by providing a reservation option, a premium can be added to a program’s price. Reservations are widely offered for golf tee times; court times at tennis or basketball complexes; state park camp sites; and picnic shelters in local parks. However, in many agencies, the use of reservations is limited. The key role of time scarcity in participation decisions suggests the use of reservations could be substantially expanded.

**Peak Time Priority**

A pervasive challenge confronting recreation managers is highly skewed temporal user distribution patterns. The primary parameters delineating peak times are the traditional work week and educational institution schedules and, in the case of outdoor recreations, the weather. For many potential users, these parameters dictate the times of the day, days of the week, and months of the year when they can participate.
However, some users who are not constrained by these parameters (e.g., retirees, preschoolers) still choose to participate at peak times. Even among those who ostensibly are constrained, there are some who could adjust their schedules to participate at a different time (e.g., part-time workers, college students, and the self-employed). For such groups, peak-time use is a matter of convenience rather than necessity, and if there was sufficient incentive they may be persuaded to shift to non-peak times.

Peak demand often skews decisions on amount of needed capacity. Charging differential prices for peak and off-peak use enables recreation agencies to better manage demand relative to supply. Whenever peak demand is reached and some potential users are unable to participate agencies are likely to come under pressure to add capacity. This leads to inefficient use of resources, because if facilities are designed with sufficient capacity to accommodate peak demand, then much of this capacity remains unused the rest of the time. Thus, peak-time users are responsible for a disproportionate amount of the cost of developing a facility compared to off-peak users. Hence, the Benefit Principle directs they should pay a premium that covers this cost.

A caveat to the use of peak time pricing in preference to lottery, reservation, or queuing strategies for rationing use is its potential adverse impact on equity. Hence, the efficiencies it offers have to be weighed against an agency’s social equity mandate for programs in which lower socioeconomic segments are prominent users. For example, it could discriminate against lower income participants who are fully controlled by work schedules and, consequently, can go to facilities only in the evenings or at weekends. In contexts where a service is exclusively used by a relatively affluent clientele this concern dissipates.

**Superior Quality Increments**

Superior quality increments stem from three sources: (i) variations in quality among facilities, (ii) variations in preferred locations within a facility, and (iii) added service opportunities. Their implementation has to be sensitive and monitored to avoid low-income users from feeling more socially marginalized by being segmented into the less desirable areas, locations or time slots.

A recreation and park system is likely to have facilities that ostensibly deliver the same service, but offer different levels of quality. Most are likely to accept that those who use a higher quality facility or program should pay a higher price. The higher quality is likely to require higher development and maintenance costs, so the price premiums for these extra increments of benefits should at a minimum be set to cover the marginal costs of providing them.

For those who want parks in their neighborhoods to be maintained and programmed to a higher level than an agency’s norm, differential pricing can be facilitated through the mechanism of a special district. For example, Bryant Park is a dramatic 8-acre oasis in New York City comprised of colorful flower beds, verdant green lawns, and mature landscaping, and is maintained immaculately. A substantial proportion of its $18 million renovation and $2 million annual maintenance budget is paid for by a private Business Improvement District. This was voluntarily created by businesses in the area which agreed to pay an annual premium of approximately $2 per square foot of their developed space and dedicate those revenues to the park. They correctly believed that investment in these improvements would substantially increase the value of their assets.
At a concert, theater, or sports event, a higher price is charged for front-row than for back-row seats. Similarly, a room in a hotel with a view over the ocean is priced higher than a room looking out over a parking lot or at the back of the next building. In public recreation services, most *variations on preferred locations* within a facility occur in outdoor settings where landscape and topography are variable and so inherently offer differential benefits to users. For example, at a camp site, the preferred locations are likely to be close to a lake or river, on higher ground with a scenic view, in shady areas, or the most accessible sites. The users of these sites receive more benefits than campers on other sites. Thus, it is common practice to offer sites at different price points reflecting their different levels of perceived quality. This strategy results in both a more even distribution of site use within campgrounds and an increase in revenues (Bamford et al., 1988; Manning et al., 1984).

*Added services premiums* are imposed to cover costs associated with extra services sought by relatively small proportions of those who use a basic offering. This leads to two-point pricing. For example, there may be a basic admission price to a park, but additional premiums may be charged for those seeking interpretation programs, guided tours, trail permits, or boat access. A membership fee for a recreation center may be augmented by additional charges for programs offered within it. In an urban parks setting, examples might include additional prices for lighting on athletic fields or tennis courts. These are clearly distinguishable augmented benefits. If the cost of these services was included in determining the regular cost-based price, then basic service users would pay disproportionately more and would be subsidizing the augmented benefits users.

**Auctions and Bidding**

In contexts where demand greatly exceeds supply, a bidding process or auction can be used to capture consumers’ surplus and extract the maximum premium. This unconventional approach directly involves users in the price-setting process. Widespread access to the world wide web makes this relatively easy to administer. For example, if there were multiple teams or leagues seeking to use athletic fields at peak times, all interested parties could be invited to bid for those time slots and they would be allocated to those who were prepared to pay the most. This is analogous to the competitive bidding process public jurisdictions use for construction contracts, concession operators, or to select other vendors from whom they buy services.

This approach has the added virtue of managers not having to develop (invariably controversial) administrative decision rules to prioritize who should have access to the relatively rare resource. If this approach was adopted for the allocation of soccer fields, for example, the process might involve the following:

- Determine the daily/weekly capacity of the fields.
- Assign off-peak, shoulder, and peak prices to each of the available time slots.
- Conduct a lottery to decide the order in which leagues/teams select their preferred time slots.
- Allocate (say) 80% of the peak time slots in this way, but make the remaining 20% available in auction.
Variations of this approach are frequently used by state wildlife agencies. In the 1970s, avid sheep hunters persuaded some state game departments to donate one permit to hunt Western bighorn sheep to conservation organizations dedicated to restoring the sheep herds in the wild. The auction of these permits has largely funded one of the most successful wildlife-recovery programs in the U.S., nearly doubling their number to 45,000 animals in the following two decades (Montaigne, 1998). Importantly, because the auction bids are paid to a nonprofit organization, they are fully tax deductible.

This business model arouses concerns relating to equity and ability to pay, which has led to hybrid models emerging in the form of lotteries to which all have equal access. These are used to allocate most of a resource's use, but bids are solicited for a remaining small portion of the resource to capture substantial additional revenue and some of the consumers’ surplus. In these cases, the auction component is often positioned as a subsidy to those entering the lottery. That is, without the auction revenues, entry fees to the lottery would be higher.

**Nonresident Access Premiums**

Many jurisdictions charge nonresidents a higher price than residents, because subsidies come from general tax funds to which nonresidents do not contribute. Hence, if nonresidents use these services, a price premium is appropriate. The rationale for a premium is most compelling when demand for a service exceeds the available supply. Often, a two-step process is used. First, residents receive priority by being able to register/enroll before nonresidents. Second, any remaining capacity is filled with nonresidents who are charged a price that will maximize revenues generated by the service. This will reduce either the cost to residents who use it, or the subsidy from taxpayers, or both. If little spare capacity is available, then revenues can be maximized by imposing a large premium. However, if there is substantial remaining capacity, then revenues may be maximized by a relatively large number of nonresidents paying a small premium or no premium at all.

Since both available space capacity and the price sensitivity of nonresidents will vary among services, nonresident premiums should be established for each service. Arbitrary, across-the-board premiums, such as a 50% higher price for nonresidents for all recreation services, cannot optimize an agency’s revenues. Indeed, it is possible that such an indiscriminate approach would result in less revenue accruing than if no premium price was imposed.

The nonresident premium issue is especially prominent in vacation and resort communities. In these cases, visitors directly contribute only minimally to the taxes used to subsidize the facilities they use, but they are likely to be less price sensitive than residents because the price to use recreation amenities for vacationers represents only a small proportion of the total cost they invest in their trip.

Once a policy decision to differentiate price is made, three pragmatic decision rules have to be adopted. First, nonresidents have to be defined. Are they everybody who lives outside a city’s corporate limits? What about people who live outside the limits but (i) have a city postal address, or (ii) own either property or a business inside the city? If school district facilities are used for many city programs should residents include those who live outside the city, but inside the school district? There is precedent for each of these definitions.
Second, athletic teams sometimes are comprised of residents and nonresidents, so how will team entry fees be handled? Charging a premium based on the proportion of nonresidents in a team would not be administratively feasible. An alternative is to define a resident team as having (say) 75% of its members who live within the defined area. Once a rule is implemented, will there be an audit process to ensure compliance, or will the honor system prevail? If it is to be audited, how will this be done?

Third, what form of identification will be accepted to verify residential status? Three types are available: (i) driver’s license, automobile registration or insurance card; (ii) current telephone, gas, electric, water or cable bill; or (iii) voter registration or other government issued identifications. Alternatively, an agency could issue its own leisure identification card. All verification approaches increase the irritation and harassment cost to residents and are a potential source of resentment. Many agencies simply adopt the honor system. They accept its inevitable abuse by some as a reasonable cost of doing business, considering it preferable to the ill-will created by rigorous verification.

**Concluding Comments**

The term _distributive justice_ is frequently used as a synonym for _social justice_ (Jackson, 2005). Government entities are the primary institutions with responsibility to operationalize distributive justice. This paper suggests pricing is an effective vehicle for recreation and park agencies to do this by using discounts to operationalize the Ability to Pay Principle; ensuring it is not abrogated by the use of regressive taxes to subsidize those who are not economically disadvantaged; performing due diligence to ensure discounts are confined only to the economically disadvantaged; and, consistent with the Benefit Principle, using premiums to capture consumers’ surplus.

**References**


