



## THE WAY WE FINANCE

# USER FEES WHITE PAPER

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## 1.0 PURPOSE OF WHITE PAPER

The purpose of this white paper is to create discussion around developing a corporate policy for user fees and subsidies that supports the City's financial, economic, social, and environmental strategic objectives. While the City does have individual user fee policies for Recreation Services<sup>1</sup> and Edmonton Transit System<sup>2</sup>, it does not currently have a corporate policy in place with a consistent approach to user fees and subsidies across the whole organization.

This white paper aims to create a shared understanding for Council and City Administration of the suggested principles that will guide the development of a corporate user fees and subsidies policy. This discussion is also intended to inform the creation of Edmonton's Financial Sustainability Plan: *The Way We Finance*.

The white paper is structured to first provide context around City services, how City services produce both private and public benefits, and the role of user fees and subsidies. A more detailed discussion of user fees then follows. In order to examine both user fees and subsidies in a meaningful and relatable way, this paper will then highlight two City services which generate significant user fee revenues, but which also involve subsidies: transit and recreation services. Following that, suggested principles to guide the development of a corporate user fees and subsidies policy are discussed, as well as their policy implications.

## 2.0 SETTING THE CONTEXT

Edmontonians look to their City government for a wide variety of programs, services, and infrastructure. For many of the services offered by the City, there is no comparable service available in the marketplace (such as fire rescue services, policing, transit, outdoor pools, among others). When the City provides these services, it does so in consideration of enhancing the public good—to contribute to the quality of life for Edmontonians, to attract and retain talent, to address social issues within the community and to keep Edmonton economically competitive.

In order to provide innovative and beneficial programs, services and infrastructure, the City relies on several revenue sources—these include property taxes, user fees, franchise fees, government grants, investment income and earnings, fines and penalties, licensing and permits, and customer and developer contributions. The City then uses these revenues to fund programs and services that are deemed to be of public benefit. Although these services are typically available to every citizen, the costs of certain City services are also partially recovered through payment by the direct user of the service—through user fees.

It should be noted here, that there are various City services for which there is a charge, but which are not considered part of the user fees discussion. In some of these situations, the City is not selling access to a public service in the traditional sense, but instead grants legal permission through permitting and licencing to citizens and property owners to engage in certain activities in compliance with the City's standards. Permitting and licencing are not discussed in this paper.<sup>3</sup> Regulated City utilities are also not discussed in this paper—Drainage Services (sanitary and stormwater) and Waste Management Services, which operate under full cost recovery models, are fully paid for by rates charged to users and non-regulated program revenues.

User fees are fees charged to citizens in exchange for the use of City services, and they form a significant portion of the City's operating revenues. In 2015, the City budgeted for \$463 million in user fees, fines, and permit revenues (excluding utilities). This accounted for 19.5 per cent of

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<sup>1</sup> City Policy C167B: Recreation User Fee

<sup>2</sup> City Policy C451G: Edmonton Transit System Fare Policy

<sup>3</sup> See Appendix 1 for more discussion on permits and licenses.

total budgeted operating revenues, the second largest revenue source after property tax. Within this group, user fees alone accounted for \$319 million. Given the size of this revenue source, any significant fluctuations can affect the City's ability to operate within its budget.

The City is always working to increase the number of sources from which it can generate revenues to prevent overreliance on property taxes. Larger municipalities like Edmonton are under increasing pressure to limit tax increases while providing more and varied services. At the same time, the City is always working toward achieving numerous financial, economic, social and environmental goals—user fees are a tool that can assist the City to achieve those goals. User fees and subsidies must necessarily therefore undergo regular review.

#### QUESTION FOR CONSIDERATION

- What, if any, is the optimal proportion of user fee revenues to total City revenues, and should the City have a target?

### 2.1 WHO BENEFITS FROM CITY SERVICES?

An important consideration in the applicability of user fees is understanding who benefits from the services. A service creates purely private benefits if those benefits accrue only to the individual using the service. A service creates purely public benefits if those benefits accrue to society at large. Between those two extremes lies a spectrum of services that benefit both the user individually as well as society at large. Most City services lie within this spectrum, producing both an individual or private benefit to the user of the service, as well as a broader societal or public benefit.

A good example of a service that benefits individuals and society at large is the City's transit service. When an individual uses transit, the direct private benefit is obvious—they get where they want to go. But there are also numerous public benefits that arise from that individual's transit trip and transit service in general: traffic congestion (and the productivity losses associated with it) is reduced, vehicular air pollutants and greenhouse gas emissions are reduced; and economic productivity and community connectedness are enhanced by providing a low-cost transportation option.

Community recreation services are another notable example. An Edmontonian using a City recreation service gains the private benefit of personal enjoyment and health, but the public also benefits. We see increased public health, reduced health care costs, increased community cohesion and a more attractive and liveable city. These factors benefit every current and prospective citizen—whether they have used a recreation facility or not—because they enhance Edmonton's health, economic competitiveness and quality of life.

Of course, the City operates many other programs and services. Most provide a blend of private and public benefits. It's also worth noting that for many City services, the public benefits spill over to other orders of government in the form of reducing their service costs. For example, City recreation services clearly contribute to a healthier population, which therefore reduce provincial health care costs.

### 2.2 WHO SHOULD PAY FOR CITY SERVICES?

Determining how we as a City pay for services that provide both public and private benefits should be an ongoing conversation. To what extent should the users of these services pay for them? To what extent should they be paid for through tax-support? Council must weigh these considerations in the context of to whom, and to what extent, the benefits of service are received.

For a City service that produces both public and private benefits, it is appropriate to match the direct user's payments with the private benefits received, and to match tax-supported public payments with the public benefits received. The blend of user fees and subsidies that fund a City service should, ideally, represent the mix of private and public benefits received from that service.

By way of example, if the full cost of a single use of a City service was \$10, and we knew that 60 per cent of the benefits would accrue to the individual, and 40 per cent to the broader public, the user payment for that single use should be \$6 and the subsidy \$4. For purely private goods and services that create purely private benefits, the individual should pay the full cost (which is the case with consumer goods and services). For purely public goods and services where the benefits accrue wholly to the public, the full cost of the service should be paid for by public funds (such as policing services).

#### QUESTIONS FOR CONSIDERATION

- At what level of derived private benefits is an existing City service better provided by the marketplace?
- Are there any market-based (or non-existent) services that, if delivered by the City, could derive sufficient public benefits and enhance the public good?

### 2.3 USER FEES AS A TOOL

While user fees are a large portion of municipal revenues, the City currently does not levy them with the intention of recovering the full cost of service. The City also does not have one single approach to user fees and subsidies—the current practice of levying user fees varies from service to service. While not all user fees need to be structured the same way, it is important for user fee principles to be consistent across the City organization. For the purposes of this paper, subsidization means using tax-supported operating revenues to fund a portion or all of a City service.

User fees enable the City to directly observe many different markets, consumer preferences, and changes in demand. User fees can also be intentionally structured to contribute to achieving the City's strategic goals. For example, prices affect consumer/citizen behaviour, and certain pricing models can shift behaviour toward what our society considers socially positive outcomes. User fees, in other words, are about much more than simply revenue—they are a valuable tool the City can use to work toward achieving its financial, economic, social and environmental goals and objectives.

This also means that user fees are a valuable tool for citizens. There are many positive and beneficial characteristics of user fees from a citizen perspective. They provide a more direct relationship between money paid and service received. They provide citizens the choice of whether to consume a service and pay, or not. They are also a means to partially, or wholly, fund a City program, service or infrastructure project without tax support. To highlight this point, if recreation services did not charge user fees, the service would need additional tax support, which would mean every citizen would have to pay more in property tax whether or not they used recreation services. On the flip side of this, services suited to user fees (where there is a clear private benefit) but which are nonetheless fully-subsidized simply place too much burden on the tax base. Charging the direct beneficiary of the service some level of user fee would create a more equitable situation.

User fees, in short, are one of the ways in which a citizen contributes towards the creation of a stronger, healthier, and more equitable city. This benefits everyone.

## 3.0 THE RATIONALE FOR USER FEES

There are several reasons that the City might choose to apply user fees. By introducing user fees where they did not previously exist, or by expanding existing user fees, the City can achieve any one or more of the following seven objectives.

### 3.1 EQUITABLY DISTRIBUTE SERVICE COSTS

When programs, services or infrastructure provide clear private benefits in addition to their public benefits, it can be justified to distribute the service or infrastructure costs to both individual users as well as the public at large. Distributing service delivery costs according to the distribution of derived benefits increases social equity for all of society, including the users. By applying user fees, the cost of service delivery can be fairly distributed between both the public and individual users who are direct beneficiaries of the service.

#### QUESTION FOR CONSIDERATION

- Are there any City services with clear private benefits that would be more equitably delivered if a user fee component were included?

### 3.2 LIMIT TAX INCREASES

User fees enable the City to increase services, to create enhanced streams of service, or to build new infrastructure while limiting property tax increases. As an example of how user fees reduce property taxes, if the City decided to fund all services at the same level from property tax while levying no user fees, the 2015 property tax levy would have had to increase by 24 per cent in order to balance the Operating Budget.<sup>4</sup> It's easy to see, using this simple example, that user fees are a very important tool the City uses to achieve its goals and objectives without overburdening the property tax base.

Charging user fees to the direct beneficiaries of City services also makes efficient use of scarce government resources. User fees enable the City to free up scarce taxation dollars that can be reallocated toward new public good priorities and emergent issues. These dollars can then be directed toward achieving the City's goals and objectives, as well as toward the always-present aim to minimize tax increases.

#### QUESTION FOR CONSIDERATION

- Should the City employ user fees more often across more program and service areas as a means to reduce tax increases?

<sup>4</sup> This hypothetical example does not include eliminating revenues from fines, permits, or licenses, nor does it include Utility rate revenues.

### 3.3 ENABLE FREEDOM OF CHOICE

User fees also require citizens to make decisions about how to spend their personal income. This gives them the ability to exercise their own value judgments and choose whether to use the service and pay the user fee, or to not use the service and not pay the user fee. In contrast, City services that are wholly funded by tax-supported operating revenues do not give this choice to citizens; whether or not you use the service, you pay for it through property taxes.

#### QUESTION FOR CONSIDERATION

- In what instances should the City enable freedom of choice for citizens to use a service and pay, or not?

### 3.4 MORE EFFICIENT ALLOCATION OF GOVERNMENT DOLLARS

Unlike some of the City's other operating revenue sources, user fees are a direct link to the marketplace. When the City charges a price for a service, it can closely observe market behaviour, which then allows for greater flexibility and control over the amount and quality of service that is delivered.

User fees are one of the best tools for providing the City with a link between its cost of service delivery, and the value society places on that service. When a public service has no associated user fee or price, it can sometimes create the perception that the service is free, which can lead to excess demand, followed by an oversupply response from government. In effect, the government's allocation of funds can end up being in excess of the true demand for that service, as well as society's true value for that service. In certain instances, attaching a user fee to a service acts as a regulator for this possibility.

A perfect example of government oversupply in many parts of Canada and the United States is municipal roadway infrastructure: many observers and analysts have noted that due to the absence of a price mechanism, roadway infrastructure has been over-demanded, which has led to an over-supply of scarce public funds toward roadways. From this over-supply, the urban built form evolved to become automobile-dependent, which then necessitated even more roadways, leading to roadway networks that not only encourage environmentally unsustainable behaviour, but are beyond society's true value for that infrastructure.<sup>5</sup> By applying user fee pricing toward roadway infrastructure, a more efficient allocation of government resources would prevail, as citizens would make more prudent choices between housing and commuting costs, which would be less subsidized and would lead to more compact, efficient cities.<sup>6</sup>

In other words, when the price is at zero and the user has no fee barriers, demand is effectively infinite. Keeping up with infinite demand is a costly proposition for cities to adopt.

#### QUESTIONS FOR CONSIDERATION

- Is sending a price signal of zero to citizens for public services an appropriate way to gauge their value for that service?
- For services with no link to the marketplace (no user fee), how can the City know whether it is providing too much service or not enough service?

<sup>5</sup> Bazel, Philip & Jack Mintz. 2014. "The Free Ride is Over: Why Cities, and Citizens, Must Start Paying for Much-Needed Infrastructure." The School of Public Policy, University of Calgary

<sup>6</sup> Bazel, Philip & Jack Mintz. 2014. "The Free Ride is Over: Why Cities, and Citizens, Must Start Paying for Much-Needed Infrastructure." The School of Public Policy, University of Calgary

### 3.5 REGULATE DEMAND

User fees can also enable the City to make pricing decisions that regulate demand. The City has strategic pricing options available to it that can adjust user fees according to the time of day, the season, or when capacity is challenged—when demand for a service far exceeds supply. For example, when services or infrastructure are overly-congested, user fees are a means to reduce congestion by shifting demand toward other lower-cost alternatives, or toward alternative times of use. Applying user fees in this manner can help the City achieve desired financial, economic, social or environmental goals and objectives, such as regulating demand for limited on-street public parking during peak-demand periods.

An example of how pricing methods can regulate demand can be seen when a particular service or infrastructure is experiencing congestion, but the City is unable to alleviate the congestion by increasing the “supply” of this service or infrastructure—because of financial or other constraints. When this happens, the City can instead alleviate congestion by charging user fees where there were none before, or by increasing existing user fees. This type of user fee pricing is referred to as congestion or peak-load pricing, and is a means of regulating demand on a congested service so that it provides efficient service without having to increase service or build additional infrastructure. One might think this is denying the service to those who can’t pay, but in fact it merely encourages those who do not wish to pay to utilize the service at a different time. At a recreation centre, for example, user fees might be higher during peak usage hours; those who wish to not pay a peak-time user fee can use the facility during a low-usage, lower-cost period. This type of efficient approach saves all citizens in tax dollars.

Another example of peak-load pricing is roadway user fees. In some cities around the world, user fees are levied on roadway users to reduce demand on roadways during peak times as a means of reducing both congestion and greenhouse gases.<sup>7</sup> This serves as a way to control congestion without resorting to building costly new freeway or roadway lanes.<sup>8</sup> When faced with a user fee, drivers with flexibility and/or little value for the service opt for alternative routes or travel times, or for transit or active modes of transportation (which has beneficial environmental impacts), while drivers who place high value on the service can choose to use it and pay. This approach is a means to control and regulate traffic congestion on the demand side, instead of on the supply side. For governments that are financially constrained, regulating demand through pricing provides a lower-cost solution to congestion, which saves money for all taxpayers in the end.

#### QUESTION FOR CONSIDERATION

- Should peak-load pricing be used as a means to solve congestion on the demand side, or should the City pursue solving the problem on the supply side through more service or infrastructure? Or a combination of both?

<sup>7</sup> Several international cities, including London, UK now levy a user fee on roadway users during peak-times to reduce roadway congestion.

<sup>8</sup> In certain instances, widening the roadway or freeway is not physically possible due to space constraints, and peak-load user fees provide the most efficient way to regulate traffic congestion.

### 3.6 USE PRICING TO ACHIEVE DESIRED GOALS AND OBJECTIVES

User fee pricing, or pricing in general, has the ability to affect consumer/citizen behaviour, where pricing can be used to shift demand toward social outcomes widely accepted as positive. The City has numerous opportunities to manage user fee pricing to optimize service delivery, ensure financial sustainability and help achieve the City's goals and objectives, though there are still various pricing strategies available to it that the City doesn't currently use. The City's existing user fees pricing practices, for instance, do not employ geography-based pricing, distance-travelled pricing, pricing aimed at encouraging its land-use and city building objectives, or pricing aimed at discouraging behaviours that may generally be seen as costly, inequitable or environmentally damaging (such as encouraging transit-oriented development and discouraging automobile-oriented development).

To provide just one example of strategic pricing, numerous metropolitan centres use geographic or distance-travelled variable transit pricing.<sup>9</sup> The City will have more opportunity to apply different transit service pricing models once the Smart Fare system is deployed.

#### QUESTIONS FOR CONSIDERATION

- Should the City deploy user fees to regulate demand toward achieving its strategic goals and objectives—such as its environmental objectives, urban built form objectives, and transportation mode shift objectives?
- Should the City have variable transit fares based on distance, with lower-cost shorter trips charging less to the customer than higher-cost longer trips?

### 3.7 FUND INFRASTRUCTURE

User fees can also be levied for the purpose of recovering part, or all, of a piece of infrastructure's financing costs. This would create predictable and dedicated revenue streams that would enable the City to responsibly debt-finance much-needed infrastructure projects (such as bridges, interchanges or new/expanded arterial roadways). The Port Mann Bridge in Metro Vancouver, as an example, will use automated road tolling to recover infrastructure financing costs until 2050, or until \$3.3 billion is generated (whichever happens first). At present, there are 20 tolled roadways and bridges in Canada—two in British Columbia, three in Nova Scotia, 12 in Ontario, one in Prince Edward Island, and two in Quebec. In addition to this, there are nine roadways or bridges that were previously tolled, but that generated enough user fee revenues to allow for the removal of the toll.

While user fees are a broadly accepted means of infrastructure financing around much of the world, the City currently doesn't have the legislative authority to use this common financing tool. The current Alberta *Traffic Safety Act* stipulates that a Council of a municipality is not permitted to make a bylaw that imposes a fee on roadways or bridges.

<sup>9</sup> For example, TransLink uses a zone-based fare structure for transit in Metro Vancouver.

## 4.0 WHEN ARE USER FEES APPLICABLE?

In order to understand the applicability of user fees, it is important to first understand the required conditions that qualify a City service for user fee pricing. City services that are good candidates for user fees are ones where all of the following conditions are met:

1. There is some private benefit associated with the service.
2. The service costs attributable to deriving private benefits can be reasonably estimated.
3. The revenues generated through user fees would be greater than the administrative cost of implementing a fee system.
4. Restricting access to the service can be enforced if payment is not made (excludability).
5. One person's consumption of the service does not prevent another from using it (consumption rivalry).

The last two conditions are further explained in the text box.

The bottom line is: user fees are most applicable in situations for services where there is a private benefit, where the City can reasonably estimate the private benefit derived, where the revenues from user fees would be greater than the administrative cost of implementing a fee system, where the City can control access to the service and where the service in question can't be "used up."

### EXCLUDABILITY

A good or service is **excludable** if you can prevent a non-paying person from using it. For example, if you need to provide a ticket or pay a fare to ride transit, that makes transit an excludable service. An example of a **non-excludable** service is when the City provides street lighting. When one person walks down a sidewalk and benefits from the street lighting, it is impossible to exclude any other person from also enjoying the lighting; the City cannot compel the light to shine on paying users but not on non-paying users. The necessity of excludability is central to user fee pricing. If it is not possible to control access to the service, user fee pricing can't work—using transit as the example, free riding would be incentivized and most users would simply choose to benefit from the service without paying the user fee.

### CONSUMPTION RIVALRY

A good or service is **rivalrous** if its consumption by one person prevents its consumption by another person. For example, if a person eats a sandwich, that same sandwich cannot be eaten by another person, which makes the sandwich a rivalrous good. On the other hand, if the City provides a public park, it does not matter how many people use that same park, the park cannot be "used up," which makes the park a **non-rivalrous** service (unless the park becomes overcrowded<sup>10</sup>). Non-rivalry is also a necessary condition, because if an excludable service (one you can control access to) also happens to be rivalrous (a good or service that can be "used up"), its delivery is better left to the marketplace and not the government sector.<sup>11</sup>

### QUESTION FOR CONSIDERATION

- If new technologies emerged that enabled the City to control access (in other words, exclude) to services that traditionally had no user fee, in what instances should the City pursue a user-fee-based service model?

<sup>10</sup> In certain instances, when demand exceeds supply, non-rivalrous services can unintentionally become rivalrous due to congestion. See Appendix 2 for further reading on this subject.

<sup>11</sup> For a more detailed explanation of consumption rivalry and excludability, see Appendix 2.

## 5.0 SETTING USER FEES AND SUBSIDIES

### 5.1 FULL COSTING

Understanding the full cost of a service is vital information to have before setting user fee rates. That is not to say user fees should necessarily be levied only to recover a service's full costs (though sometimes it is appropriate to do so). Rather, understanding the full cost of service delivery should be the starting point when setting user fees. Without full cost information, correctly allocating service costs according to the distribution of public and private benefits cannot be done. Full costing should certainly also be conducted for fully-subsidized services, if for no other reason than that the true cost of the service is then fully understood by City Council and the citizens using those services.

A City service's full costs include all direct and indirect<sup>12</sup> operational costs as well as all capital costs—including life cycle costs for renewal, rehabilitation, and amortization. When user fees are levied, they can be set to either partially or wholly recover a service's full costs. When cost recovery is the objective, there are varying levels that can be undertaken, with full operating and capital cost recovery at one end of the spectrum, and no cost recovery at the other end.<sup>13,14</sup>

### 5.2 ALLOCATING THE COST OF SERVICE

User fees are a key component of the City's ability to deliver unique and effective programs and services to its citizens. They are also a useful tool to help the City find the right balance when distributing service costs across individual users and the public at large. For a City service that produces both public and private benefits, it is justifiable to match the user fee with the private benefits derived, and to match the subsidy with the public benefits derived. The blend of user fees and subsidies that fund a City service should, ideally, represent the mix of private and public benefits derived from that service.

Even though aligning private payments to private benefits and public payments to public benefits forms a valuable and equitable framework for distributing service costs, it's important to point out that quantifying these ratios is very much an imperfect science. Private and public benefits are perhaps best used, then, as an overarching lens for interpreting benefit distribution, since it would be very challenging to precisely calculate the dollar value of many benefits and even if we could, pure numbers may not always tell us the true value of a benefit or, indeed, the true cost of a service.

The City must also be mindful of other criteria in addition to benefits distribution when setting user fees, such as service efficiency, the desired results from pricing, and whether user fees are applicable for a given service to begin with.

### 5.3 SUBSIDIES: COMMON AND TARGETED

The question of which services to subsidize, and to what degree, is one of the most important issues the City deals with. When a service is subsidized, and that subsidy is provided to all users of the service, it is referred to as a **common subsidy**. Equally important is when individual users are charged different fees for use of the same service. Currently, not every user pays the same fee for accessing the same service. Some user groups are subsidized to a greater extent than others. The reasons for this vary from city to city and country to country, but a common reason is income disparity. This type of subsidy is referred to as a **targeted subsidy**.

<sup>12</sup> Indirect operating costs include costs such as leased office space, and use of shared corporate support services like human resources, finance, fleet services, and information technology.

<sup>13</sup> Cost recovery can also occur from revenue sources other than user fees, though only user fees are discussed in this paper. It is also possible for user fees to generate revenues beyond the full operating and capital costs of the service, however, this would constitute an enterprise service model and is not discussed in this paper.

<sup>14</sup> See Appendix 3 for more discussion on cost recovery models.

### **Common Subsidies**

When user fees do not recover the full cost of service delivery, a common subsidy is applied, which enhances the public good by making a service widely available. Common subsidies are provided from tax-supported operating revenues. In many instances, the costs of service delivery are fully subsidized, with no user fee component whatsoever. For example, Fire Rescue Services is a fully subsidized service. Roads is another service that is fully subsidized with no user fee levied on roadway users (despite the clear presence of both public and private benefits).

In other instances, where costs are partially recovered through user fees, services are only partially subsidized. In principle, the common subsidy provided to a service should match the value of public benefit derived from that service. Transit and recreation are two services that are provided common subsidies, as the current user fee structure is not set to recover the full cost of service. But targeted subsidies are also provided to transit and recreation. Specific citizen groups receive an additional subsidy (a targeted subsidy) on top of the common subsidy already provided to the service. In the case of transit, these groups qualify for targeted subsidies according to their income, their age, and their occupation or student status.

### **Targeted Subsidies**

Affordability is one factor that typically encourages the use of targeted subsidies. Low income targeted subsidies are justified on the basis that by removing accessibility barriers, more people are able to use the public service, which then enhances both private benefits and public benefits, and which may also have the public benefit of more optimal service delivery. For the sake of consistency, standardized means testing of low-income eligibility should be consistently applied across the entire organization.

Currently, the most-employed targeted subsidy provided by the City is age-related fares for seniors and youths. There have not been any recent studies or assessments that tell us this type of subsidy is justified as a means to address accessibility for individuals with financial barriers. Nor has an increase to the public benefit been demonstrated when targeted subsidies are provided specifically to seniors. Under the current system, a high-income senior citizen using transit during peak periods receives a targeted subsidy, while a low-income adult riding off-peak does not. Not only does this create inequity across user groups, it fails to encourage optimal use of the service. An approach for targeted subsidies that better aligns with the City's goals would instead aim these subsidies at individuals with financial barriers. Doing so would better enable the City to achieve its goals—such as, goal three in *The Way We Live*: “Edmonton is a caring, inclusive, affordable community.”

When offering targeted subsidies to specific citizen groups, the public benefits derived from the additional use or availability of the public service should outweigh the public costs of providing targeted subsidies. It is unlikely that public benefits are increased in the instance of a high-income senior receiving a targeted subsidy, as that individual could just as easily have afforded the adult transit rate. The targeted subsidy did not produce any new use of the service that would not have otherwise occurred.

### **QUESTIONS FOR CONSIDERATION**

- Are targeted subsidies based on age justified if the intention is to address income disparity?
- Is full tax-supported subsidization justified if a program or service derives clear private benefits?
- Is levying user fees on transit users but not roadway users justified if both derive clear private benefits?
- Should the City consider charging different user fee rates for different levels of service?

## 6.0 EXAMPLES OF SUBSIDIZED SERVICES

### 6.1 TRANSIT

Edmonton Transit System (ETS) is Canada's sixth largest transit agency, which means that not only is it important to Edmontonians, it is also positioned to influence the industry in Canada. In fact, it has already pioneered various transit initiatives. ETS was the first agency in North America to introduce LRT (Light Rail Transit) to a city of under one million. It was one of the first to provide standardized low-floor buses (accessible transit) and was also a forerunner in linking transit use to customer reward programs such as Air Miles. The core mandate of ETS is to offer affordable and convenient transportation to the citizens of Edmonton (and, not insignificantly, other Edmonton Region residents) every day.

Investing in transit provides value to Edmonton beyond the benefits to individual riders. Research shows that superior transit has a notably positive impact on the social, environmental, and economic well-being of a city. It has been estimated that transit in Edmonton provides in the order of \$700 million per year in benefits of reduced congestion, reduced collisions, decreased parking requirements and improved environmental impacts.<sup>15</sup>

As a subsidization side note—given that transit investments are sometimes negatively referred to by car users who do not use transit—it's important to note that the City provides a vast array of services and infrastructure to meet the needs of private vehicle users. These services are funded through the City's tax-supported operating revenues, and roadway infrastructure is funded through property tax, capital grants and investment earnings. Considerable costs are incurred every year building, maintaining, and enhancing the City's expanding roadway network. This system of roadways operates under 100 per cent subsidization through tax-supported funding with no user fee revenues collected from the users of the roadways, despite providing direct and obvious private benefits to individual users. Private vehicle users, in other words, are fully subsidized by all taxpayers for roadway services, whether those taxpayers are vehicle users or not. Transit users on the other hand are only partially subsidized, as they pay a direct portion of the service cost through user fees.

User fee pricing for transit service sometimes involves targeted subsidies (such as for students and seniors, though these are under review), but the common subsidies that make the service more affordable to anyone who uses it are justified through the public benefits generated by the positive impact on the social, environmental, and economic well-being a strong transit system has on a city.

#### *Usage*

As Edmonton has grown, so too has its transit service. Currently, ETS employs over 2,300 people and provides over 2.2 million service hours annually. It uses 936 buses, operates on 207 different bus routes, and goes to 26 Transit Centres. Its 94 Light Rail Vehicles (LRVs) for LRT operations go through 15 LRT stations. Disabled Adult Transit Service (DATS) delivers approximately 932,000 trips annually with 90 DATS vehicles and contract service vehicles. ETS provides over 89 million rides annually.

Since 2006, ETS has seen significant growth in annual ridership (an increase of 31.8 million rides) and service hours (an increase of over 451,000 service hours), while annual revenues have grown by \$58.6 million over the same period. Since the adoption of the current Edmonton Transit System Fare Policy in 2007 (revised in 2010), ridership has increased by 44.1 per cent despite the Council-approved fare increases.

### **Policy**

The City's current Edmonton Transit System Fare Policy is designed to help Council direct Administration to implement a fare structure and allows ETS to provide transparency and consistency around fares. However, the current policy falls short—it is outdated, lacks significant direction and does not contain statements of principle. As a recent external analysis of the service noted:

“There is no policy in effect that answers questions regarding the intent of the fare categories, the rationale for the discounting of fares, nor the expectations for those discounts in terms of additional ridership or non-monetary gains for the transit system or the City as a whole. ...The result of this lack of strategic policy, and the reliance on discounting as a means of increasing the number of passengers on the system, has led to the current fare structure and corresponding declining average fare despite the high adult cash fare.”<sup>16</sup>

This policy is currently undergoing comprehensive review in conjunction with the creation of this white paper and Edmonton's Financial Sustainability Plan: *The Way We Finance*.

ETS uses the single adult cash fare as the base level for establishing all other fares (except for Assured Income for Severely Handicapped and Senior passes), and then incorporates discounts—targeted subsidies—for seniors and youths, as well as discounts based on usage to encourage ridership. ETS is also currently working with Community and Recreation Facilities to adopt a one-stop shop for means-testing “low income cut off” (LICO<sup>17</sup>) Edmontonians eligible for a low-income transit pass. The ETS policy also offers some direction on regional issues, DATS, special events and charters.

It should also be noted that transit user fees are often affected by subsidies from third parties. Employers sometimes offset user fees for their employees, school boards offset user fees for students, and, with respect to the post-secondary U-Pass, non-riding students offset the costs for riders. There is an agreement in place with the University of Alberta allowing access to the LRT between South Campus and Churchill stations. In many respects, these third party subsidies are negotiated by the City and are bound by contracts, but all are subsidies of one form or other.

Other strategic objectives can also come into play when discussing subsidization. For example, the principle behind pricing DATS service is based on the City's strategic objectives of increasing accessibility for mobility-reduced citizens, a policy that contributes to the overall well-being and liveability of the city.

### **Balancing User Fees and Taxes**

ETS was budgeted to generate approximately \$120 million<sup>18</sup> in fare revenue in 2015, but to incur \$344.1 million in expenditures. This meant a subsidy of \$224.1 million was required to operate the service—nearly \$189.1 million of which can be considered a common subsidy, and \$35 million as a targeted subsidy.

But the numbers do not tell the whole story. The public benefits derived from transit are a central component of the transit narrative, and the overarching question of how a superior transit system benefits the City must be considered. ETS will always seek a state of higher cost-recovery through user fees, thereby lessening the reliance on tax support, but to focus on that alone would miss the reality that a comprehensive and accessible transit system benefits everyone at some level, even those who do not use the system.

<sup>16</sup> “Edmonton Transit System Comprehensive Review - Phase One Report.” Prepared by Stantec Consulting with Jarrett Walker & Associates, and JMK Consulting. December 16, 2013.

<sup>17</sup> As specified by Statistics Canada.

<sup>18</sup> An additional \$15.5 million in non-fare revenue was also budgeted in 2015.

A strong transit system that moves people efficiently is necessary for good city building, and is also necessary for attracting and retaining talent to the city. Not only that, more people on transit means fewer cars, which contributes to better air quality, a smaller carbon footprint and less traffic congestion. Transit also has the means, when cross-leveraged with urban-format transit-oriented development, to build dense, vibrant, sustainable and efficient urban neighbourhoods. The ever-evolving challenge is to estimate the breakdown of private and public benefits derived from a strong transit system, and then align user fees with the private benefits and subsidies with the public benefits. Like many elements of the user fee dialogue, it is both art and science.

### **Considerations**

Some of the issues and challenges facing transit include: land development patterns and non-grid based road networks; the level of integration between rail and bus networks; and changing values and priorities of the City. The balance between ridership, coverage and accessibility is critical, as is the balance between peak- and all-day service. Fare policy analysis requires attention, as does the local versus regional debate.

A strategic planning approach needs to be implemented that builds on *The Way We Move*, and which identifies principles and priorities to guide long-term decision making. While the overall level of subsidization for ETS is within the range of other similar systems, the City's level of subsidization is higher than average. This is due to many factors, one being the various targeted subsidies (such as to seniors and students) which do not help optimize the service.

A corporate user fees and subsidies policy would help guide a new transit fare structure that would encourage certain types of ridership, as well as a targeted subsidy structure that aligns more appropriately with the City's goals and objectives. The forthcoming implementation of a Smart Fare system could also lead to a simplified fare structure that limits variable fare pricing by age demographics, and instead introduces variable fare pricing according to time of day, distance travelled and geographic location. This pricing structure could also be incorporated into a regional transit fare system.

## **6.2 RECREATION**

Edmontonians are active and engaged, and the City works to match this activity level with superior recreational services and facilities for its citizens. There are over 60 facilities of varying types provided for Edmontonians today. This range of recreational, cultural, and sports facilities includes five outdoor pools, 12 leisure centres, and five major multi-purpose centres. The City operates 21 arenas, hundreds of sports fields, three golf courses, one driving range, and other unique attractions. It also operates seven specialty facilities and eight cemeteries (included here as a user-fee-based service). The operating costs of most of these facilities are partially recovered through user fees, with the remainder subsidized through tax-supported operating revenues.

### **Usage**

With both a growing population and more facilities to service that population, attendance at the City's recreation facilities has grown. In 2015, there were over 9.1 million visits to the City's community and recreation facilities. Of this figure, over 102,000 visits were to outdoor pools, over 1,870,000 visits were to neighbourhood leisure centres, over 3,790,000 visits were to major multi-purpose centres, over 1,440,000 visits were to ice arenas, over 375,000 visits were to specialty facilities, over 335,000 visits were to golf courses, over 658,000 visits were to City attractions, and over 43,000 visits were to partner facilities. It's a testament to a vibrant and active community that needs and deserves high-quality, accessible recreation options.

### **Policy**

City Council adopted its current Recreation User Fee Policy in 2008 (revised in 2014). The policy aims to balance various objectives, though not all are fully complementary. The objectives of the policy are as follows:

1. Ensuring that fees contribute to the public's effective and efficient use of City resources.
2. Reducing the reliance on property taxes, by recovering a portion of the costs for various services from the user(s) that primarily benefit from them.
3. Providing a consistent and equitable process that encourages accessibility and participation.
4. Identifying the relative pricing provided to various user segments.
5. Establishing meaningful and realistic goals that provide enough flexibility to meet evolving social values and changing fiscal pressures.

A good recreation user fee policy is able to reasonably distribute the full cost of a service between user fees and subsidies according to the private and public benefits derived from the service. However, there are other matters of concern that must be considered when recommending user fee structures to Council, such as the City's goals and objectives, evolving market trends, how pricing strategies may maximize overall revenue growth, and strategic objectives pertaining to targeted subsidization.

Community Services conducts means-testing of Low-Income Cut Off (LICO) Edmontonians, as specified by Statistics Canada, to determine eligibility for free annual membership cards and a 75 per cent discount for up to four registered programs. New immigrants and refugees are also eligible for the program.

There were over 36,700 low-income membership cards (Leisure Access Program) issued in 2015, and 99 per cent of the memberships were used, on average, 17 times that year. The estimated value of offering this program to low-income Edmontonians and new citizens was \$15.4 million in 2015. Minor groups—groups providing sport and recreation to residents 18 and under—may be discounted up to 50 per cent of the base rate for their use of space in City facilities. Taking into account arenas, pools, recreation centres, and sports fields, the value of offering this subsidy was \$6.6 million in 2015.

### **Balancing User Fees and Taxes**

Edmonton is seeing an increase in revenues from recreation facilities, and attendance is also on the rise, but user fee revenues recover only about half of the operating cost of providing recreation services. The cost-recovery ratio has slightly improved, but not enough to change the subsidy requirements.

Operating costs in 2015 were approximately \$122.8 million, with user fee revenues of approximately \$62.2 million, which meant a subsidy of \$60.6 million was required to fully fund the services. This subsidy was provided through tax-supported operating revenues. It is important to note that the cost-recovery ratio includes direct controllable and uncontrolled costs, such as maintenance. Seasonal facilities are also impacted by such factors as weather.

This \$60.6 million subsidy in 2015 does not imply that recreation facilities are unsustainable; rather, it means that user fees are deliberately set to recover only the partial operating cost of service. User fees are also deliberately set to optimize facility use: too low a fee would not optimize revenues, while too high a fee could potentially inhibit facility use.

High-quality recreation services are necessary to enhance the quality of life and social connectedness of Edmontonians, and are also necessary for attracting and retaining talent to Edmonton. Not only that, high-quality recreation services contribute to the health and wellness of Edmontonians, and provide preventive public health benefits to Edmonton as a collective group of citizens. Such outcomes are difficult to quantify, but are nonetheless vitally important as the City endeavours to enhance the public good and to create healthy communities. That these intangibles are hard to measure does not make them any less important. There is an ever-evolving challenge to estimate the public and private benefits derived from recreation services, and to then align a cost-recovery structure that aligns user fees with private benefits and subsidies with public benefits.

### **Considerations**

The City's recreation services enhance not just the lives of those who use them, but all Edmontonians (in the same way, perhaps, that 10 citizens choosing to take a bus instead of drive 10 cars enhances more than just those 10 lives). An active, healthy, and socially-connected population helps to foster a vibrant, thriving city—one that is capable of both attracting and retaining talent. Central to the issue is the determination of what recreation services qualify for subsidy, and to what extent subsidies should be provided. Following this is the ongoing challenge of determining what an appropriate cost-recovery ratio is, and how it can be attained while considering the other factors relevant to successful city-building.

## 7.0 PRINCIPLES & POLICY IMPLICATIONS

While the City does have individual user fee policies for Recreation Services<sup>19</sup> and Edmonton Transit System<sup>20</sup>, it does not currently have a corporate policy in place with a consistent approach to user fees and subsidies across the whole organization.

This section suggests six principles that are to guide development of a corporate user fee and subsidies policy that demonstrates a consistent approach (but not an identical fee structure) to setting user fee and subsidy rates across the organization. These suggested principles are a foundation for setting user fee and subsidy rates, but there may be certain instances where it is not possible to adhere to all six principles. In these instances, it is important to consider the principles that best apply.

### **7.1 BENEFITS PRINCIPLE**

#### ***Suggested Principle***

Those who receive benefits from City services, whether an individual or society at large, are the ones who should pay for those services in an amount proportionate to the private and/or public benefit derived.

#### ***Description***

City services can produce private benefits to an individual user, as well as broader public benefits to society at large. Private benefits refer to the benefits that accrue principally to an individual through her or his use of a City service. Public benefits refer to the accrued benefits that are shared across an entire society from the use of a City service, or from the availability of the service itself.

The benefits principle suggests the following:

1. when the benefits derived from the use of a City service accrue to an individual, that individual should bear the full cost of the service
2. when a City service provides entirely public benefits, the cost of service should be funded wholly by tax-supported operating revenues
3. when a City service produces both public and private benefits, it is appropriate to match user fee payments with the private benefits derived and to use tax-supported subsidies to match the public benefits derived.

A balance between levying user fees and applying common and/or targeted subsidies is struck when they are in relation to the private and public benefits derived from a service. The benefits principle is based, therefore, on the notion that those who receive benefits from City services are the ones who should pay for those services—whether the beneficiary is an individual or society at large.

Targeted subsidies are appropriate when the subsidy targeting a specific group creates a public benefit deemed to be greater in value than the additional public costs of the subsidy.

<sup>19</sup> City Policy C167B: Recreation User Fee.

<sup>20</sup> City Policy C451G: Edmonton Transit System Fare Policy.

### *Policy Implications*

1. To consistently apply the benefits principle across all City services. Without this consistency, the principle may be applied inequitably across City services, resulting in inequities between citizens.
2. To understand that, under the benefits principle, the balance between user fees and subsidies will not necessarily be the same across all City services.
3. To align user fee payments to the private benefits derived from a City service, and tax-supported subsidies to the public benefits derived from a City service.
4. To use public and private benefits distribution as a foundation for setting subsidy and user fee rates (however, due to the imperfect science of calculating these benefits, it should not be a requirement to precisely calculate the dollar value of each benefit).
5. To provide guidance on identifying which City services are eligible for user fee pricing under a partial-cost recovery or full-cost recovery model, and which City services are eligible for full subsidization under a no-cost-recovery model.
6. To explore levying user fees for City services that are currently 100 per cent subsidized, but which provide clear private benefits.
7. To evaluate targeted subsidies on the basis that public net benefits increase when a specific group are offered targeted subsidies.

## **7.2 FULL-COSTING PRINCIPLE**

### *Suggested Principle*

The full cost of service delivery is well understood prior to setting user fee or subsidy rates.

### *Description*

The full cost of a service includes all direct and indirect<sup>21</sup> operational costs as well as all the capital costs—life cycle costs for renewal, rehabilitation and amortization. Understanding the entire cost of delivering a service is essential and should be the starting point when setting user fees. That is not to say user fees should necessarily be levied only to recover a program's full costs (though, sometimes it's appropriate to do so). Rather, understanding the full cost of service delivery should be the starting point when setting user fees, if for no other reason than that the real cost of the service is then fully understood by the citizens using those services. Without full cost information, properly allocating service costs according to the distribution of public and private benefits cannot be done.

### *Policy Implications*

1. To use a service's full costs as the starting point before determining user fee and subsidy rates.
2. To examine the user fee and subsidy rates for all City services that have not yet factored in the full cost of service delivery when setting rates.

### 7.3 SERVICE EFFICIENCY PRINCIPLE

#### *Suggested Principle*

Prices are set to ensure optimal service delivery and government efficiency.

#### *Description*

The City will understand and consider the downsides and upsides of user fee pricing in relation to risk and efficiency of service delivery, and strike the right balance. For instance, an overpriced City service may be undersubscribed, thus not generating the optimal level of usage nor the desired public benefits, while an underpriced City service may be oversubscribed, costing the City too much relative to the public benefit derived. Take for example on-street public parking in a commercial area: if the price is set too low (or is free), this can lead to over-demand, and thus congestion, making the on-street parking not serve its intended purpose—certain cars may park too long, or indefinitely, not allowing space for others to park. If the price is set too high, citizens will not park in the spaces and may not frequent the commercial area as a result, which would also not serve the purpose of creating public parking. Because demand for public parking varies according to time of day, a corresponding pricing strategy (peak-load pricing) can further ensure the service is efficiently delivered in both high-demand and low-demand periods.

#### *Policy Implications*

1. The City will use the price mechanism, through user fees, as a means to efficiently allocate services.
2. The City will evaluate user fee pricing as a means to achieve its goals and objectives (using strategies such as peak-load pricing, time-of-use pricing, seasonal pricing, geographical/location-based pricing, behavioural pricing, and other pricing mechanisms).
3. The City will assess the risks of under- or over-pricing City services.
4. The City will consider maximizing or optimizing user fee revenues as a service-delivery goal.
5. The City will determine the level at which the private benefit derived from a service indicates that service should not be publicly delivered, but should instead be delivered by the marketplace (provided it is an excludable service).
6. The City will consider levying user fees on services that are currently fully subsidized.
7. The City will understand that user fees are the primary tool for alleviating congestion when higher service volumes or more infrastructure cannot be provided.

### 7.4 TARGETED SUBSIDY PRINCIPLE

#### *Suggested Principle*

Targeted subsidies are levied with the purpose of achieving a desired result that supports the City's goals and objectives.

#### *Description*

Targeted subsidies are the subsidies provided to specific citizen groups based on some characteristic. This principle suggests that targeted subsidies should be provided with the specific intention of achieving a desired City result, and not provided arbitrarily or for reasons of historical precedent.

In Edmonton today, the City's most-employed targeted subsidy is age-related for seniors and youths. There have not been any recent studies or assessments that tell us this type of subsidy is justified as a means to address accessibility for individuals with financial barriers.

Currently, a high-income senior citizen using transit during peak periods receives a targeted subsidy, while a low-income adult riding off-peak does not. This creates an inequity and does not maximize the service. A more results-oriented approach to targeted subsidies for transit would instead focus on individuals with financial barriers. This would also help the City achieve certain goals—for example, goal three in *The Way We Live: Edmonton is a caring, inclusive, affordable community*.

***Policy Implications***

1. To use targeted subsidies as a means to achieve a desired City goal, objective, or outcome.
2. To use income- or means-testing as a basis for targeted subsidies when the goal in question is to increase opportunities for economically-vulnerable populations.
3. To phase out targeted subsidies that have no demonstrated public benefit, or that unintentionally create opportunities for high-income individuals to receive greater subsidies than low-income individuals.
4. To develop standardized targeted-subsidy qualifiers across all departments where appropriate—for example, establishing a standard income- or means-test across the entire organization.

**7.5 TRANSPARENCY PRINCIPLE**

***Suggested Principle***

User fees and subsidies are transparently reported for all City services.

***Description***

To improve transparency of the City's financial practices, a consistent reporting framework will be developed for all City services that identifies the full cost of City services, costs recovered through user fees (if any), and the amount that services are subsidized through tax support. A consistent reporting framework will also be developed that identifies City services that are ideal candidates for user fee pricing, whether or not those services are currently levying user fees.

***Policy Implications***

1. To report to Council the full cost of service delivery for all services, as well as the extent of cost recovery through user fees—whether it be full cost recovery, partial cost recovery, or no cost recovery.
2. To report to Council the extent that each City service is subsidized based on the full cost of service delivery.
3. Transparent reporting to enable better-informed decision making on when to levy user fees and how they should be structured.
4. Transparent reporting to contribute to a more comprehensive and well-informed discussion surrounding new municipal revenue-generation tools, and the City's revenue-generation challenges.
5. To help citizens better understand the role of user fees and subsidies.
6. To explore using outcomes, measures or targets around the use of user fees and subsidies.

## 7.6 PUBLIC ENGAGEMENT PRINCIPLE

### *Suggested Principle*

The public will have opportunities to engage with the City, and to provide input on a corporate user fees and subsidies policy.

### *Description*

Engaging with the public is a priority for the City of Edmonton. By engaging Edmontonians, Administration believes that a better corporate user fees and subsidies policy can be developed and a more informed electorate can be created. This will lead to a better overall relationship between citizens and the services the City provides for them.

### *Policy Implications*

1. To follow the City's public engagement practices when gathering and incorporating public feedback on a corporate user fees and subsidies policy.
2. To clearly articulate the expectations, goals, and outcomes of any public engagement to ensure citizen expectations are compatible with Administration's expectations.
3. To enable the public to have, either directly or indirectly, an impact on defining what constitutes a private or individual benefit and what constitutes a public benefit.

## 8.0 CONCLUSION

User fees are a key tool at the City's disposal in generating the revenue required to deliver a strong mix of services to Edmontonians. Central to providing these services is the understanding—for both the City and its citizens—of what constitutes a private benefit and a public benefit, and how user fees should be calibrated to align with these benefits. The creation of a robust and transparent corporate user fee policy will support the City's goals and objectives, while also enabling Edmontonians to enjoy as wide and equitable an array of City services as the combination of public and user fee dollars will allow.

## 9.0 APPENDICES

### 9.1 APPENDIX 1: PERMITS AND LICENSES

Some services the City provides are not services in the traditional sense, but instead provide legal permission for citizens to conduct various activities on their property. For example, the City issues permits and licenses for the development, construction, and use of all commercial, industrial, institutional, or residential properties and buildings. The City also issues licenses for certain business activities and for pets. In such instances, the City is not selling access to a public service operating under a user fee model; rather, the City is granting permission to citizens and property owners to engage in certain activities in compliance with the City's standards.

There is a strong public benefits rationale behind the system of permits and licenses. It is implicitly understood that if various activities occurred unregulated (such as constructing a building, running a business, driving a car for hire, putting an addition on a house, the placement of advertising and many others), the whole of society could be negatively impacted. Bearing that in mind, regulatory fees through permits and licenses ensure the public costs of monitoring quality of life, health and safety standards are recovered from the individual or business generating the cost.

### 9.2 APPENDIX 2: CONSUMPTION RIVALRY AND EXCLUDABILITY

Goods and services that are both rivalrous and excludable are private goods. Private goods are typically best provided by the marketplace. Goods and services that are rivalrous and nonexcludable are common goods. Common goods include things such as fresh water and clean air, which cannot be excludable, but are rival in the sense that when one person pollutes the air or water, it diminishes the amount of fresh air or water left for everyone else. Goods and services that are non-rivalrous but excludable are quasi-public goods, and include things such as transit and recreation services, where access is restricted to fare payers only, but the good cannot be "used up." Goods and services that are both non-rivalrous and nonexcludable are public goods, and include things such as street lighting. The table below presents the different types of goods and services, and provides a few examples of each.

	EXCLUDABLE	NONEXCLUDABLE
RIVALROUS	<i>Private Goods &amp; Services</i>	<i>Common Goods &amp; Services</i>
	Food	Fresh Water
	Clothing	Clean Air
	Consumer Goods	
NON-RIVALROUS	<i>Quasi-Public Goods &amp; Services</i>	<i>Public Goods &amp; Services</i>
	Transit Service	Street Lighting
	Recreation Services	Public Parks
	Toll Roads/Bridges	Fire Rescue Services
	Recreation Services	Police Services
	Non-Toll Roads/Bridges	

At either extreme, there are pure public goods and pure private goods. But many things lie somewhere in between as common goods or quasi-public goods. Furthermore, pure public goods and services can sometimes become impure, in the sense that they are not directly rivalrous, but if demand far exceeds supply, congestion can become an issue, at which point they become *indirectly* rivalrous. Likewise, this can also occur for quasi-public goods, like transit services and swimming pools, where one person's use does not prevent another person's use, except in instances where demand far exceeds supply and indirect rivalry is created through congestion.

### 9.3 APPENDIX 3: COST RECOVERY MODELS

The extent of cost recovery for a program or service can be organized into seven levels that fall along a spectrum, with full operating and capital cost recovery at one end of the spectrum, and no cost recovery at the other end.

- 1) **FULL OPERATING AND CAPITAL COST RECOVERY:** this occurs when a particular service recovers all of its capital costs and all of its operating costs (both direct and indirect) through user fees that are paid by users of the service. The City operates its Drainage Utilities under this model.
- 2) **FULL DIRECT AND INDIRECT OPERATING COST RECOVERY:** this occurs when a particular service recovers no capital costs but all of its operating costs (both direct and indirect) through user fees that are paid by users of the service. There are no City services that operate under this model.
- 3) **FULL DIRECT OPERATING COST RECOVERY:** this occurs when a particular service recovers no capital costs but all of its direct operating costs through user fees that are paid by users of the service. The City operates its Terwillegar Community Recreation Centre under this model.<sup>22</sup>
- 4) **PARTIAL OPERATING COST RECOVERY:** this occurs when a particular service recovers no capital costs and recovers only part of its operating costs through user fees that are paid by users of the service. The City operates its transit service and most of its recreation services under this model.
- 5) **FULL CAPITAL COST RECOVERY:** this occurs when a particular service recovers all of its capital costs through user fees that are paid by users of the service over time. There are no City services that operate under this model.
- 6) **PARTIAL CAPITAL COST RECOVERY:** this occurs when a particular service recovers part of its capital costs through user fees that are paid by users of the service over time. There are no City services that operate under this model.
- 7) **NO COST RECOVERY:** this occurs when a particular service does not recover any capital or operating costs through user fees, and fully funds a program's operations from tax-supported operating revenues. The City operates its Roads Operations and Fire Rescue Services under this model.

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<sup>22</sup> Full direct operating cost recovery is not a policy for Terwillegar Community Recreation Centre; rather, it is the consequence of current attendance levels and user fee rates.