

The Costs of Energy-related Linear Property on Local Governments in Canada and the Role of That Local Government Revenue Tool Can Play in Addressing these Costs

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Introduction

The term energy-related linear property is generally referencing energy infrastructure that is linear in nature, spanning either across property (i.e. pipelines and electrical power lines) or across surface and sub-surface property-rights (i.e. oil and gas wells). Energy-related linear property (ERLP) infrastructure presents challenges to governments that must balance both the benefits and costs that such infrastructure brings. One of these challenges is that not all governments either share in the benefits, at all or commiserate to the level of costs, the ERLP imposes on them. While federal and provincial governments reap benefits from the revenues from taxes from ERLP associated activities, including carbon taxes, sales taxes, resource royalties, corporate and personal taxation, or even in some cases the sale of the energy itself, local governments particularly only share in these benefits if these higher order of government chooses to transfer any of these funds and the magnitude of this sharing may not be reflective of the true costs incurred by local government. Yet potentially substantial costs from ERLP fall uniquely onto local governments, including those associated with: reduced property tax revenues due to reduced property values; land use and development constraints arising from setbacks; emergency response planning costs; and rights-of-way and infrastructure management.

Local governments, therefore, may need to consider their own levies on the owners of the ERLP itself to help recover these costs, otherwise these costs are subsidized through increased taxation on local businesses and residents. Imposing the costs on the ERLP instead of on local businesses and residents ensures that the owner of the ERLP appropriately internalizes these costs as a part of its decision-making process. The ability of local governments to recoup these costs from ERLP owners may prove vital to the acceptance of ERLP by local governments and their citizens as without it, local governments and their citizens are left feeling that they are managing substantial risks without any real economic benefits. In fact, this perception, along with the environmental concerns, may be key factors related to the lack of pipeline support in the provinces of Quebec and British Columbia (Summerville and Wilson 2013, 12).

This chapter focuses solely on the various costs that ERLP brings to local governments, the evidence regarding these costs, and the tools that a local government can employ to recover these costs. Given that local governments across Canada are generally constrained to raising revenues through property taxes and various user levies, including those associated with regulation, this paper will focus on the application of local property taxes on ERLP as well as discuss the likelihood of charges that can be levied pursuant to local government regulatory powers, via rights-of-way by-laws, and fees pursuant to local government powers to enter bilateral rights agreements. Overall, the chapter finds that there are options available to local governments to not

only take actions to minimize the costs imposed by ERLP but also to recoup the identified costs. Each option not only to minimize costs but also to recoup costs has areas of strengths and weaknesses, suggesting that not only a multipronged approach will be necessary, conditional on the specific jurisdictional characteristics, but also that these tools may not be able to minimize or recoup all the specific costs incurred.

Evidence related to the costs imposed on local governments related to ERLP

The introduction suggested that ERLP imposes costs on local governments. What are these costs and what evidence exists substantiating these costs? The potential costs most commonly raised relate to setbacks, emergency response planning, reduced property values, and rights-of-way and infrastructure management. We will detail the potential costs associated with ERLP here, but it is important to note that these four general categories of costs also apply to other forms of linear property. For example, setbacks also apply to water and waste water systems, specialized emergency response planning apply to rail lines due to the hazardous material they transport, above ground telecommunications lines are linked to reduced property values due to their unsightliness, and subsurface television and internet cables must be managed along local governments rights-of-way and increase local government's infrastructure maintenance costs. However, in the case of ERLP, the potential costs generally stem from the inherent risks associated with this type of property and the costs are specific to managing these risks. We detail these costs here as well as outline possible mitigating actions that can be taken to minimize these costs. As it will be demonstrated, there is a lot of overlap with these various categories of costs, with some synergies that can be potentially capitalized on to manage costs across cost categories.

Setbacks

One of the direct costs the presence of ERLP can impose on local governments are setbacks. A setback is defined as the minimum distance established by regulators to provide a buffer between development (and people) and ERLP (Alberta Energy Regulator 2018). Setbacks prevent the construction of new buildings within a certain distance of the property line that runs adjacent to the ERLP. These setbacks are in place to both protect the linear property, but also to protect property and people in case of an accident or incident. The minimum distance prescribed by the setback, in the case of ERLP usually set by the federal or provincial governments depending, is generally determined by the nature of the linear property, the potential risk it presents, and the vulnerability or sensitivity of the adjacent land use. That is, the greater the risk related to the ERLP or the vulnerability of the adjacent land use, the greater the setback and the greater the restriction on future development.

For pipelines, potential risk can be the function of pipeline diameter, operating pressure, and the type of product being transported (Canadian Standards Association 2012). As an example, in Alberta, a pipeline containing level 1 sour gas¹ has a minimum setback of 30 meters for all properties (Alberta Energy Regulator n.d.-b, 2018) whereas a pipeline containing level 4 sour gas has a minimum setback for sparsely populated areas set at 500 m and public buildings, such as

¹ Sour gas is toxic natural gas, leading to fatalities, that contains significant amounts hydrogen sulphide. Sour gas facilities are categorized into four hazard levels depending on the amounts of hydrogen sulphide, with level four being the most hazardous (Alberta Energy Regulator n.d.-a).

schools or hospitals, set at 1500 meters (Alberta Energy Regulator 2018). For all oil and gas wells the setback varies according to the adjacent land use, with larger setbacks applying for schools, hospitals, churches, and urban centres than other buildings or road ways (Pembina Institute 2016). For example, in B.C., the minimum setbacks are 40 meters from a right-of-way of any road allowance or public utility and 100 meters from any buildings (BC Oil & Gas Commission 2019). Further, setbacks are also usually increased for sour gas wells due to the dangers they pose (McMorran 2013). In the context of transmission lines, the voltage of lines and the adjacent land use generally determine the setback distance. In most situations this results in a minimum distance of 10 meters or less (Kiessling et al. 2013).

What costs then do setbacks impose on local governments? Generally, setbacks impose an opportunity cost on potential land development, thereby theoretically reducing revenue from local property taxation. The larger the setback, the larger the potential land removed from developments, the larger the reduction in potential future stream of property taxes.

Three specific examples for which data exists pertain to the impact of setbacks on the County of Grande Prairie in Alberta, Montreal in Quebec, and the State of Colorado in the United States. The County of Grande Prairie contains 10,800 kilometers of pipelines, roughly 2,200 kilometers of which require a setback of 100 meters (County of Grande Prairie No. 1 2012). The total impact of this setback removes about 77,000 acres of land from potential development and, the county argues, limits its potential for property tax revenues (County of Grande Prairie No. 1 2012). However, some caution should be exercised regarding this claim as the total setback area represents 5 percent of the total area of the county that currently only has a population of just over 22,000. Without a detailed examination of development in the County and its area development plan, it is not clear if the setbacks are currently impeding development or if this represents a constraint that it may encounter sometime in the future. Further, the perceived constraint could potentially be overcome through increased density strategies and brownfield development (Metro Vancouver 2012).

Considering the costs of setbacks in more developed areas, where the opportunity cost may be more poignant, is also important. Savaria Experts (2015) estimated the cost from the land use and setbacks of the Energy East pipeline on cities of Montreal and Pointe-Fortune in Quebec. The study found tax losses to the local governments of Montreal at \$1,900,000 and Pointe-Fortune at \$245,000 in present value for a 60-year period (Savaria Experts 2015, 9), demonstrating the costs on more developed areas of not only setbacks, but land directly used in construction of the pipeline.

Setbacks may also have a potentially negative impact on the general economy, and tax revenues by extension, if they are of significant magnitude. While defeated in the November 2018 statewide election in Colorado, Proposition 112 would have required a 2,500 foot setback between new oil and gas wells from homes, buildings, and other areas designated as vulnerable. The current law requires wells to be setback a minimum of 500 feet and 1,000 feet from schools. The Colorado Oil and Gas Conservation Commission estimated the proposed increase to the setback would remove 90% of the states surface acreage from new oil and gas development (Savaldi 2018). One study determined that, had the setback distances been increased, in the first five years the policy would have lowered the state's real GDP by an average of \$14.5 billion (3.4 percent annual reduction) and 104,000 fewer jobs would have been created between 2017 and

2031 due to the reduction in new production (Leeds School Of Business 2016, 2). These estimates should be considered with a degree of caution, however, as they do not consider the economic activity that would take place in lieu of the oil and gas well drilling. However, it is clear that the immediate effect of the increase in setbacks would negatively affect local government revenue.

While setbacks likely impose certain costs on local governments in that they restrict land development, careful local government land use planning may be able to offset some of these costs and may even enhance adjacent property values, and, hence, local property tax revenues. Pro-density strategies and brownfield over greenfield development were already mentioned above. As will be discussed in later in this chapter, often the right-of-way where some forms of ERLP are built results in a tree dominated greenbelt (or green way). Greenbelts can be designed to provide recreational spaces, such as golf courses, and other amenities that may enhance adjacent property values (Anderson, Williamson, and Wohl 2017, 182). It is possible that smartly implemented land use planning may be able to use ERLP in conjunction with greenways (Tipping Point Planner n.d.), to provide possible benefits to the local governments.

The synergy of greenbelts and ERLP can be further enhanced with restricted development areas within local government boundaries for the purposes of creating a Transportation/Utility Corridor. Transportation/Utility Corridors are strategically planned tracts of land used to place forms of linear property in a single, large right-of-way (rights-of-way are discussed in greater detail near the end of this chapter) (Alberta Infrastructure 2004). Transportation/Utility Corridors have been used in Calgary and Edmonton “to facilitate infrastructure’s development of the city, the surrounding regions, and the Province by accommodating the provincial ring road system, major power lines, pipelines, and local government regional water, sanitary and storm sewer lines.” (Government of Alberta n.d., 1) Essentially, Transportation/Utility Corridors can be used to concentrate ERLP in one place, minimizing many of the impacts associated with ERLP, including the negative effects of setbacks. However, as will be discussed later in this section, co-location of such linear property also brings complications and potentially increases other costs. As we will outline, any corridor would have to be carefully planned to minimize all costs.

Overall, the evidence suggests that setbacks do impose land use opportunity costs on local governments, but it is difficult to determine the magnitude of true economic cost of lost potential land development without also considering the specific size of the setback and jurisdictional specific characteristics along with companion policies like greenbelts, green ways, and utility corridors. While greenbelts, green ways, and utility corridors clearly work to reduce the costs imposed by setbacks, they are not themselves costless to create or maintain. As a result, local governments wanting to pursue this strategy will still need revenues to support it. Further, as will be discussed in a later section, utility corridors do bring additional costs related to rights-of-way management and infrastructure repair.

Emergency Response Planning

The specific purpose of setbacks is to prevent possible accidents and incidents and to minimize damage when accidents and incidents do occur. Setbacks, though, are insufficient on their own, meaning that there will still be requirements to have a plan to respond to accidents and incidents due to the presence of the ERLP. Local governments are generally responsible for ensuring

appropriate emergency response systems, teams, training, equipment, and clean up from ERLP incidents are in place (Pearce and Jones 2015). In Canada, and in almost all cases, it is local governments who lead the initial response to emergencies within their communities. Most provinces have an emergency act that determines local government emergency management responsibilities (Henstra n.d., 2). These responsibilities generally include ensuring the local government has an up-to-date emergency plan, the appointment of an emergency management committee or agency, and an advisory committee who is responsible for advising on the development of emergency plans and programs. Local governments are also generally required to have emergency plans for numerous natural and human-induced emergencies. Therefore, as was alluded to before, costs for emergency preparedness are not solely related to the presence of ERLP and likely overlap with other needs. However, in areas where there is a heavy presence of ERLP, local governments are required to be prepared to respond to emergencies specifically associated with ERLP, like pipeline spills, downed power lines, and well ruptures. They will also be required to coordinate with the emergency response plans and teams of the owners of the ERLP, which adds to the complexity albeit it lessens the burden of having to respond on their own. To reduce emergency response planning complexity, local governments have advocated for the development of joint private-public emergency response plans that do not require the local government to sign confidentiality agreements with ERLP owners (Pearce and Jones 2015).

The concentration of and the higher risk (due to the presence of high voltage transmission lines, bigger diameter and high pressure transmission pipelines) associated with ERLP in rural areas makes emergency response planning especially difficult (Canadian Energy Pipeline Association 2013, Natural Resources Canada 2016, Canadian Association of Petroleum Producers 2017, Rioux, Savard, and Gerick 2013). In many cases fire departments will be the first to the scene in the event of an oil spill, gas leak, fire, or a downed powerline in rural areas. Fire departments in rural areas are often made up of volunteer firefighters (Rhodes 2019). In some cases, they may lack the training or equipment to properly deal with an emergency associated with ERLP. Furthermore, emergency management is often neglected by the public and local government officials, who are focused on what appear to be more pressing local issues (Henstra n.d., 10).

There are a number of provinces that are seeking to improve the resources available to local government for emergency planning. Several provinces have funding programs or offer grants in order to assist local governments with the costs of emergency preparedness. These programs can also help train emergency service personnel. However, as demonstrated by the federal government's cancelled Joint Emergency Preparedness Program, funding for local governments is subject to the whims of upper levels of government (Wherry 2012). This is why the Federation of Canadian Local governments (FCM) is currently working with the National Energy Board (NEB) to implement principles to protect local government interests in the ERLP assessment processes to address these challenges (Federation of Canadian Municipalities 2017a). These include, to "equip and support local government first responders to emergencies related to proposed projects" and "to prevent downloading of project-related safety, emergency response and other costs to local government taxpayers." (Federation of Canadian Municipalities 2017a, 1)

Overall, emergency response planning specific to ERLP is likely imposes real additional costs on local governments, more so in rural areas. Local governments need reliable sources of funding to plan and respond to emergencies related to ERLP. While intergovernmental cooperation is

increasing, it is subject to change, demonstrating the need for local governments to recoup costs directly from ERLP owners and operators. While local governments has expressed a desire to work more closely with ERLP owners on emergency planning, ERLP owners have imposed barriers to doing so by requiring local governments to sign confidentiality agreements to access the companies emergency response plans which increases complexity and forces individual rather than collective relationships and approaches. Clearly, more interventions than just funding are needed, but funding is an important pillar to addressing emergency response planning challenges.

Property Values

Another one of the effects on local governments is the presence of ERLP on or near private property is that it may be perceived to reduce the assessed value of property, thereby reducing the property tax take of the affected local governments. We consider each form of ERLP separately as the effect on property taxes is quite different across the different forms of ERLP.

Transmission Lines

A property's proximity to power lines may affects its value for three reasons: health concerns related to the exposure to electromagnetic fields (Bolton 1993, Jackson and Pitts 2010), noise (humming) concerns particularly from high-voltage transmission lines (Bond, Sims, and Dent 2013, Wyman and Mothorpe 2018), and visual disamenity and view obstruction from power lines, transmission towers, and transformers (Bond, Sims, and Dent 2013, Jackson and Pitts 2010). However, studies that have sought to measure the impact of transmission lines on property values have yielded mixed results (Jackson and Pitts 2010, Tatos, Glick, and Lunt 2016, 205). Generally, a survey of the literature indicates that the negative impact on property values is less than 10 percent, with the impact on property values diminishing sharply as the distance from the property to the power line increases (Anderson, Williamson, and Wohl 2017). That said, when power lines are built along a right-of-way corridor, studies have found that adjacent properties actually fetch a price premium of 4.9 percent to 8 percent (Bond, Sims, and Dent 2013, Jackson and Pitts 2010, Nicholls 2000, Wyman and Mothorpe 2018). This benefit arises because the properties adjacent to the setback have "the benefit and enjoyment of this extra land" (Dent and Peter 2016, 666) and gain increased views, privacy, and recreational space from the greenbelt (Anderson, Williamson, and Wohl 2017).

Overall, the literature indicates that while people voice a general dislike for power lines, property sales data show that they have either a small negative effect on prices which can be more than offset if a greenbelt policy is pursued. Since the greenbelt policy also minimizes the costs of the associated setback, as discussed above, this seems like a smart practice. Thus, potential effects on local governments in terms property tax takes may be minimal, though the specific jurisdictional characteristics and companion policies will need to be carefully considered.

Oil and Gas Pipelines

Oil and gas pipelines pose a different problem from transmission lines due to the risk associated with an emergency event arising from a leak, spill, explosion, and environmental damage. Somerville and Wetzal (2014) provide a recent and comprehensive review and assessment of the

literature of the effect of pipelines on property values. The authors note that while there is a large amount of literature in this area, the existing literature does need to be read very critically and that there are actually only a small number of well-conducted studies that are published in reputable peer reviewed journals (Somerville and Wetzel 2014, 4). Their assessment of this research is that it would seem that proximity to pipelines has a negligible impact on property values and thus minimal impacts on property tax takes (Somerville and Wetzel 2014, 6). However, these results may change as attitudes towards the oil and gas industry shift or if events increase.

In terms of the affect of an accident or incident on property values, Somerville and Wetzel (2014) find that the story is quite different. Following a well-publicized spill with clear environment effects or fatalities, the values of properties near the affected pipeline have lower sales prices for a period of up to five years after the event with the first year following the event having the largest effect on property values. The range of estimates outlined in the literature, however, is quite broad. As summarized by Somerville and Wetzel (2014), directly impacted properties lose anywhere between 10-40 percent of their value, whereas properties unaffected by the spill but located near-by saw anywhere between a 5-8 percent reduction (Somerville and Wetzel 2014, 9). The rationale for this finding is that the closer the property is to a pipeline, the higher the amount of property damage and other losses when the pipeline fails.

The main finding here is that pipelines only affect property values, and hence local property tax revenues, in the case of an accident or incident. The mere presence of a pipeline, on the other hand has no negative affect on property values. This latter finding may be because pipelines are generally buried (Natural Resources Canada 2016), leading to a possible “out of sight, out of mind” outcome. Local property tax revenues are, however, affected in the case of an event and for a period of up to five years, with the biggest affect happening in the first year after the event, leading for some consideration for financial redress, otherwise local government service delivery will be affected during this time or other local taxpayers will have to make up the difference. In this case, where the costs are directly associated with an event, as opposed to be an ongoing consideration, it may be more appropriate to consider pricing these costs into liability rules and financial assurance policies, environment risk tools discussed in detail by Ecofiscal (2018).

Oil and Gas Wells

With the development of fracking and horizontal drilling, the oil and gas industry has seen a large increase in the number of wells being drilled due to previously non-viable reserves becoming economically viable (Becklumb, Chong, and Williams 2015). While oil and gas drilling has undoubtedly created economic benefits, it has also created concerns that may affect local property values. Some of these effects include: the visual impact of cleared land to make room for drilling platforms, the noise associated with the drilling and operation of the well, the increase in heavy vehicle traffic, the odour emitted from the wells, and the real and perceived health hazards posed by sour gas wells and ground water contamination (Stephenson 2015, 5-9).

Several studies have sought to measure the impact of oil and gas wells on property values. One study conducted in Alberta examined the effect of proximity to oil and gas facilities on residential properties in townships surrounding the City of Calgary (Boxall, Chan, and McMillan 2005). The study found that property values were negatively correlated with the number of oil

and gas wells. Additionally, the impact of sour wells was significantly greater than sweet wells², suggesting property buyers discount properties due to the health hazard posed by sour gas (Boxall, Chan, and McMillan 2005, 255). Another study examined the property value impacts of shale gas development in Pennsylvania, particularly the risk of ground water contamination (Muehlenbachs, Spiller, and Timmins 2015). The study found that groundwater-dependent properties within 1.5 kilometers suffered a 9.9-16.5 percent decrease in value (Muehlenbachs, Spiller, and Timmins 2015, 3655). However, the study notes that properties that relied on piped water may not experience the same decrease in value (Muehlenbachs, Spiller, and Timmins 2015, 3655). This result is likely due to the perception that fracking pollutes groundwater, despite there being little scientific evidence to back this up (Ernststoff and Ellis 2013). A similar finding related well activity, ground water reliance, and property value is reported in (Gopalakrishnan and Klaiber 2019), who also find that the reduction in property value is geographically constrained to approximately 1.6 kilometers from the well. Contrary to the case for pipelines, no evidence was found related to property values and well accidents or incidents.

Overall, the presence of wells and well activity affects property values and the affect appears to be larger the closer the proximity to the well or well activity and for properties reliance on ground water. This means that local property tax revenues in the area of the well may be reduced over the duration of the well activity compared to that which would occur otherwise, though this could be partially offset by connecting affected rural properties still on groundwater to piped water.

Rights-of-Way and Infrastructure Management

It was alluded to above that the costs of setbacks can be minimized through the use of transportation and utility corridors. These corridors make use of what are called rights-of-ways. A right-of-way exists where a government, in this case a local government, has granted access rights with respect to its property. The right-of-way allows the right holder to access the public property for the purpose of constructing, maintaining, and operating its equipment provided that doing so does not interfere with the public's use of the public property. In many cases, these rights-of-way are granted along roads and sidewalks, but, as mentioned above, can also be along greenbelts and green spaces.

It was indicated at the start of this chapter that many of these categories of costs are shared by many forms of linear property. This is particularly true of those associated with rights-of-way management. As ERLP will also need to be located along various rights-of-way along with many other utilities, various ERLP owners vying for space on local government rights-of-way with each other that will already crowded with other utilities and other forms of linear property. While it was alluded to above that utility corridors can reduce the costs associated with setbacks, these utility corridors do need to be planned and managed properly to ensure that the various forms of property can co-exist. That planning and managing is not, in and of itself, costless. Further, managing the relationships between all the forms of linear property and their needs for access, construction, maintenance, and operation will result in administrative and transactions costs that will be incurred by the local government.

² Sweet refers to oil or gas that contain low amounts of hydrogen sulfide (Huo 2012). See note *supra* 1 regarding sour gas.

Further, all forms of linear property, including ERLP, put significant infrastructure management and maintenance costs onto a local government, especially when linear property is installed along a road or sidewalk right-of-way. Linear property that is installed below the surface, as many pipelines are, means that roads and sidewalks need to be dug up in order to install and upgrade equipment, which weakens the pavements engineered structure (Federation of Canadian Municipalities 2017b, 14). This means that even when roads and sidewalks are repaired, they can no longer flex and distribute the loads of cars and trucks. Additionally, when pavement is repaired the bond between the new and old asphalt often degrades quicker resulting in cracking and movement between different sections of asphalt (Federation of Canadian Municipalities 2017b, 14). Eventually, water enters the cracks and weakens the structure of the pavement that causes potholes form. The local government is then left with the responsibility of filling and patching these potholes which shortens lifespan of the pavement. Subsurface linear property like pipelines is also troublesome because they are often installed closer to the surface than local government sewer and water infrastructure. This makes repairing local government utilities much more difficult and expensive as they have to effect repairs while navigating the presence of linear property. It has been estimated that the cost to construct sewer and water facilities has increased up to 20 percent due to having to work around shallow forms of linear property (Federal of Canadian Municipalities 2008, 16). Additionally, the presence of linear property can sometimes cause expensive relocation and rehabilitation work (Federal of Canadian Municipalities 2008, 17). Relocation costs can occur when a city needs to realign a street or construct a subway. While these costs are incurred due to all forms of linear property, ERLP imposes additional costs due to additional access needs.

If these are the general costs that come with all forms of linear property, to which ERLP contribute, what other additional and unique costs do ERLP bring? A specific example of costs ERLP imposes on local governments can be highlighted in reference to the twinning of the Kinder Morgan Trans Mountain Pipeline. Local governments along the twinning route are required to abide by the *National Energy Board Pipeline Damage Prevention Regulations-Obligations of Pipeline Companies*. One requirement outlined in these regulations is that all road maintenance activities must first be approved by the pipeline company creating additional administrative burdens (Alberta Association of Municipal Districts and Counties 2016, 2). The FCM has stated that the regulations “unfairly shift burdens, obligations, costs and liabilities to local governments and continue to compromise their ability to conduct routine maintenance on local government highways.” (Federation of Canadian Municipalities 2017b, 8) According to a consultant report commissioned by several local government surrounding Vancouver, B.C., these governments are expected to shoulder costs in excess of \$93 million in added costs due to these various regulations (Associated Engineering Ltd. 2015, i).

In addition, the mere presence of ERLP can increase infrastructure maintenance costs. For example, it can lead to road degradation due to the fact the ERLP may require many heavy truck trips for construction and delivery of equipment (Conger and Dalby 2015, 497). In one jurisdiction it has been estimated that 1500 heavy truck trips are required to build a single shale gas well (Graham et al. 2015, 203) resulting in total cost road degradation between \$13,000-\$23,000 (Abramzon et al. 2014, 1). Since roads are often designed with specific uses in mind, with major highways designed to withstand heavier loads than local roads, this suggests local roads may degrade faster than provincial or federal highways, increasing repair and replacement costs for local governments.

It is clear that local governments incur additional costs from ERLP through planning and managing the rights-of-way, coordinating an increasing number of property owners and property types accessing the right-of-way, wear and tear, maintenance and repair, planning and relocation, and accelerated degradation. While there can be cooperation between the ERLP owners and local governments regarding these costs, these relationships are not guaranteed and can be fractious. Ensuring local governments have a way to pay for and manage these costs is essential to maintaining the quality of infrastructure expected by residents.

Summary

This section examined the evidence related to the costs that may be incurred by local governments due to the presence of ERLP. The evidence indicates that there are four sources for these categories of potential and additional costs to local governments from ERLP, that the magnitude of these costs is case and jurisdictional specific, and that there are beneficial co-policies that can be pursued to help manage these costs, though these co-policies are themselves not cost-less. Overall, it is clear that combining setbacks with greenbelt/ways along rights-of-way utility corridors that are carefully planned and managed is a combination of policies that best minimizes, but does not eliminate costs. In fact, the management of utility corridors brings along increased costs to local governments, who have to incur increased planning, administrative, and coordination costs associated with managing access to the right-of-way and increased infrastructure costs. Table 1 provides a summary of these issues.

[Insert Table 1 Here]

Local Government Authorities and Revenue Options

If a local government in Canada finds that they are incurring one or more of these costs due to the presence of ERLP, what choices does it have to recoup these costs? To what revenue instruments does it have access? In Canada, the legislature in each province has the exclusive power to make laws regarding local governments within their jurisdiction. This is why local governments in Canada are known as “creatures of the province:” they are only allowed to exercise the powers that are delegated to them by provincial governments. This has meant that the funding options of local governments are restricted by the provinces to limited revenue sources. While there is some variation across the provinces, in general, local government own-source revenues are typically limited to property taxes and user levies³ and this limitation in local government revenue instruments has remained virtually frozen in this state since Canada was established more than 150 years ago. As a result, local governments have few readily available revenue tools to employ.

There are three possible approaches to this situation. First, expanding local government’s fiscal authorities to include the collection of additional taxes could be considered. However, doing so would require local governments lobbying their provincial governments to have their enabling legislation modified. Expanding local government tax authorities would set a potentially

³ The term user levies is defined in Tedds (2019) as user fees, regulatory charges, and proprietary charges. User fees are levies that are used to recoup the cost of providing a good or service, regulatory charges are levies that are used to recoup the cost of granting a right or privilege, and proprietary charges are levies that are used in relation to a proprietary interest.

undesirable precedent and get lukewarm reception since provincial governments have traditionally been unenthusiastic about granting additional authorities to local governments. Second, fiscal transfers from the federal and provincial governments to local governments could be negotiated. However, this puts local government at risk to fluctuations in these transfers to fund potentially ongoing costs. In the case of transfers from higher orders of governments these transfers are often tied to specific initiatives that may be poorly aligned to the problems being faced by any particular local government. Third, and a more realistic approach, is to consider how existing local government revenue authorities could be deployed to address the costs faced by individual local governments directly. That is the approach taken in the rest of this chapter. Specifically, we consider the application of property taxes to ERLP as well as regulatory tools to manage access to local government rights-of-way and recoup costs related to this access.

Property Taxation

Revenues from property taxes have and remain the most important source of funding for local governments in Canada. According to Statistics Canada (2018), property taxes account for 60% of Canadian local governments own source revenues. A property tax is a tax based on the assessed value of real property, which includes both residential and non-residential (e.g., commercial, industrial, farm, charitable organizations, and do on) properties including the land, buildings, structures (including energy-related linear property), and other improvements. The general rule of thumb is that all real property, residential and non-residential, should be assessed and subject to taxation as tax exemptions lead to potential problems, including unfairly redistributing the tax burden to non-exempt properties and inefficient property use.

As detailed in Slack and Bird (2014), property taxes are generally considered an appropriate and fair tax for local governments to levy for several reasons. One of the advantages of the property tax is that it is generally visible and transparent. This high visibility and connection to the cost of the provision of local services thus encourages local government accountability (Hoffman and Gibson 2006). Another advantage of the property tax is that building structures and especially land is immobile and cannot flee or be hidden from tax authorities (Murphy 2018, 6). Unlike other types of capital, this characteristic means that it cannot easily shift in response to the tax. A final advantage of the property tax is that since revenues from property taxes are legally designated as tax revenues, the revenues can be spent in any way desired by the government to which the revenues accrue (Tedds 2019, 105). As a result, property tax revenue can be used to fund any activity or offset any cost, including all the costs identified earlier in this chapter.

However, it is not just as simple as a local government applying a property tax to ERLP that is commiserate to the costs they incur. The property tax framework available to local governments in Canada is actually established by the provinces and sets out what property is assessed for a local property tax, the procedures for assessing different types of property, and the method for establishing the local property tax rate. Assessment is the process of assigning a dollar value to a property for taxation and the tax rate is what is applied to the assessed value to determine the property owner's tax liability. In some provinces, a provincial authority will be responsible for assessing all properties, with the local governments free to set the tax rates with some limitations. Such limitations include that the tax rate for all properties within a property type must be the same or that ratios across properties must not exceed a certain level. In other provinces, local governments may be fully responsible for both assessment and setting of tax

rates. We will consider how property tax assessment and property tax rates apply specifically to ERLP below and consider how to balance the recoupment of costs imposed by the ERLP with the administrative costs that a property tax framework imposes.

Property Tax Assessment

Method of Assessment

Property tax assessment is the process of assigning a dollar value to a real property for taxation. In Canada, the market value standard and the regulated procedure standard are the two primary methods of property tax assessment. The first method is the market value standard estimates the value the property would likely sell for on the open real estate market between a willing buyer and seller (Alberta Municipal Affairs 2018, 5). The second method is the regulated standard which is a method that is based on prescribed rates and procedures based on what the type of property is used for, its activity, or its production capabilities (Alberta Municipal Affairs 2018, 7-8). Because ERLP possesses complexities in being assessed under the market value standard (it seldom trades in the market, ERLP often crosses local government boundaries, and are of a unique nature (Alberta Municipal Affairs 2018, 7)) many provinces assess ERLP using a regulated procedure-based standard. There is no one way to assess property using a regulated standard. Instead, the approach adopted will be outlined in provincial regulations and often varies across the different types of ERLP. For instance, in determining the value of a pipeline an assessing authority may take into consideration several different factors including: pipeline material, maximum operating pressure, the diameter of the pipeline, the length of the pipeline, the operational status, and so forth. In the context of assessing electrical energy-related linear property, transmission lines can be differentiated between distribution lines and transmission lines.

There is no one way to assess ERLP using the regulated standard. It can be as simple as valuing the infrastructure by kilometer. Valuation can also vary by size, product, materials, location, and so on. Or it can be as complex as considering inflationary factors, depreciations costs, construction costs, commodity costs, operating pressure, operating expenses, capitalization rates, and so on. Different provinces have different forms and concentrations of ERLP and it makes very little sense, from a cost-benefit perspective, to develop complex rules in the presence of minimal property. Provinces should have an approach to property assessment of ERLP that balances the administrative costs associated with assessment with the quantity and concentration of ERLP within their jurisdiction, but that the complexity and variations of assessment regulations should evolve to reflect the growth or decline in ERLP within the province.

Designated Assessor

In addition to the method of assessment of the ERLP, what body assesses the property also needs to be established. Assessment can be either centralized with the provincial authority or delegated to each local government. Given the fact that ERLP often crosses local government boundaries, this may be why, as a general rule, almost all provinces assign ERLP assessment responsibilities to a provincial authority rather than delegate it to local governments. Having assessment centralized at the provincial level has several benefits. First, a centralized assessment authority will likely produce more uniform assessments than using numerous decentralized local local

government assessors (Kitchen 2012, 12). For example, the exact same length of pipe in one local government jurisdiction should be valued at the same amount in another jurisdiction. Second, having a provincial assessment authority responsible for assessment allows for economies of scale that would not be available if local governments were each individually responsible for conducting assessments (Sjoquist and Walker 1999). Third, assessment by provincial authorities will help ensure that property assessment is fair and stable for ERLP owners. This will help ensure predictability of assessed value and allow owners of ERLP to make more informed investment decision in whether to construct ERLP or not.

Property Tax Rates

To calculate the property tax owed, the assessed value of the property is multiplied by the property tax rate. Local governments are generally the ones who set the property tax rates that are applied to the assessed value of property, including that of ERLP. In terms of what this means for setting tax rates for ERLP, while these properties do directly consume fewer local government services, it has been established in this chapter that they impose costs on local governments that other properties do not. As a result, the tax rate should reflect both realities.

However, some local governments will be limited in how well they can set their tax rates to reflect these realities. Many provinces have implements maximum tax ratios between residential and non-residential tax rates. While, in general, this provides for non-residential properties to be taxed at a higher rate than residential properties (Kitchen 2012, 16) it may mean that this maximum may imply that not all of the costs imposed by ERLP in all cases can be recouped. In addition, some provinces do not distinguish finely enough between classes of property to allow rates to differ according to imposed costs. For example, all ERLP in British Columbia falls under a single property class, thus the local governmentity can only apply a single rate across all forms of ERLP (B.C. Assessment 2019). In Manitoba (Manitoba Municipal Relations n.d.) and Ontario (Municipal Property Assessment Corporation 2019) only some forms of ERLP, such as pipelines, are in individual property classes themselves allowing for differing rates commiserate with imposed costs. In most other provinces, ERLP is combined with other industrial property classes meaning that to increase the rate on ERLP means that rate on all industrial property must increase (Kitchen and Slack 2012, 41-43).

ERLP Property Tax Exemptions

An important complication related to the ability of a local government to recoup costs imposed on them from the presence of ERLP is that any of the ERLP may be owned and operated by governments themselves. Property owned by governments are not subject to taxation, including property taxation. However, alternative revenue transfer schemes do exist that may provide some compensation for the costs incurred by local governments. In some cases, utilities in the province pay either a percentage of gross revenue or a grant in lieu of taxes to local governments, a regime that reflects the public purpose of utilities in Canada (Kitchen 2012). However, these payments may not be guaranteed. It is possible for the owing government entity to contest the assessment value of the property in the case of payments in lieu of taxes payments or for a government to unilaterally change the payment scheme. Notably, in the 2017 provincial budget, the Government of Saskatchewan attempted to eliminate payments-in-lieu of taxes to local governments for properties owned by SaskPower and SaskEnergy, potentially eliminating \$36

million in annual funding to local governments in the province (C. T. V. News Regina 2017). As a result, it may be that costs imposed on local governments by government-owned ERLP may not be fully compensated through existing compensation regimes.

The Role of By-law and Franchise Agreements

An additional potential source of funds is a form of user levy. When a linear property runs along private property, the owner of linear property typically pays the property owner rent for the use of the land and compensates the owner for any disruptions or damages. This then leads to the consideration of if a similar arrangement can be true for linear property that runs along (or under) a local government right-of-way. As mentioned earlier in this chapter, local governments generally have the right to manage the public right-of-way according to their local standard. This includes the ability to regulate and charge for the use of the public rights-of-way by owners of linear property. There are two potential ways to do this. One way is through a local rights-of-way by-law. A second approach, often employed in a complementary way to a right-of-way access regime, is through individual franchise or access agreements (Federal of Canadian Municipalities 2009, 10-11). Both of these options will be discussed below.

Rights-of-way-by-laws

As outlined above, many roads, sidewalks, greenbelts, and related public property are not only used by the public but are also used by owners of linear property to install wires, pipes, and other facilities. As these types of facilities, owners of these facilities, and new technologies and services have expanded, there have been a higher level of activity by these providers in accessing these rights-of-ways. Local government are required to manage this access and these activities by service provides which, as we documented above, results in increased costs. In general, local governments can recover these rights-of-ways management costs and related infrastructure maintenance costs by developed a local rights-of-way by-law that sets out the access terms of conditions along with a fee schedule to recover costs. While the by-law would apply to all owners of linear property needing rights-of-way access, in theory it could also recoup some of the costs specific to ERLP, including those related to setbacks, permitting, coordination, inspections, administration, repair, and damage costs. It may also be able to recoup any costs related to emergency response and levy fines provided that the regulatory scheme is written accordingly. A notable advantage of this approach is that local government, in general, have a very broad authority to develop by-laws that unique to them and their situation provided that it meets their general statutory authority outlines in the provincially enabling legislation.

There are three shortcomings with this by-law approach to recouping costs. First, the approach is a one-sized fits all approach, with a general fee regime set out in a by-law, the fees may not reflect the specific costs imposed by any specific piece of ERLP. Second, the fee(s) established by the rights-of-way by-law are legally defined as a regulatory charge. A regulatory charge is a cost recovery tool, the revenues from which must be solely used to recover the costs outlined in the by-law itself (Tedds 2019). This potentially includes rights-of-management costs and costs related to setbacks, permitting, coordination, inspections, administrations, repair, damages, and possibly emergency response. The key is if the cost is not established in the by-law and the fee not set at a cost recovery level, then the fee is not a legally enacted fee and would not sustain a legal challenge. Third, and more importantly, while on the surface this approach seems to be a

simple way to recoup the costs specific to rights-of-way access and utility corridors, there is a complication that arises specific to ERLP. The issue with local governments passing by-laws relating to the regulation of ERLP is that in order for the by-law to be valid it needs be within the powers of the specific local government. Specifically, for a by-law to be valid, it must not be inconsistent with provincial or federal legislation that covers the same subject matter (Vlavianos and Thompson 2010, 86). That is, a valid by-law regulating ERLP, such as a rights-of-way by-law that applies to ERLP, it must not be inconsistent nor frustrate provincial or federal legislation that also applies to ERLP. Unfortunately, in many cases, provincial acts have very clear blanket prohibitions against local governments regulating most forms of ERLP and that provincial acts and regulations may already provide for who should bear the costs related to rights-of-way management and infrastructure maintenance (Transportation Association of Canada 2008, 12). Therefore, a by-law attempting to recover these costs would seem to frustrate or infringe the purpose of the provincial regulation and would thus be invalid. While this chapter is not intended to provide a complete survey of all legislation in Canada related to ERLP, it is safe to say that local governments will find it challenging to enact a valid by-law that attempts to recoup rights-of-way associated costs imposed by ERLP.

Franchise Agreements

In lieu of a by-law, local governments could enter into what are called franchise agreements. Franchise Agreements and their role in recouping local government costs related to ERLP are detailed in a white paper released by The City of Edmonton (2014). Franchise Agreements are contract-like arrangements between local governments and individual ERLP owners. Franchise agreements are similar to the by-law method, but instead of generalized approach, a franchise agreement is a specific agreement with each ERLP owner that grants each ERLP owner the exclusive right to provide a service and to use local government land, including rights-of-way, to construct, operate, and maintain infrastructure. An important part of a franchise agreement is a charge that permits access to local government property. Rather than a one-sized fits all approach to regulating access to local government property that occurs through a rights-of-way regime discussed above, this approach has the local government negotiate individual agreements with each linear property owner wanting access to the local government rights-of-way and sets out the cost and the conditions for that owner to use the public land. These costs can include any direct costs itemized above, as well as costs related to setbacks and emergency planning. An interesting part of this approach is that the franchise agreement could establish, as part of the charge, a fair market rate (a rent payment, if you will) for access to the public right-of-way. Such a charge is legally known as a proprietary charge (Tedds 2019). Proprietary charges allow governments to act like a private proprietor, allowing it to generate general revenue from the imposition of the charge. That is, unlike the case of charges under a rights-of-way by-law, franchise fees are not required to be solely used for cost recovery. Further, because a franchise agreement is unique to each party, when the agreement is entered into a public entity, it can include a charge in lieu of local government property taxes (The City of Edmonton 2014, 1).

In most jurisdictions, the provincial utilities commission will have the authority to set the terms of the franchise agreement, including the amount of the franchise fee they may levy (The City of Edmonton 2014). This means that it is possible for the fee set by the commission to not reflect the actual costs incurred by the local government, though usually there are clear provision in the governing legislation that defers to the local government to establish what is a fair fee in each

case (The City of Edmonton 2014, 3). If it is the local governmentity, itself delivering the services within their boundaries this may fall outside the jurisdiction of the provincial utilities commission. An example of this, is Calgary's franchise agreement with ENMAX Power Corporation to use city property to deliver electrical power to the residents of the city (Alberta Utilities Commission 2017). Since the City of Calgary owns ENMAX, they will not require the permission of the Alberta Utilities Commission to set the terms of the franchise agreement. Again, as above,

Summary

This section outlined the three tools available to local governments that could be deployed to address the costs that ERLP imposes on them. Local governments have very limited tools that can be applied, generally limited to property taxes, charges attached to a rights-of-way by-law, and fees associated with franchise agreements. Table 2 summarizes the information detailed in this section. The property tax framework has limitations in that it is generally established by the province and to the extent that the existing framework does not reflect the realities of ERLP, local governments would have to lobby the province to have to changed. ERLP is also generally assessed using some form of regulated standard, which some may argue undervalues the property, and may be simplified to reduce administrative costs. However, it is possible these issues can be addressed through a higher property tax rate applied to the property to ensure that revenues collected reflect the costs imposed on the local government. Albeit, provinces may also limit local governments in how they set the local tax rate on ERLP. The real benefit of property taxes is that local governments are free to use the revenues in any way they see fit, meaning that it is the only revenue tool that can be used to address the costs associated with reduced property values. However, property taxes are not without their limitations, including the fact that property taxes are unsecured debt, meaning that when a private ERLP owner goes into receivership or goes bankrupt, if they owe any property tax debt, the debt is unsecured. That means the debt goes to the bottom of the list of debt to be paid by the proceeds of any assets that get sold off. As a result, property tax debt is unlikely to be paid.

Rights-of-way by-laws and franchise agreements are two tools to address the same thing: the management of and infrastructure maintenance costs associated with rights-of-way access. While this chapter details the use of rights-of-way by-laws, with regards to ERLP it appears they are not a legally valid local government option as they would likely frustrate existing federal and provincial legislation. This is why more recently local governments have turned to the use of franchise agreements. While these have not yet been extensively used outside of Alberta (The City of Edmonton 2014), they do appear to be a potentially valid option for local governments to recoup costs associated with rights-of-way managements as well as payments-in-lieu of property taxes from public ERLP owners.

[Table 2 here]

Conclusion

Putting the story of costs and cost recovery tools together as this chapter has paints a fairly interesting, albeit complex and jurisdictional specific picture. As a reminder, the four categories of costs are setback, emergency response planning, property values, and rights-of-way and infrastructure managements. The chapter outlines that rather than these costs being unique and mutually exclusive costs, they are, in fact, intertwined and careful consideration of effective beneficial co-policies in one area actually helps manage costs across multiple areas. Those co-policies are smart policies that should be pursued, but are themselves not costless and it will still be important to pursue revenue tools to help manage those costs as well as the cost identified.

Overall, it was determined that a key co-policy to help reduce the costs associated with setbacks that helps manage the costs both with emergency response planning and minimizes, if not benefits, the impact on property values is to pursue a policy of co-locating ERLP along a utility corridor that is paired with a greenbelt or greenway. That said, this comes with the increased cost of associated with planning and managing the multiple types of potential conflicting types of co-locating property along with rights-of-way management and infrastructure maintenance and repair.

In terms of tools to pay for these costs, the chapter finds that there are options available to local governments to recoup the identified costs, but each one has areas of strengths and weaknesses, suggesting that not only a multipronged approach will be necessary, conditional on the specific jurisdictional characteristics, but also that these tools may not be able to recoup all the costs incurred. Property taxes applied to ERLP itself will be an essential component to recovering costs, but the ability to do so is both dependent on the completeness of the provincial framework established along with how the limitations of the framework apply the property and ownership in the jurisdiction itself. That leaves the potential of two other tools to fill in the gaps: rights-of-way bylaws and franchise agreements. While it appears that rights-of-way by-laws appear to be inconsistent with the current constitutional framework, franchise agreements appear to be slowly filling in the gap. That advantage to both property taxes and franchise agreements is that these revenues are flexible and can be applied to all the costs identified in this chapter. One critique that may be levied against applying the costs onto ERLP is that ERLP owners will pass these costs onto the consumer. However, this is an economically efficient outcome since it is the customers who benefits from property and are now the ones paying for it rather than local tax payers.

It would seem from this picture of costs that franchise agreements are best used by local governments to manage the direct costs associated with the rights-of-way management associated with a utility corridor that could be combined, as applicable, with a greenbelt/way. The property tax system would best be used to manage the ongoing costs associated with presence of ERLP, including the affect on property values and emergency response planning. However, the short-terms costs associated with an accident or incident appear to be best recouped through liability rules and financial assurance policies, tools that are dealt with in more detail in a companion chapter in this book.

Table 1: Summary of Costs of ERLP to Local Government

Category	Cost to Local Government	Size of Cost	Urban/Rural Considerations	Beneficial Co-policies
Setbacks	<ul style="list-style-type: none"> Restricts Local Development potentially reducing local government property tax revenues 	<ul style="list-style-type: none"> Depends on size of setback, which depends on form and function of ERLP, and jurisdictional characteristics 	<ul style="list-style-type: none"> Setbacks may have greater costs in urban locations where setbacks are more likely to be co-located with development 	<ul style="list-style-type: none"> Setback costs can be minimized through smart land use planning. Examples include co-locating ERLP along a greenbelt or utility/transportation corridor and through increased density strategies and brownfield development.
Emergency Response Planning	<ul style="list-style-type: none"> Local Government must develop appropriate emergency response plans, teams, training, equipment, and clean up related to ERLP potential accidents and incidents 	<ul style="list-style-type: none"> Local governments are responsible for ensuring appropriate emergency response systems are in place. Some cofunding is available for higher orders of government. Cost depends on the additional costs imposed due to the presence, type, function, and proximity to development of the ERLP in the community. 	<ul style="list-style-type: none"> Concentration and higher risk of ERLP in rural areas, along with fact that emergency response in rural areas more likely to be made up of volunteers increases the costs. 	<ul style="list-style-type: none"> A process which ensures funding from higher orders of government and the ERLP owners is provided to local governments to share in these costs
Property Values	<ul style="list-style-type: none"> Reduced property values reduce local government property tax revenues 	<ul style="list-style-type: none"> Depends on type of ERLP, proximity of homes to ERLP, and whether there has been a recent accident or incident. Reduced property values may be permanent (due to the presence of ERLP) or temporary (as the result of an accident or incident) 	<ul style="list-style-type: none"> Rural properties are more likely to be reliant on groundwater which increases the reduction in property values due to ERLP activity. A plan to connect all rural properties to pipedwater near ERLP activities may reduce negative property valuations. 	<ul style="list-style-type: none"> Greenbelt and greenway policies for power lines and pipelines can help reduce possible negative property valuations associated with the presence of ERLP, and may actually lead to increased valuations, increasing property tax revenues. Consideration should be giving to pricing the costs associated with a temporary reduction in property values from an accident or an incident into liability rules and financial assurance policies.

Rights-of-Way and
Infrastructure Management

- Administration and transactions costs in managing rights-of-way access, increased pavement repair and replacement costs, compliance costs associated with federal and provincial regulations associated with ERLP

- Size of costs will vary according to the number and types of linear property owners vying for the same space and will vary according to the number of times the pavement is accessed and degraded.

- Urban rights-of-way are more likely to be paved and are more likely to be co-located with multiple different types and owners of linear property which increases the costs. Rural rights-of-way are more likely to be degraded due to heavy truck access and trips.

- Utility corridors can increase the costs associated with infrastructure maintenance and managing the corridor, but proper planning, management, and cost-sharing arrangements can help reduce these costs.

Table 2: Revenue Tools for the Recoupment of Costs of ERLP by Local Government

Local Government Revenue Tool	Administrative Considerations	Costs That Could Be Offset	Limitations
Property Tax	<ul style="list-style-type: none"> • Property tax framework is established by the province and local government must work within the framework set by the province or lobby to have it changed to address shortcomings. • Assessment method usually based on regulated standard. • Complexity of regulated standard assessment method usually reflects the degree of concentration of ERLP in province, reflecting a tradeoff between administrative costs and accuracy of assessment. • Assessment of ERLP should be centralized to help reduce administrative costs and ensure fair, stable, and predictable assessments. 	<ul style="list-style-type: none"> • Tax Revenues are general revenues and can be spent in any way desired by the government to which the revenues accrue, meaning property tax revenues could be applied to all the costs identified in this chapter. • Is the only revenue tool that can be used to offset reduced tax revenues that results from reduced property values from ERLP. 	<ul style="list-style-type: none"> • Local government may not be fully free to set their property tax rates to reflect their incurred costs. • Property owned by governments are not subject to property tax and payments in lieu may not compensate for the full loss of property tax, may not be guaranteed, may be unilaterally changed, or may be disputed. • Property taxes are an unsecured debt, meaning when the debtor goes into bankruptcy property taxes will likely never get paid
Rights-of-Way By-Law	<ul style="list-style-type: none"> • Local government would have to draft the by-law themselves, but they would be able to curate the content of the by-law for their unique situation and the specific costs they have incurred related to the ERLP and rights-of-way management and maintenance. 	<ul style="list-style-type: none"> • Costs that could be offset include management costs and costs related to setbacks, permitting, coordination, inspections, administrations, repair, damages, and possibly emergency response. 	<ul style="list-style-type: none"> • A fee established by a rights-of-way by-law is legally defined as a regulatory charge, a cost recovery tool where the revenues must be solely used to recover the costs outlined in the by-law itself. • One-sized fits all approach so may not reflect specific costs imposed by any specific piece of ERLP. • More importantly, it is highly likely that this option may not be legally valid as it may be inconsistent with existing provincial or federal legislation that has paramouncy over a local by-law.

Franchise Agreement

- Local government would have to enter into a franchise agreement with each owner of ERLP that increases administrative costs, but allows the fee to vary according to the specific costs the individual property imposes on the local government.

- Can establish a fair market rate for access to the public right of way which, by law, is considered to be general revenue and can be applied to any of the costs identified in this chapter

- The fees can compensate the local government for any specified direct costs, costs arising from setbacks, as well as inherent risks related to utility access.

- In some cases, when the franchise agreement is entered into with a public entity, the franchise fees include a charge in lieu of local government property taxes.

- Provincial utilities commission usually have authority to set the terms of the franchise agreement, including the amount of the franchise fee, meaning the fee may not be reflecting of actual costs incurred.

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