City of Denver Outdoor Dining Expansion
Economic Impact Study
Denver, Colorado

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Background and Executive Summary

Denver’s Outdoor Places Program builds upon the success of the temporary program put into place as a result of Covid-19 restrictions. This economic impact study is intended to help provide a better understanding of the potential positive impacts of an adoption of a permanent outdoor dining program and associated rules, regulations and fees.

Like many jurisdictions nationwide, the temporary outdoor dining program was created in May 2020 to help restaurants and bars safely expand their serving capacity during the height of the COVID-19 pandemic. A permanent program in Denver will allow these and other businesses to use private and public space for outdoor operations after the temporary program ends.

The following memo analyzes the potential economic impact of the program. It is outlined as follows:

- **National Economic Case Studies**: Several national jurisdictions analyzed the economic impact of their respective outdoor dining programs. While the methodologies used varied widely, all seem to agree that benefits of the programs outweighed the potential disadvantages.

- **Local Case Studies**: Jurisdictions along the Front Range also implemented temporary outdoor dining programs. They also put fee programs into place. We interviewed several of them for their feedback on their transition from temporary to permanent programs and how their communities are responding. The City of Arvada is the only local jurisdiction (Denver metro) that we’re aware of that examined potential economic impacts.

- **Economic Analysis**: The analysis examines sales tax revenues, by neighborhood, the use of the Temporary Outdoor Expansion (TOE) programs as well as the existing Tables, Chairs and Rails (TCR) program. We examine how tax revenues have changed since 2017, during and after the pandemic. We also incorporate a discussion of how current challenges (high labor and materials costs) are impacting current restaurant operations as well as a comparison of outdoor dining sales tax revenues compared to parking meter revenues.

Conclusions:

- **Case Studies**: The national case studies in New York and San Francisco demonstrated that outdoor dining and parklet installations led to higher sales (19%-29%) compared to similar areas without outdoor dining which either experienced declines (29%) or more modest sales increases (10%). The Toronto study made the case that outdoor patios generated 49 times more revenue than the parking revenue replaced. The Arvada, Colorado case study demonstrated that outdoor dining led to the retention of tax revenues and jobs that would have otherwise been lost.

- **Economic Analysis**: An analysis of sales tax revenues before, during and after the pandemic indicated neighborhoods with a higher utilization of the TOE / TCR program during and immediately after the pandemic experienced an 18% increase in sales tax revenues compared to neighborhoods in the rest of the City. An analysis of a prototypical 400 square foot expansion indicated that potential sales tax revenues generated by the expansion would result in an estimated two times the estimated parking meter revenue generated.

Outdoor dining has always been popular in Denver. Although the Covid-19 pandemic had unfortunate and deadly consequences, the analysis of the City and business response to indoor dining restrictions (by moving dining outdoors) helps demonstrate the economic value of allowing outdoor dining to continue. Other benefits such as community vitality and safety are also important consequences but were not enumerated here.
Economic Impact Analysis
Case Study: New York Economic Impact Analysis

The City of New York examined the economic benefits of “Open Streets” (where outdoor expansions occurred) two years after the advent of Covid-19 lockdowns. Through data from the New York Department of Finance in five different neighborhoods, their analysis points to a significant difference in those corridors with Open Street corridors compared to similar corridors without the Open Street program.

The analysis examined corridor level data (unavailable for the Denver analysis). The analysis found that in the Open Street corridors, sales were about 19% above their prepandemic baseline. Nearby control corridors were 29% below.

There was general agreement that without the Open Streets program, businesses would have likely closed permanently. Open Streets corridors significantly outperformed nearby control corridors on three key metrics (sales growth, growth in the number of restaurants and bars, and keeping businesses open). They also saw faster growth in the number of new bars and restaurants that opened during the pandemic when compared to the rest of the borough.

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Case Study: Toronto Economic Impact Analysis

The 2021 CafeTO Economic Benefits study examined larger economic benefits of Toronto’s outdoor patio program during a 13 week period in the summer of 2021. The analysis was based on an online weekly survey of restaurant owners and managers. It included direct communications with 20 participating restaurants. The analysis and results are based on 940 restaurants in the CafeTO program.

On a global basis, the analysis found an:
- Estimated $181 million in revenues generated from outdoor patios during a 13 week period in the summer of 2021
- Estimated $25 million in investments on patio upgrades and maintenance
- Estimated 4.9 million customers served during this time period
- During this time period, the analysis estimated that 36% of total participating restaurant sales were from CafeTO; 26% were from indoor dining, 25% from permanent patios, and 13% takeout / delivery

On average:
- The average participating restaurant spent $26,000 to update and operate CafeTO patios
- Largest expense categories were $11,000 on furniture and $7,000 on property upgrades
- The average participant invested $1,300 on CafeTO-specific menus and mobile apps
- The average restaurant spent $1,700 on signage or advertising related to the program
- The average participating establishment experienced weekly $15,000 in weekly CafeTO related sales throughout the summer
- The average restaurant served 400 CafeTO customers per week

According to Strong Towns, the outdoor patios made 49 times more revenue than revenues from the parking they replaced. The estimated parking revenue during this time period, according to Strong Towns was $3.7 million (in comparison to $181 million in revenues).

* It is important to note that the comparison is between total revenues (rather than sales tax revenues) compared to parking meter revenues.

Case Study: San Francisco Economic Impact Analysis

The City of San Francisco examined the impact of their Shared Spaces program, which was created at the advent of Covid-19. It already had a “Parklet” program which essentially expanded into the Shared Spaces program during the Pandemic.

In order to better understand the potential economic impact of the Shared Spaces program, San Francisco undertook an economic impact analysis of the parklet program (prior to the pandemic) to provide some indication on how the Shared spaces program might benefit the City’s economy.

Results

- The analysis focused on impacts of parklets on a pre-pandemic basis because it operated during a “normal period”. Permanent street closures were not addressed as the City felt that they could have a material impact on the provision of alternative mobility throughout the City.

- To examine the effect of a Parklet, the analysis measured the businesses’ sales tax growth in the year following the parklet permit and compared it to citywide sales tax growth for the same industry over the same time frame.

- For businesses installing a Parklet, average quarterly revenues grew by 29% or $56,000 in the year following the Parklet application date. Businesses in the same industry that did not install a Parklet saw their revenues during the same time period grow by only 10% on average.

- The faster parklet growth was deemed to be statistically significant at the 90% confidence level.

- Adjacent or nearby businesses were not measurably impacted (either positively or negatively) by the presence of a nearby parklet, from the loss of parking primarily.
Case Study: Arvada Business Impact Analysis

The City of Arvada launched an Arvada Resiliency Task Force at the advent of the Covid-19 pandemic. Like many communities, the City issued temporary use permits for tents and patio expansions focusing on Olde Town Arvada as well as other areas within the City. Most of the expansion activity has occurred in Olde Town.

The City of Arvada closed down some of the streets in the Olde Town area during the pandemic. Because of public support, the City has planned permanent street closures around Olde Wadsworth primarily to help and support Olde Town businesses as well as activate Olde Town.

The business impact analysis focused on a number of activities that the City undertook to help support their commercial businesses. In the first year of the program (May 2020 to May 2021, the City:

- Issued 13 temporary use permits for tents / patio expansion
- Oversaw 20 patio expansions in Olde Town and 32 liquor license premise expansions
- Retained $2.1 million in tax revenues during the heart of the pandemic that would have otherwise been lost had businesses permanently closed
- Spent $182,500 on Olde Town street closures and Business Improvement District support
- Participated in several grant programs to help businesses

The City of Arvada also undertook a study which examined parking, visitor, and sales tax trends during and after Covid-19. While Olde Town visitorship has not returned to 2019 levels, sales tax revenues have more than rebounded (see the figures to the right). They observed, however, that the revenue analysis is misleading.

- The pandemic has resulted in labor shortages resulting in the need to increase worker wages.
- In addition to increases in worker wages, inflation emerged as a serious business consideration due to increases in prices for raw materials
- While businesses appear to have increased revenues, their costs have increased substantially
- Sales tax generation is based on gross revenues so much of the gain is due to inflationary pressures rather than actual increases

In May 2020, the City and County of Denver created a Temporary Outdoor Expansion (TOE) program to allow restaurants and bars to operate in outdoor settings adjacent to their businesses. These spaces allowed establishments to safely expand service capacity during the height of the COVID-19 pandemic into adjacent outdoor dining spaces often located in parking lots, streets, and sidewalks.

The City already had a Tables, Chairs and Railings (TCR) program which sets rules and regulations and other guidelines for outdoor seating areas as outdoor dining is a popular option in Denver.

While the TCR program was in place already, the pandemic saw the addition of many more temporary expansions (TOEs) in order to comply with public health and safety spacing requirements.

Source: City of Denver, QCEW, ArLand
Economic Impact: TOE / TCR Analysis

TOE usage varied with downtown and downtown-adjacent neighborhoods taking more advantage of the TOE program than neighborhoods further to the south for a variety of reasons.

It is notable that despite the significant number of restaurants located along major corridors including South Federal and South Colorado Boulevards, restaurants in these locations took less advantage of the TOE / TCR program.

Restaurants in these areas tend to be located in strip commercial centers and expanding into sidewalks and parking areas would have also entailed negotiating with landlords in addition to dealing with City permitting processes.

Source: City of Denver, QCEW, ArLand
Economic Impact: TOE / TCR Analysis

The City of Denver has 78 neighborhoods. In order to estimate the economic impact of outdoor dining in the City of Denver, the following steps were undertaken:

- **Total Estimated Restaurant Count by Neighborhood**: Estimated based on State of Colorado employment by industry data for the City of Denver as well as estimates from the City of Denver. The restaurant category includes all restaurant types including sit-down restaurants, quick serve restaurants and fast food establishments.

- **Total Estimated TCR and TOE counts**: The TCR / TOE counts are based on data from the City of Denver’s permitting offices for these programs.

- **Eliminated Neighborhoods**: Neighborhoods with nine or fewer restaurants were eliminated from the list as City sales tax revenue data for the restaurant category was only available for those neighborhoods with ten or more restaurant establishments.

- **Neighborhoods with Heavier Utilization of TOE / TCR**: By calculating a ratio of the usage of TCR / TOE to the total estimated number of restaurants by neighborhood, the analysis was able to focus on those neighborhoods with a higher percentage utilization of the outdoor dining programs than those which were not.

- **Neighborhoods Analyzed**: Our subsequent analysis focuses on those neighborhoods where utilization rates were 70% and higher. Most of these neighborhoods were popular restaurant destination neighborhoods prior to the pandemic. Jefferson Park was eliminated from the analysis because of the relatively low number of restaurants in the neighborhood (10). The Civic Center neighborhood was the only downtown neighborhood with a utilization rate over 70%.

### Estimated TOE / TCR Utilization by Neighborhood

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Total Restaurants</th>
<th>TCR</th>
<th>TOE</th>
<th>Total TCR + TOE</th>
<th>Ratio of TCR/TOE to Total Restaurants</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Park West</td>
<td>42</td>
<td>29</td>
<td>9</td>
<td>38</td>
<td>90%</td>
</tr>
<tr>
<td>Washington Park</td>
<td>16</td>
<td>8</td>
<td>6</td>
<td>14</td>
<td>88%</td>
</tr>
<tr>
<td>Jefferson Park</td>
<td>10</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>80%</td>
</tr>
<tr>
<td>Civic Center</td>
<td>24</td>
<td>11</td>
<td>6</td>
<td>17</td>
<td>71%</td>
</tr>
<tr>
<td>Highland</td>
<td>84</td>
<td>27</td>
<td>32</td>
<td>59</td>
<td>70%</td>
</tr>
<tr>
<td>Five Points</td>
<td>126</td>
<td>40</td>
<td>42</td>
<td>82</td>
<td>65%</td>
</tr>
<tr>
<td>Congress Park</td>
<td>37</td>
<td>14</td>
<td>10</td>
<td>24</td>
<td>65%</td>
</tr>
<tr>
<td>City Park</td>
<td>14</td>
<td>8</td>
<td>1</td>
<td>9</td>
<td>64%</td>
</tr>
<tr>
<td>North Capitol Hill</td>
<td>37</td>
<td>16</td>
<td>6</td>
<td>22</td>
<td>59%</td>
</tr>
<tr>
<td>Union Station</td>
<td>122</td>
<td>19</td>
<td>52</td>
<td>71</td>
<td>58%</td>
</tr>
<tr>
<td>Washington Park West</td>
<td>16</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>56%</td>
</tr>
<tr>
<td>Cherry Creek</td>
<td>51</td>
<td>9</td>
<td>17</td>
<td>26</td>
<td>51%</td>
</tr>
<tr>
<td>Platt Park</td>
<td>26</td>
<td>3</td>
<td>10</td>
<td>13</td>
<td>50%</td>
</tr>
<tr>
<td>Speer</td>
<td>68</td>
<td>18</td>
<td>14</td>
<td>32</td>
<td>47%</td>
</tr>
<tr>
<td>Baker</td>
<td>28</td>
<td>5</td>
<td>8</td>
<td>13</td>
<td>46%</td>
</tr>
<tr>
<td>Hale</td>
<td>25</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>44%</td>
</tr>
<tr>
<td>Capitol Hill</td>
<td>59</td>
<td>14</td>
<td>12</td>
<td>26</td>
<td>44%</td>
</tr>
<tr>
<td>Cheesman Park</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>43%</td>
</tr>
<tr>
<td>West Colfax</td>
<td>12</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>42%</td>
</tr>
<tr>
<td>Berkeley</td>
<td>44</td>
<td>5</td>
<td>13</td>
<td>18</td>
<td>41%</td>
</tr>
<tr>
<td>West Highland</td>
<td>37</td>
<td>5</td>
<td>7</td>
<td>12</td>
<td>32%</td>
</tr>
<tr>
<td>South Park Hill</td>
<td>23</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>30%</td>
</tr>
<tr>
<td>Sunnyside</td>
<td>25</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>28%</td>
</tr>
</tbody>
</table>

Source: City of Denver, QCEW, ArLand
The figure on the left shows receipts received by those neighborhoods where at least 70% of the restaurants in the neighborhood participate in the TCR or TOE program. The figure on the right shows receipts received by restaurants in the rest of the City where the TOE/TCR participation rates varied. These are quarterly sales receipt figures which reflect seasonality. It shows that the neighborhoods with a higher percentage utilization of the TOE/TCR program have seen greater percentage revenue increases than the restaurants in neighborhoods in the rest of the City. The columns shown the actual receipts while the line indicates the percentage change. Because the figure on the left is a small subset of neighborhoods, compared to the rest of the City, the scales are different.
Economic Impact: TOE / TCR Comparisons

Restaurants in Denver have the option of paying their sales taxes either monthly, quarterly, or annually. Revenues are seasonal. Revenues in warmer weather help sustain restaurant businesses for the entire year. Denver’s TOE program was put into place in May, 2020.

In order to normalize seasonal changes, the analysis also compared revenues on a quarterly and annual basis to better assess how the TCR / TOE program fared across the City.

- **4Q 2019 v 4Q 2020**: Colder weather and the inability to serve outdoors led to decreased restaurant revenues in the 4th quarter of 2020 compared to the 4th quarter of 2019. Restaurants in neighborhoods with a high TOE/TCR participation rate as well as restaurants in the rest of the City saw an equivalent 29% decrease in revenues between the 4th quarter months in 2019 and 2020. (0% difference)

- **1Q 2020 v 1Q 2021**: March 2020 saw the advent of Covid-19 lockdowns. The 1st quarter of 2021 also saw the emergence of the Delta variant. However, while sale decreases were seen, the neighborhoods with the high TOE/TCR participation rates saw a decrease of 8% in sales tax revenues while the rest of the City saw a larger decrease of 13%. (5% difference).

- **2Q 2020 v 2Q 2021**: The difference between the 2nd quarter of 2020 (the advent of the TOE program) and the 2nd quarter of 2021 is significant. Neighborhoods with a high TOE/TCR participation rate saw a 161% increase in revenues when comparing these quarters. Neighborhoods without the program saw a relatively smaller 95% increase in revenues indicating that the TOE and TCR program may have contributed up to a 50% increase in revenues. (50% difference).

- **3Q 2020 v 3Q 2021**: Restaurants in neighborhoods with a high TOE/TCR participation rate saw a 51% increase in revenues compared to other restaurants in the City with a 38% revenue increase (13% difference) during this quarter.

The overall net annual average benefit of the TCR / TOE program is an 18% increase in sales tax revenues to the City of Denver based on gross revenues generated by eating and drinking businesses.
Economic Impact: Inflation

Near Term Economic Considerations

Despite positive revenue growth, an important consideration for restaurants is the immediate economic environment as well as the rising cost of goods and labor.

- According to the National Restaurant Association, economic challenges persist because of rising labor costs due partially to the unavailability of labor, rising materials costs. (figures below)

- The CPI is a good indicator of the inflationary challenges business and consumers have faced recently. It has increased considerably in the last year for the Denver-Aurora-Lakewood region (figure top right).

- Data from the National Restaurant Association (figure bottom right) indicate that while menu prices have increased, grocery prices (for restaurant meals as well as for meals at home) have increased even more dramatically.

Source: Bureau of Labor Statistics, ArLand

Source: National Restaurant Association, 2022
Economic Impact: Local Restaurant Challenges

Ongoing Local Challenges

Since 2020, Denver has sustained a net loss of over 11% of its total number of restaurants. Prior to 2020, that number usually grew by 3-5% per year.

- The figure to the right indicates the continued decline in the number of restaurants in Denver with impacts of Covid-19 being felt several years after its onset.

- Other challenges include comparatively higher Denver restaurant wages compared to other Front Range communities (which don’t have minimum wage requirements):
  - Denver tipped wages are up 43% since 2019
  - Overall restaurant wages are up 30%
  - Minimum wage is tied to the CPI and is likely to increase

Source: DEDO
Economic Impact: Parking Meter Comparison

Parking Meters

Parking meters in the City of Denver tend (generally) to be located in neighborhoods with TOE and TCR permits. Not surprisingly, meter revenue fluctuated significantly in the last five years. During the pandemic, the City also suspended parking meter payments for a period of time.

In examining parking meter revenue before and after the pandemic (2018 and 2022), several neighborhoods have consistently robust parking revenues including CBD, Cherry Creek, Highland, Speer and Union Station.

Overall annual City average revenues per meter was $1,910 in 2018, increasing to $2,268 in 2022. The average is about $2,100 per meter; for our purposes, we will simplify to $2,000 average revenue per meter.

*Note: The City increased its parking meter rate to $2 from $1 per hour in January 2022.

Source: City of Denver, ArLand

Parking Meter Locations, TOE/TCR Permits

Annual Average Parking Meter Revenues

*Note: The City increased its parking meter rate to $2 from $1 per hour in January 2022.

Source: City of Denver, ArLand
Economic Impact: Parking Meter Comparison

Sales Tax Revenues from Outdoor Expansions compared to Parking Meter Revenues

<table>
<thead>
<tr>
<th>400 sf Expansion (Only)</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Revenues from a Restaurant ($/sf) with a Patio Expansion</td>
<td>$165,200</td>
</tr>
<tr>
<td>City of Denver Sales Tax Rate</td>
<td>4.81%</td>
</tr>
<tr>
<td>Revenues to City from Expansion</td>
<td>$7,946</td>
</tr>
<tr>
<td>2 Parking Meter Revenues</td>
<td>$4,000</td>
</tr>
<tr>
<td>Total Business Revenues vs. Parking Meter Revenues [1]</td>
<td>40:1</td>
</tr>
</tbody>
</table>

Sales Tax Revenues vs Parking Meter Revenues | 2:1

[1] Toronto case study methodology

Source: City of Denver, ArLand

Business and Sales Tax Revenues compared to Parking Meter Revenues

A 400 square foot expansion is estimated to:

- Create 40 times more business revenue than comparable parking meter revenue
- Create 2 times more sales tax revenues than comparable parking meter revenue

Assumptions include:

- The revenues from the expansion result in 18% additional revenues to the business as a result of the expansion. These revenues are applied to the expansion area only.
- The City of Denver sales tax rate is 4.81%. Businesses, however, pay significantly more (8.81%); the balance of the revenues go to the State of Colorado and RTD.
- The parking revenues generated are equivalent to an estimate of revenues from two parking meters.
- Potential sales tax revenues outpace parking meter revenues 2:1.