

# City of Calgary Livery Transport Services Fee Review



Summit72 Capital Advisory Services  
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## 1. Background

### 1.1 Livery Transport Services (LTS)

Calgary's Livery Transport Services (LTS) is mandated with maintaining a vehicle-for-hire industry that ensures public safety, service quality and consumer protection. LTS fulfills this mandate through the licensing and regulating of all market participants, including taxis, limousines and Transportation Network Companies or TNCs (also known as ride sharing companies). Although not a profit center for the City of Calgary, LTS is expected to be self-sustaining. To this end, LTS seeks to ensure the service fees it charges market participants are sufficient to cover the costs of executing its mandate.

### 1.2 Industry Disruption

Prior to 2016, Calgary's vehicle-for-hire industry consisted almost entirely of taxis. In April of 2016 the City of Calgary decided to provide Calgarians with another vehicle-for-hire option, opening up the industry to competition from TNCs. This led to significant changes in the structure of Calgary's vehicle-for-hire market and by the end of 2018 TNCs are forecasted to have captured approximately 39% of the market.

This industry disruption has broadened the scope of LTS's regulatory and administrative oversight, with an increasing amount of time and effort now required to serve the TNC market segment. Consequently, service fees charged by LTS may not accurately reflect the costs of providing these services.

### 1.3 Scope of Work

The City of Calgary engaged Summit72 Capital Advisory Services to assess the impact this new industry structure will have on its current and future costs. Ultimately, the objective is the development of a fee schedule that equitably allocates costs across all market participants while also ensuring the current and future operational stability of LTS.

Since 2016, LTS and Calgary City Council have worked to address industry disruption primarily through a reduction in taxi fees and by introducing fees and regulations for TNCs. Our understanding is that some market participants and key stakeholders criticised this process as being *ad hoc*, causing the need for an independent, in-depth, and transparent analysis of LTS's fee structure.

A well-functioning vehicle-for-hire market, based on an equitable fee structure is central to what LTS aims to achieve through the delivery of this scope of work. Specifically, LTS wishes to establish a clear link between each market participant's consumption of LTS resources and the level of payment required to provide these services.

The scope of work required to deliver on this objective is as follows:

- Review of existing LTS processes;
- Develop an equitable fee schedule supported by Activity Based Costing principles;
- Complete further analysis of the TNC Combined Licence Fee option;
- Create a forecast model which provides insight into LTS revenue as it relates to the new fee schedule and projected industry trends; and
- Review of the LTS Reserve Fund

## 2. Methodology

### 2.1 Activity Based Costing (ABC)

Activity Based Costing (ABC) is a commonly accepted method used to understand the true costs incurred in the production of a good or in providing a service. Specifically, ABC is used to allocate indirect costs in a way that accounts for the relationship between a product and the resources that product consumes. In the case of LTS, if one industry participant consumes more LTS resources than another, then fees based on ABC will reflect this.

To apply ABC to understanding the costs of producing a good or service, it is necessary to differentiate between Direct, Indirect, and Total Costs.

#### ***Direct Costs***

Direct costs are those costs that can be easily traced to a specific good or service. Using LTS, an example of direct costs would be the time it takes a Livery Licensing Assistant to process a driver licence application or the cost of materials like a taxi plate.

#### ***Indirect Costs***

Indirect costs (also called overhead), are costs that are not easily traceable to a product or service. Indirect costs include the salaries and wages that are not directly involved in producing a good or service, as well costs such as building and vehicle expenses. ABC provides a means of equitably allocating the indirect costs to industry participants based on their consumption of resources.

#### ***Total Costs***

The total cost of a product or service is equal to the sum of all direct costs and indirect costs.

### 2.2 Implications of ABC Based Fee Structures

An LTS fee structure that is based on ABC does not imply that all market participants will pay equal fees. For example, differences in the business models employed by taxis and TNCs lead to differences in the amount of LTS services each of these industry sectors consumes. Therefore, applying the principle of equity to LTS fees may mean that fees will differ across industry sectors.

## 3. Fee Schedule Development

### 3.1 Data Gathering

For Summit72, the first step in the LTS Fee Review involved enhancing our knowledge of the organization's operational environment and the market it operates in. To facilitate this, we conducted extensive interviews and information gathering sessions involving LTS and relevant people from Compliance Services, Strategic Services, and Finance.

Next, Summit72 reviewed the relevant background documentation required to complete the fee review. This included, but was not limited to, policies and procedures, historical LTS demand, audited financial statements, and historical reserve fund data. Finally, detailed process maps and time studies provided by LTS Staff were

analyzed and taken to be indicative of the level of effort involved in processing front counter transactions and undertaking enforcement activities.

### 3.2 LTS Costing Dynamics

The City of Calgary administers the vehicle-for-hire industry under a cost recovery model whereby regulatory costs are passed on to industry participants in the form of fees.

For instance, if the cost to LTS of licensing and regulating all vehicle-for-hire drivers is \$1 million, then under an equitable fee structure that \$1 million will be passed on to drivers in the form of driver licence transaction fees. From this example, it becomes apparent that the number of drivers also impacts the magnitude of the fee. \$1 million distributed equally to 1,000 driver licence fees will be substantially more per driver than \$1 million distributed equally to 10,000 driver licence fees.

The driver licence example is indicative of all LTS fees in the sense that the magnitude of the fee is not only based on the magnitude of expenses, but also the number of fee transactions completed. This characteristic of a revenue neutral fee structure highlights the importance of accurate estimates for both expenses and the number of transactions. Summit72 worked closely with LTS staff to produce a steady-state view of future expenses and transaction numbers that could be used as the basis of the costing exercise.

### 3.3 Key Assumptions

Information gathered during the data gathering stage of work was reviewed and used to inform the fee development process. Activity Based Costing often requires balancing the competing priorities of achieving a high-level of cost precision against practical limitations such as the cost and time involved in such an exercise. For the current scope of work, it was not always deemed reasonable or cost effective to obtain the most precise costing estimates possible. Therefore, professional judgement was used to implement a number of assumptions that were necessary to develop the recommended fee schedule. For the purposes of transparency, a list of key assumptions used is provided on the following page.

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Table 1: LTS Fee Review Key Assumptions

| Assumption   | Rationale   | Purpose   | Source   |
|--|---|---|--|
| Steady-State Annual Expenses   | A normalized operating year based on budget and actuals smooths out one-time items and other irregularities   | Allocate costs to industry participants based on an <u>average</u> operating year | LTS Audited Financials and 2019 – 2022 Budget                    |
| Steady-State Annual Transactions                                     | Similar to expenses, create a normalized number of LTS transactions from current numbers of industry participants and historical transaction data   | Calculate fees that are based on an <u>average</u> number of LTS transactions     | LTS historical transaction data and LTS current industry reports |
| Maintain Status Quo  | Expense projections maintain the status quo unless instructed otherwise by LTS (i.e. vacant positions are included in costs)  | Produce the most accurate forward-looking view of expenses as possible            | Various LTS sources  |
| Compliance Indirect Costs are Allocated to all Industry Participants | Indirect costs for compliance (Livery Inspectors, vehicle expenses, Licence Review Hearing costs, etc.) are allocated to all industry participants. In this way everyone pays for compliance, similar to how all Calgary citizens pay for police services | Facilitates an appropriate and straight-forward costing methodology               | Not applicable   |
| New Car Set Up Fee Paid for by Plate Holders (Taxi and Limousine)    | The New Car Set Up Fee was eliminated by Council in 2018. However, ABC requires that the related costs are allocated to a cost object   | Allocate the cost to the most appropriate industry participant (plate holders)    | Not applicable   |
| Training for TNC Drivers   | Council directed LTS to explore training for TNC drivers and report back at the same time as the Fee Review. The proposed training fee is included in the new fee schedule (Section 4.1) and the forecast analysis (Section 5.2)                          | Ensure equitable cost recovery from all industry participants.                    | Not applicable   |
| Forecast Assumptions   | Forecasts provided in Section 5.2 assume that LTS costs and related fees remain constant over the five-year forecast period   | Removes uncertainty during / beyond 2019-2022 budget cycle                        | Not applicable   |

## 4. Results

### 4.1 Schedule of Fees

The result of the LTS Fee review is the proposed fee schedule provided below. See Appendix A for a comparison of this fee schedule with the existing Schedule B fees as contained in Livery Transport Bylaw 6M2007.

Table 2: Proposed Fee Schedule

| <b>Driver</b>  | <b>Taxi</b> | <b>Limo</b> | <b>TNC</b> | <b>Garage</b> |
|--|-------------|-------------|------------|---------------|
| 1st License / Renewal                                | 230         | 230         | 329        | -             |
| Replacement  | 50          | 50          | -          | -             |
| New Driver Application & Classroom Training          | 325         | 325*        | 325*       | -             |
| New Driver Application & Online Training             | 115         | 115         | 115*       | -             |
| New Driver Application & Training Manual (Limo Only) | -           | 150         | -          | -             |
| Testing (additional Rewrite)                         | 50          | 50          | 50         | -             |
| Accessible endorsement                               | 80          | 80          | 80         | -             |
| Police check (includes \$30 CPS Fee)                 | 45          | 45          | 45         | -             |
| License Reinstatement                                | 181         | 181         | 181        | -             |
| License Reinstatement (152(3))                       | 400         | 400         | 400        | -             |
| License Reinstatement (152(2))                       | 1,260       | 1,260       | 1,260      | -             |
| <b>Plate</b>   |             |             |            |               |
| Application  | 50          | 50          | -          | -             |
| 1st License / Renewal                                | 595         | 455         | -          | -             |
| Transfer Application                                 | 260         | -           | -          | -             |
| Transfer Processing                                  | 200         | -           | -          | -             |
| Replacement  | 75          | 50          | -          | -             |
| <b>Brokerage</b>                                     |             |             |            |               |
| Application / 1st License                            | 3,000       | 2,500       | 3,500      | -             |
| Renewal  | 3,000       | 2,500       | 3,500      | -             |
| <b>Station</b>                                       |             |             |            |               |
| Application / 1st License                            | -           | -           | -          | 410           |
| Renewal  | -           | -           | -          | 400           |
| <b>Mechanic</b>                                      |             |             |            |               |
| Application / 1st License                            | -           | -           | -          | 330           |
| Renewal  | -           | -           | -          | 325           |

\* not offered at this time

#### 4.1.1 Additional Comments

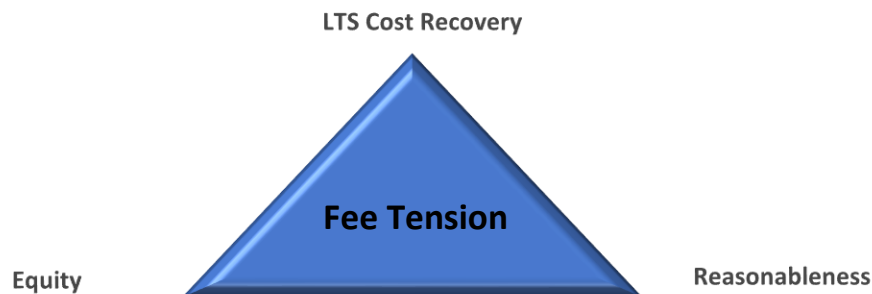
The proposed fee schedule includes all the assumptions set out in Table 1. This includes new items approved in the 2019 - 2022 One Calgary Budget such as the addition of two new Livery Inspectors and updated building lease expense related to the planned relocation of LTS offices from Stockman's Centre to Airways.



## 4.2 Discussion

The Activity Based Costing review resulted in cost estimates for all regulatory processes administered by LTS. These costs were then translated into the fees that LTS could charge market participants based on the principle of equity. However, the resulting fee structure made it apparent that the fee review needed to also consider the impact that equitable fees could have on the competitiveness of market participants. This led to the inclusion of the criterion of reasonableness in the fee review.

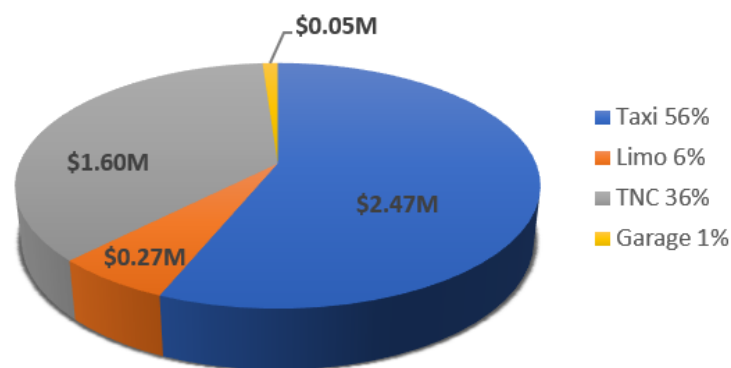
Figure 1: Fee Considerations



In recognition of this “fee tension”, a new approach was taken that applied the requirement for equity to the industry sector level (i.e. taxis, TNCs and limousines) rather than each industry participant (i.e. drivers, brokers, plateholders, etc.). This distinction became a point of departure for successive iterations of the proposed fee structure.

Equity at the industry sector level means that each industry pays for the costs they are responsible for and the Activity Based Costing review provided a clear view of this. Based on a total LTS operating budget of \$4.4 million, Figure 2 illustrates the industry sector cost breakdown.

Figure 2: Industry Sector Cost Responsibility



The proposed fee schedule in Table 2 sets fee prices at reasonable levels, while also explicitly satisfying each industry’s cost responsibility. For example, the fee for a taxi driver licence was set by balancing the need to cover LTS costs against the goal of ensuring the fee was not set at a rate that could potentially deter market participation and / or jeopardize existing service levels.

#### 4.2.1 TNC Combined Licence Fee

In 2016 Council approved the Combined Licence fee for TNCs. This fee structure consisted of an administration fee based on the number of TNC drivers and a \$0.20 per trip surcharge. The Combined Licence Fee was effectively eliminated by council in 2018 and replaced with a minimum and maximum fee that essentially fixes the TNC fee at specified rate per driver.

Throughout the year LTS tracks the number of TNC trips and TNCs are invoiced quarterly on a per trip basis. However, at the end of the year the actual amount owing is calculated based on the cumulative number of drivers over the course of the year multiplied by the current fee of \$229. The TNC either pays the difference or is reimbursed for their overpayment.

As part of the LTS Fee Review, Summit72 assessed the TNC Combined Licence fee in its current form and our observations are as follows:

1. The current fee system is administratively burdensome. It requires LTS staff to assess per trip fees throughout the year but then regardless of trip numbers, complete a year end true up based on the number of drivers.
2. Costs incurred by LTS for TNCs are a function of the need to regulate industry and to process industry related transactions such as licensing. In other words, costs are independent of the number of trips completed by TNC drivers and, as such, a per trip fee is not equitable from an ABC point of view. Likewise, this same argument would be made against a per trip fee for any other industry sector.

#### 4.2.2 Proposed TNC Per Trip Fee Methodology

A per trip fee has not been included in the new fee schedule because it does not fit within the equity framework. However, a per trip fee could be acceptable if it ensures that TNCs pay for their full cost responsibility of 36% or \$1.6 million (see Figure 2). In this case, the projected number of trips to use in the fee calculation would be important to ensure LTS isn't being exposed to an unnecessary level of revenue risk.

It is recommended that LTS base any decision related to a per trip rate on actual trip data, not forecasted number of trips, regardless of how the data is trending. While 2018 data is the most recent view of TNC volumes, a two-year average allows for the largest sample size and would likely be the most appropriate estimate of future volumes.

Table 3: TNC Per Trip Fee

|   |                                   |                          |
|---|-----------------------------------|--------------------------|
| <b>Total TNC Cost Responsibility (\$millions)</b> |                                   | <b>1.60</b>              |
| <b>Period</b>                                     | <b>Number of Trips (millions)</b> | <b>Per Trip Fee (\$)</b> |
| 2017  | 2.28                              | 0.70                     |
| 2018*   | 3.91                              | 0.41                     |
| Two-Year Average                                  | 3.09                              | 0.52                     |

*\*10 months actuals and 2 months forecast*

It is important to note that the proposed per trip fee above is not an appropriate comparison to the existing TNC per trip fee of \$0.20. The existing Combined TNC Fee includes a separate company administration fee which is not being proposed here. Additionally, the proposed per trip fee is based on an updated cost structure which includes items such as TNC training and increased enforcement costs.

For information purposes, the below table provides the per trip fee which would be required for a range of different TNC trip volumes. Again, this is based on the current LTS cost structure and a TNC cost responsibility of 36%.

Table 4: Per Trip Fee Based on Range of Trip Volumes

| <b>Annual Trips (millions)</b> | <b>1.0</b> | <b>1.5</b> | <b>2.0</b> | <b>2.5</b> | <b>3.0</b> | <b>3.5</b> | <b>4.0</b> | <b>4.5</b> | <b>5.0</b> | <b>5.5</b> | <b>6.0</b> |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Per Trip Fee (\$)              | 1.60       | 1.07       | 0.80       | 0.64       | 0.53       | 0.46       | 0.40       | 0.36       | 0.32       | 0.29       | 0.27       |

### 4.3 Combined Licence Fee for Other Industries

A component of the LTS Fee Review is to further assess the Combined Licence Fee in order to investigate possible adjustments for other industry participants. This is certainly an option for other industry participants, however administering a per trip fee would require that taxi and limousine brokerages manage their fleets in a way that is similar to TNCs. LTS has expressed a willingness to work with industry participants if this is an option that they choose to pursue. In this case the same fee calculation methodology applied to TNCs would be recommended for other industry participants.

## 5. Market Dynamics

### 5.1 TNC Market Impact

As per Table 5 below, from 2014 to 2016, annual taxi trips were in decline (likely due to economic conditions<sup>1</sup>). The entry of TNCs in late 2016 has more than offset this decline, leading to an overall increase in market size from 8.4 million to 10.0 million over the five-year period.

Table 5: Annual Vehicle-for-Hire Trips

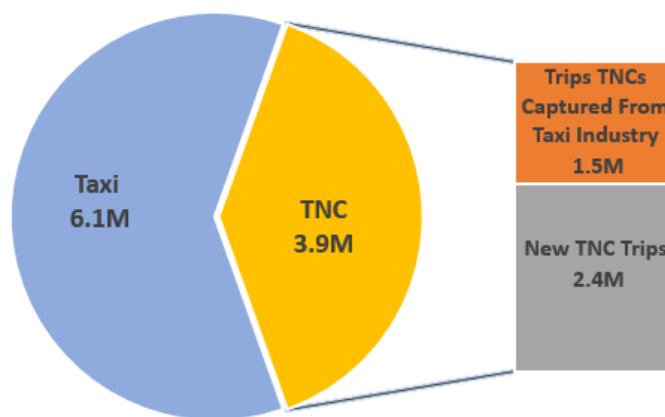
|                              | <b>2014</b> | <b>2015</b> | <b>2016</b> | <b>2017</b> | <b>2018</b> |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Annual Taxi Trips (millions) | 8.4         | 7.5         | 7.0         | 6.6         | 6.1*        |
| Annual TNC Trips (millions)  | 0.0         | 0.0         | 0.1         | 2.3         | 3.9*        |
| <b>Total Trips</b>           | <b>8.4</b>  | <b>7.5</b>  | <b>7.1</b>  | <b>8.9</b>  | <b>10.0</b> |

*\*10 months actuals and 2 months forecast*

<sup>1</sup> The economic downturn was precipitated by a large drop in the price of oil that began mid-2014 and continued into 2016

Figure 3 illustrates our estimation of the overall impact that TNC market entry has had on the total market size as well as the trips attributable to TNC capture of taxi market share.<sup>2</sup>

Figure 3: 2018 Taxi and TNC Trip Breakdown



One possible explanation for the increase in the overall number of trips is that TNCs may appeal to a different demographic who typically wouldn't hire a taxi. However, it is unlikely that this would result in an increase of 2.4 million trips per year. More likely, the increased number of rides provided by the vehicle-for-hire industry is largely due to TNC's surge pricing business model. A higher fare during high demand periods serves to encourage more drivers to come online and accept trips. For example, The Economist reports that "In San Francisco the number of private cars for hire has shot up . . . This suggests surge pricing has encouraged the number of taxis [referring to the total vehicle-for-hire pool] to vary with demand, with the market getting bigger during peak hours."<sup>3</sup>

In many cases, a high demand period that would see taxi supply fully utilized, would also correspond with TNC surge pricing being in effect. If the taxi fleet is fully employed, then any trips fulfilled by TNCs would be incremental trips rather than market share captured from taxis. Trip numbers would suggest that while TNCs have captured a portion of the market from taxis, they are also bringing all together new rides into the system. This distinction is important because it provides additional context to the impact which TNCs have had on the vehicle-for-hire industry in Calgary and has implications for the forecast in the following section.

<sup>2</sup> From 2014 to 2016, average taxi volumes were 7.6 million trips per year. 2018 taxi volumes are 6.1 million trips and comparing that to the three-year average, we estimate that current taxi volumes have fallen by 1.5 million trips per year. We attribute the loss of 1.5 million taxi trips to TNC market entry but, it would also appear that TNCs have increased the size of the total market. Comparing 2018 total trips to the three-year average, indicates that TNCs have added 2.4 million new trips (10 million minus 7.6 million).

<sup>3</sup> The Economist, <https://www.economist.com/finance-and-economics/2014/03/29/pricing-the-surge>

## 5.2 Market Scenarios

An important supplement to the proposed new fee schedule is the forecast model and analysis which assesses the impact of changes in the vehicle-for-hire industry and how susceptible the fee schedule is to market dynamics. To assist with this, the cost structure and fees have been held constant throughout the forecast period. In order to stress-test the new fees, multiple scenarios were produced, including extreme and even unlikely events. It is important to note that these extreme scenarios are not predictions, they are simply illustrative of potential worst-case scenarios.

### 5.2.1 Taxi Exit

In this scenario, the taxi industry continues to lose market share to TNCs and ultimately exits the market. Fragmentation of the taxi industry results in slow attrition over four years and the complete withdrawal in year five. Table 6 provides a view of LTS revenue under this five-year decline in taxi trip volumes.

Table 6: Taxi Exit Scenario

| <b>LTS Revenue Forecast (\$millions)</b> | <b>2020</b>  | <b>2021</b>  | <b>2022</b>  | <b>2023</b>  | <b>2024</b>  | <b>Total</b> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| LTS Steady-State Expense Budget          | 4.40         | 4.40         | 4.40         | 4.40         | 4.40         |              |
| LTS Revenue Under Taxi Exit Scenario     | 4.00         | 3.89         | 3.86         | 3.79         | 3.69         |              |
| <b>Surplus / Deficit</b>                 | <b>-0.40</b> | <b>-0.51</b> | <b>-0.54</b> | <b>-0.61</b> | <b>-0.71</b> | <b>-2.76</b> |

If this hypothetical scenario were to occur, LTS would see a growing decrease in revenue as the taxi industry exit occurred. While the loss of taxi driver licence fees is offset by an increase in TNC driver fees, the decline in plate revenue is not offset and is the main contributor to the annual deficit. If LTS did not react by reducing expenses or drawing from the reserve fund, an average 14% increase in fees for all industry participants would be required to offset the annual deficit.

### 5.2.2 TNC Exit

This scenario assesses a situation whereby changing market factors cause TNCs to exit the Calgary market in 2020. In this case, the loss of LTS revenue is equal to the revenue earned from TNC driver licence, training and broker fees.

Table 7: TNC Exit Scenario

| <b>LTS Revenue Forecast (\$millions)</b> | <b>2020</b>  | <b>2021</b>  | <b>2022</b>  | <b>2023</b>  | <b>2024</b>  | <b>Total</b> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| LTS Steady-State Expense Budget          | 4.40         | 4.40         | 4.40         | 4.40         | 4.40         |              |
| LTS Revenue Under TNC Exit Scenario      | 2.80         | 2.80         | 2.80         | 2.80         | 2.80         |              |
| <b>Surplus/Deficit</b>                   | <b>-1.60</b> | <b>-1.60</b> | <b>-1.60</b> | <b>-1.60</b> | <b>-1.60</b> | <b>-8.00</b> |

The total number of 2018 vehicle-for-hire trips is forecasted at 10 million. As discussed in Section 5.1, this includes an estimated 2.4 million trips which are being considered new trips directly attributed to the TNCs surge pricing business model. If TNCs exit the market, the presumption is that trip volumes would retreat back to pre-TNC levels. Therefore, taxis could expect to recapture the estimated lost market share of 1.5 million trips, but not the new trips that TNCs have attracted. While a TNC exit would likely result in higher revenue

earned for taxi drivers, it is not anticipated that a TNC exit would result in a material increase in the number of taxi drivers or LTS fee revenue.

In the absence of any reductions in LTS expenses or draw down of the reserve fund, an average 57% increase in fees for all industry participants would be required to offset the loss of TNC revenue.

### 5.2.3 Contested Market

This scenario illustrates a high level of competition between taxis and TNCs and predicts how the disruption in the vehicle-for-hire industry will unfold over the next five years and the results on LTS revenue.

Table 8: Contested Market Scenario

| <b>LTS Revenue Forecast (\$millions)</b>    | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>Total</b> |
|---|-------------|-------------|-------------|-------------|-------------|--------------|
| LTS Steady-State Expense Budget             | 4.40        | 4.40        | 4.40        | 4.40        | 4.40        |              |
| LTS Revenue Under Contested Market Scenario | 4.59        | 4.86        | 5.02        | 5.02        | 5.02        |              |
| <b>Surplus / Deficit</b>                    | <b>0.19</b> | <b>0.46</b> | <b>0.62</b> | <b>0.62</b> | <b>0.62</b> | <b>2.51</b>  |

The expectation is that TNCs continue to gain market share at the expense of taxis but that growth will slow and the market will stabilize in 2021. TNC growth may be highly volatile in the short term, but on average, they are forecasted to increase their market share to 55% versus 45% for the taxi industry. This scenario assumes that taxi numbers stay constant (drivers, brokers and plates) and TNC driver numbers increase as they capture more market share and attract new trips based on their surge pricing model. As a result of increased TNC drivers and the related fees, there would be an annual surplus for LTS and an average 10% decrease in fees for all industry participants would be possible.

## 6. Reserve Fund

### 6.1 Background and Assessment

The LTS Reserve Fund is governed by City of Calgary Policy CFO013 and it is understood that the desire in the past has been to maintain a balance equal to one year's operating budget. The below table provides a historical view of the Reserve Fund.

Table 9: Reserve Fund Balance

| <b>Reserve Fund Activity (\$1,000s)</b> | <b>2012</b>  | <b>2013</b>  | <b>2014</b>  | <b>2015</b>  | <b>2016</b>  | <b>2017</b>  |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| Opening Balance                         | 2,633        | 3,127        | 3,722        | 4,539        | 4,076        | 3,737        |
| LTS Annual Operating Surplus / Deficit  | 910          | 668          | 901          | -181         | -354         | 373          |
| Investment Income                       | 84           | 70           | 99           | 110          | 86           | 119          |
| Capital Expenditures                    | -500         | -143         | -183         | -392         | -71          | -84          |
| <b>Closing Balance</b>                  | <b>3,127</b> | <b>3,722</b> | <b>4,539</b> | <b>4,076</b> | <b>3,737</b> | <b>4,145</b> |

In the past six years, only two years resulted in an operating deficit (2015 and 2016), with the largest deficit being \$354K.

It is also interesting to note that from 2014 - 2017, \$739K was contributed to reserve but \$386K was from fines and penalties rather than actual surplus revenue from fees<sup>4</sup>.

Table 10 is based on the current Reserve Fund balance and budgeted capital. It assumes an annual LTS deficit in order to illustrate that if the worst historical year persisted for the next budget cycle, LTS would still be able to fund operating shortfalls and meet capital commitments. In this hypothetical scenario, \$2.0 million would remain in the Reserve Fund at the end of the 2022.

Table 10: Reserve Forecast

| <b>Reserve Fund Activity (\$1,000s)</b>          | <b>2019</b>  | <b>2020</b>  | <b>2021</b>  | <b>2022</b>  |
|--|--------------|--------------|--------------|--------------|
| Estimated Opening Balance                        | 4,700        | 4,307        | 3,102        | 2,511        |
| Estimated LTS Annual Operating Surplus / Deficit | -354         | -354         | -354         | -354         |
| Estimated Investment Income                      | 141          | 129          | 93           | 75           |
| Planned Capital Expenditures                     | -180         | -980         | -330         | -230         |
| <b>Closing Balance</b>                           | <b>4,307</b> | <b>3,102</b> | <b>2,511</b> | <b>2,003</b> |

## 6.2 Reserve Fund Options

At the request of LTS, Summit72 has assessed the possibility of a temporary fee reduction financed through the Reserve Fund. Table 11 reflects a fee reduction in driver licences for taxis and limousines. As the percentage fee reduction increases, so does the annual deficit which would ultimately be subsidized from the Reserve Fund.

Table 11: Fee Reduction Sensitivity

| <b>Fee Reduction</b>                | <b>10%</b> | <b>12%</b> | <b>14%</b> | <b>16%</b> | <b>18%</b> | <b>20%</b> | <b>22%</b> | <b>24%</b> | <b>26%</b> | <b>28%</b> | <b>30%</b> | <b>32%</b> |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Annual Deficit (\$1,000)            | -111       | -134       | -157       | -180       | -203       | -225       | -248       | -271       | -294       | -317       | -340       | -363       |
| Taxi & Limo Driver License Fee (\$) | 207        | 202        | 198        | 193        | 189        | 184        | 179        | 175        | 170        | 166        | 161        | 156        |

## 7. Conclusion

If there is one thing that is certain, it is that there will be a vehicle-for-hire industry in Calgary for the foreseeable future. However, the exact composition of that industry remains to be seen. LTS is responsible for regulating the vehicle-for-hire industry, and those regulations should not be punitive or favor one industry over another. Likewise, LTS should not be expected to intervene in the market to sustain existing companies or attract new ones.

The costing analysis that was completed has been based on established accounting principles and the resulting proposed fee schedule is equitable between industry sectors, it is reasonable and it addresses cost recovery. The City of Calgary should welcome legitimate stakeholder feedback but also recognize that it is the responsibility of all industry participants to work within the regulatory framework to identify the competitive advantages, strategic alliances, and efficiencies that will ensure their own long-term success. As previously

<sup>4</sup> Source: LTS Audited Financial Statements

noted, it is different industry sectors' business models which results in different regulation and therefore different costs. Each industry sector has the freedom to adjust their business model and thereby work with LTS to reduce their consumption of LTS resources and potentially, their fees.

One of the key points from the LTS fee review is that a healthy, competitive vehicle-for-hire industry will benefit LTS through stable revenue. However, industry disruption from ridesharing companies is likely not yet complete and new innovations such as autonomous vehicles are on the horizon. LTS and the City of Calgary should continue to proactively monitor market trends and be ready to adjust regulations and fees as market dynamics unfold.



## 8. Appendix

## 8.1 Appendix A

|   | Taxi Industry Cost % - \$2,465,70856% |          |          |      | Limo Industry Cost - \$270,7596% |          |          |      | TNC Industry Cost - \$1,601,57236% |          |          |     |    |    |   |    |
|---|---------------------------------------|----------|----------|------|----------------------------------|----------|----------|------|------------------------------------|----------|----------|-----|----|----|---|----|
|   | Taxi Fees                             |          |          |      | Limo Fees                        |          |          |      | TNC Fees                           |          |          |     |    |    |   |    |
|   | Existing (\$)                         | New (\$) | Variance | Δ %  | Existing (\$)                    | New (\$) | Variance | Δ %  | Existing (\$)                      | New (\$) | Variance | Δ % |    |    |   |    |
| Driver  |                                       |          |          |      |                                  |          |          |      |                                    |          |          |     |    |    |   |    |
| 1st License / Renewal                           | 141                                   | 230      | 89       | 63%  | 141                              | 230      | 89       | 63%  | 229                                | 329      | 100      | 43% |    |    |   |    |
| Replacement                                     | 39                                    | 50       | 11       | 28%  | 39                               | 50       | 11       | 28%  | 0                                  | 0        | 0        | -   |    |    |   |    |
| New Driver Application & Classroom Training     | 312                                   | 325      | 13       | 4%   | 0                                | 325      | 325      | -    | 0                                  | 325      | 325      | -   |    |    |   |    |
| New Driver Application & Online Training        | 312                                   | 115      | -197     | -63% | 56                               | 115      | 59       | 105% | 0                                  | 115      | 115      | -   |    |    |   |    |
| New Driver Application & Training Manual (Limo) | 0                                     | 0        | 0        | -    | 56                               | 150      | 94       | 168% | 0                                  | 0        | 0        | -   |    |    |   |    |
| Testing (add'l Rewrite)                         | 0                                     | 50       | 50       | -    | 25                               | 50       | 25       | 100% | 0                                  | 50       | 50       | -   |    |    |   |    |
| Accessible endorsement                          | 75                                    | 80       | 5        | 7%   | 75                               | 80       | 5        | 7%   | 0                                  | 80       | 80       | -   |    |    |   |    |
| Police check (incls. \$30 CPS Fee)              | 43                                    | 45       | 2        | 5%   | 43                               | 45       | 2        | 5%   | 0                                  | 45       | 45       | -   |    |    |   |    |
| License Reinstatement                           | 181                                   | 181      | 0        | 0%   | 181                              | 181      | 0        | 0%   | 181                                | 181      | 0        | 0%  |    |    |   |    |
| License Reinstatement (Subsection 152(3))       | 377                                   | 400      | 23       | 6%   | 377                              | 400      | 23       | 6%   | 377                                | 400      | 23       | 6%  |    |    |   |    |
| License Reinstatement (Subsection 152(2))       | 1,260                                 | 1,260    | 0        | 0%   | 1,260                            | 1,260    | 0        | 0%   | 1,260                              | 1,260    | 0        | 0%  |    |    |   |    |
| Plate   |                                       |          |          |      |                                  |          |          |      |                                    |          |          |     |    |    |   |    |
| Application                                     | 181                                   | 50       | -131     | -72% | 0                                | 50       | 50       | -    | 0                                  | 0        | 0        | -   |    |    |   |    |
| 1st License/Renewal                             | 912                                   | 595      | -317     | -35% | 731                              | 455      | -276     | -38% | 0                                  | 0        | 0        | -   |    |    |   |    |
| Transfer Application                            | 260                                   | 260      | 0        | 0%   | 0                                | 0        | 0        | -    | 0                                  | 0        | 0        | -   |    |    |   |    |
| Transfer Processing                             | 260                                   | 200      | -60      | -23% | 0                                | 0        | 0        | -    | 0                                  | 0        | 0        | -   |    |    |   |    |
| Replacement                                     | 75                                    | 75       | 0        | 0%   | 50                               | 50       | 0        | 0%   | 0                                  | 0        | 0        | -   |    |    |   |    |
| Brokerage                                       |                                       |          |          |      |                                  |          |          |      |                                    |          |          |     |    |    |   |    |
| Application/1st License                         | 1,824                                 | 3,000    | 1,176    | 64%  | 1,824                            | 2,500    | 676      | 37%  | 1,965                              | 3,500    | 1,535    | 78% |    |    |   |    |
| Renewal   | 1,824                                 | 3,000    | 1,176    | 64%  | 1,824                            | 2,500    | 676      | 37%  | 1,824                              | 3,500    | 1,676    | 92% |    |    |   |    |
|   | Garage Industry Costs - \$48,4761%    |          |          |      | Admin Costs - \$6,8320.2%        |          |          |      |                                    |          |          |     |    |    |   |    |
|   | Garage Fees                           |          |          |      | Other Fees                       |          |          |      |                                    |          |          |     |    |    |   |    |
|   | Existing (\$)                         | New (\$) | Variance | Δ %  |                                  |          |          |      | Existing (\$)                      | New (\$) | Variance | Δ % |    |    |   |    |
| Station   |                                       |          |          |      | Admin                            |          |          |      |                                    |          |          |     |    |    |   |    |
| Application/1st License                         | 97                                    | 410      | 313      | 323% | Bylaw                            |          |          |      |                                    |          |          |     | 5  | 5  | 0 | 0% |
| Renewal   | 181                                   | 400      | 219      | 121% | Inspection forms                 |          |          |      |                                    |          |          |     | 26 | 26 | 0 | 0% |
| Mechanic  |                                       |          |          |      | Photocopy                        |          |          |      |                                    |          |          |     | 1  | 1  | 0 | 0% |
| Application/1st License                         | 50                                    | 330      | 280      | 560% | NSF                              |          |          |      |                                    |          |          |     | 50 | 50 | 0 | 0% |
| Renewal   | 97                                    | 325      | 228      | 235% |                                  |          |          |      |                                    |          |          |     |    |    |   |    |