TRANSPORTATION NETWORK COMPANIES AND TAXICABS:
Transportation Bureau needs to monitor service, not just safety

October 2016

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TO: Mayor Charlie Hales
Commissioner Nick Fish
Commissioner Amanda Fritz
Commissioner Steve Novick
Commissioner Dan Saltzman
Leah Treat, Director, Portland Bureau of Transportation

SUBJECT: Audit Report – Transportation Network Companies and Taxicabs: Transportation Bureau needs to monitor service, not just safety (Report #488)

This report contains the results of our audit of the City’s oversight of transportation network companies and taxicabs. It also includes the Transportation Bureau’s response to our recommendations.

We redacted some data about transportation network companies in our report (pages 5, 6, and 11). Obscuring this data did not change our audit findings or recommendations. Transportation network companies designated data they report to the City (including number of rides and collision data) as confidential, and the City largely agreed to confidentiality when it reformed City Code and signed confidentiality agreements with the companies. One company objected to the City publishing data about its number of rides after our audit fieldwork ended. In this case, we followed the City’s confidentiality agreement and advice from the City Attorney’s Office.

The Council expected companies to routinely report data to the City for analysis of service quality, as we describe in our report. Separate from our audit, the City received a public records request for data, and the Multnomah County District Attorney ordered the Transportation Bureau to release it. The courts are still reviewing this order.

Regardless of the outcome of any records request, it is critical that the City oversee the safety and service of transportation network companies and taxicabs operating in Portland. Our recommendations describe specific improvements the Transportation Bureau should make to ensure the effectiveness of its regulatory program.

We will follow up in one year with the Commissioner-in-charge and the Director of Transportation for a status report detailing the steps taken to address our audit recommendations.

We appreciate the cooperation and assistance we received from the Transportation Bureau as we conducted this audit.

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City Auditor

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In 2015, the City Council allowed transportation network companies, such as Uber and Lyft, to transport passengers in Portland under new regulations. At the same time, Council removed or changed many taxicab regulations. In a short amount of time, the Portland Bureau of Transportation has made large changes to its management and oversight of the industry.

As of fall 2016, the Transportation Bureau has made progress achieving some of Council’s goals, but other goals could not be measured yet because of data problems.

<table>
<thead>
<tr>
<th>Council goals</th>
<th>Audit results</th>
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</thead>
<tbody>
<tr>
<td><strong>Competition</strong></td>
<td>Five new companies offer rides with hundreds more drivers and cars. Prices now vary.</td>
</tr>
<tr>
<td>Promote competition; deregulate prices; and allow transportation network companies to operate in Portland.</td>
<td></td>
</tr>
<tr>
<td><strong>Public safety</strong></td>
<td>Transportation Bureau proactively educates drivers and companies and has inspected hundreds of drivers on the road. Previously, the City did not perform such inspections, but more improvements can be made. Transportation suspended about 30 drivers, but issued few warnings about driver conduct or unsafe practices. Transportation receives some collision reports and complaints, but has not studied patterns yet.</td>
</tr>
<tr>
<td>Require companies to check driver backgrounds, inspect cars, and have insurance.</td>
<td></td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td>Under new data reporting requirements, the City gets some data from companies. Transportation has not regularly studied how long passengers wait or how many rides were not served by companies. The bureau cannot measure the extent of customer service problems, because some companies are not reporting all required data. The bureau reviewed anecdotal complaints. Transportation has not yet verified data, nor analyzed geographic equity, wait times, or accessible service.</td>
</tr>
<tr>
<td>Drivers must not refuse rides.</td>
<td></td>
</tr>
<tr>
<td>Companies must offer citywide 24/7 service.</td>
<td></td>
</tr>
<tr>
<td>Companies must accommodate riders with disabilities.</td>
<td></td>
</tr>
<tr>
<td>Passenger wait times should be less than 30 minutes.</td>
<td></td>
</tr>
<tr>
<td><strong>Effective regulation</strong></td>
<td>Riders pay a $0.50 fee, but the fee was based on rough estimates for ride volume. Shifting responsibility for background checks to the industry has been partially successful. Transportation has hired more staff to deal with its increased workload.</td>
</tr>
<tr>
<td>Recover the City’s costs of regulation with a per-ride fee and shift administrative work to the transportation industry.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Audit Services
Four different data problems made it difficult for the Transportation Bureau to track whether transportation network companies and taxicab services met City requirements:

1. The bureau did not regularly and systemically analyze data it collected from the industry.
2. The taxicab industry did not report several required pieces of data to the City.
3. The City does not require companies to share detailed data that would enable more analysis and verification.
4. The industry designated its data as confidential, which makes it difficult for the City to publicly report it.

Transportation officials emphasized their oversight responsibilities only began in July 2014 when they took over regulation from the Revenue Bureau and said they have made many improvements since.

To meet Council’s policy goals, we recommend the Transportation Bureau focus on obtaining and analyzing data for unfulfilled rides, underserved areas, long wait times, and service for disabled passengers. Further, the City should make better use of complaint, collision, and inspection data. Improvements can also be made to City inspections of drivers and vehicles.

Source: Audit Services
The Portland Bureau of Transportation regulates transportation network companies and taxicabs. While taxicabs have been regulated for decades by the City, transportation network companies are a recent addition to the market. Transportation network companies connect passengers with drivers through internet-based applications, as shown in Figure 1.

City Council changed policy in 2015
In 2015, Council changed the laws for taxicabs and transportation network companies, after it received recommendations from community members and businesses and was lobbied by a variety of stakeholders. The new policy:

- Allowed transportation network companies to operate under new requirements, including minimum standards for service, safety, insurance, and data reporting
- Removed many taxicab regulations, such as limits on the number of permits and price rates, and created new data reporting requirements
- Shifted the Transportation Bureau’s responsibilities from permitting to more monitoring and enforcement
- Authorized the City to collect regulatory fees from taxicab and transportation network company rides.

Figure 1
Customers call a transportation network company vehicle using a smartphone application

Source: Audit Services
Now, the Transportation Bureau inspects selected drivers and cars after their company certified their compliance with City rules. Previously, the City’s taxicab regulations restricted competition, especially from new companies, and industry representatives on the Board of Review contributed to policy-making and permit decisions. Council also gave Transportation the responsibility to monitor service quality – a new component focused on customer experiences.

Portland’s recent history of taxicab and transportation network company regulations is summarized in Figure 2.

**Figure 2** History of taxicab and transportation network company regulations in Portland

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2014</td>
<td>The Transportation Bureau takes over regulatory responsibilities from the Revenue Bureau. There are six taxicab companies with about 400 to 500 vehicles total.</td>
</tr>
<tr>
<td>early Dec. 2014</td>
<td>Uber begins operating in Portland without a permit; the City confronts Uber with legal action and fines.</td>
</tr>
<tr>
<td>mid Dec. 2014</td>
<td>Uber stops operating in Portland while City officials commit to developing new rules to allow transportation network companies. The Council convenes a task force.</td>
</tr>
<tr>
<td>April 2015</td>
<td>After an initial task force report, the City allows Uber and Lyft to operate under a pilot program while the task force continues studying the issues.</td>
</tr>
<tr>
<td>May 2015</td>
<td>Transportation network companies get permitted and begin service at Portland International Airport.</td>
</tr>
<tr>
<td>August 2015</td>
<td>The task force issues its second report. The Transportation Bureau studies ride data from April to August.</td>
</tr>
<tr>
<td>December 2015</td>
<td>The Council adopts new code provisions, following extensive public testimony. New code sets minimum standards for transportation network companies and eliminates many taxicab regulations.</td>
</tr>
<tr>
<td>January 2016</td>
<td>Code changes take effect, formally establishing today’s regulation system.</td>
</tr>
</tbody>
</table>

Source: Audit Services

About one year into this new regulatory environment, including the pilot phase, this audit assessed how customers experience rides with taxicabs and transportation network companies and how effectively Transportation is regulating the industry.
Transportation officials said they are still adjusting to the new environment and will make changes as needed. They also said Portland’s rules are unique and other cities are not regulating transportation network companies in the same fashion. They said many other cities do not require data reports, apply service standards, or conduct inspections like Portland now does.

Transportation is also trying to balance the tension between government regulation and market competition, officials said.

Many more vehicles are on the road

A Council goal was to promote competition among companies and to allow transportation network companies to operate in Portland. The new policy also encouraged more competition by removing limits on the number of taxicabs and price regulations. Previously, Portland had relatively few taxicabs for its population size, according to a study commissioned by a taxicab company.

More companies are providing service

Following the 2015 policy changes, three new taxicab companies and two new transportation network companies began offering rides in Portland, adding hundreds more drivers and cars. Transportation network companies say the exact number of their drivers and vehicles is confidential. Uber had 4,000 “active drivers” in Portland, according to a recent news story.

In the past, it had been difficult for taxicab companies to expand their fleets or for new taxicab companies to start service, because the City’s regulations and the Board of Review effectively limited them.

Riders have taken advantage of the different transportation options, as shown in Figure 3. Ride data collected by the Transportation Bureau shows that passengers took about 1,000 rides per day with transportation network companies and about 3,000 with taxicabs in April 2016; Transportation concluded that there was a large unmet demand for rides that is now being served by more drivers and more vehicles under the new regulations.

1) Redacted in accordance with confidentiality agreement and City Attorney’s Office’s advice.
Since 2015, the City has required both transportation network companies and taxicab companies to submit ride statistics. The purpose was to allow the Transportation Bureau to analyze the service quality, find disparities in service, and charge regulatory fees to the companies. With its new policy, the City reiterated or clarified its requirements for good service, shown in Figure 4.

**Figure 4 Service requirements for companies and drivers**

- Prohibited from refusing to transport a passenger*
- Must offer citywide service 24 hours a day, 7 days a week; it is also a City goal to improve transportation options in historically underserved neighborhoods
- Must provide meaningful accessible service, 24 hours a day, 7 days a week – including accommodating wheelchair users and service animals
- Keep passenger wait times below 30 minutes, including for wheelchair-accessible rides

* some exceptions are allowed

Source: Audit Services review of code and policy documents

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**Transportation has not regularly studied service problems**

Since 2015, the City has required both transportation network companies and taxicab companies to submit ride statistics. The purpose was to allow the Transportation Bureau to analyze the service quality, find disparities in service, and charge regulatory fees to the companies. With its new policy, the City reiterated or clarified its requirements for good service, shown in Figure 4.
Before 2015, companies did not submit ride statistics to the City and the City did not analyze these service goals.

**Transportation Bureau is not monitoring data systemically to find or address service problems**
The Transportation Bureau analyzed industry data for summer 2015, but has not done so systemically since the pilot phase. Transportation managers said analyses have not been updated because of understaffing and other priorities. Figure 5 summarizes the summer 2015 analysis. While Transportation staff have acted on individual complaints and individual compliance issues, they have not yet analyzed the data regularly or systemically.

**Figure 5** Transportation Bureau analyzed ride data for May through August 2015, but has no up-to-date analyses now

As of August 2015, Transportation had found:
- Daily rides increased from 7,000 to 10,000
- Companies provide service citywide, but ridership was geographically concentrated in the city center. Taxicab ridership was more dispersed throughout the city than transportation network company ridership
- 2 to 6 percent of transportation network company rides had been canceled; there was no comparable taxicab data
- In East Portland, transportation network company ridership grew
- Taxicab wait times were eight minutes on average (but data was incomplete), transportation network company wait times were six minutes. Wait times were longer further from the city center
- Challenges faced by people with disabilities included a limited supply of wheelchair-accessible transportation

Source: Transportation report to Council, December 2015
Without analysis, Transportation cannot systemically enforce regulations, track service quality in the industry, or monitor the ride data for Council’s concerns about:

- Drivers refusing to pick up passengers
- Underserved areas, times of day, or populations
- Wheelchair-accessible vans not available
- Disparities in wait times.

**Companies are not reporting all required data**

Almost all taxicab companies are having problems reporting more than basic data to the City, although they are required to provide more detail. Transportation network companies appeared to report the specific data required by the City.

*No data on canceled taxicab rides:* Most taxicab reports were missing data about canceled rides and requests for wheelchair-accessible taxis, as detailed in Figure 6. Rides that were canceled by the driver or company can reveal service problems such as drivers avoiding underserved areas or customer groups. The Transportation Bureau said that some companies did not have the technical resources to create such reports, and that different data collection systems are used among taxicab companies.

Even when taxicab companies reported canceled rides, they did not meet the intent of the City’s requirements. Council’s intent for the data was to learn if companies were unable or unwilling to serve certain customers. Taxicab companies, however, mainly report rides that the customer canceled, as opposed to rides that the company did not fulfill. These different kinds of cancellations indicate separate service issues, the latter being of more interest to the City.

Transportation network companies did not fulfill 2 percent of ride requests in July 2016, according to their reports to the City. Confidentiality agreements may prevent the City from reporting details, such as company-specific information.

*No data on taxicab wait times:* Most taxicab companies also did not report passenger wait times to the City, as shown in Figure 6. A Council goal was to learn how much time passed between a customer calling a ride and the vehicle’s arrival. Long wait times can indicate service prob-
lems, such as drivers avoiding certain neighborhoods or customer groups. Long-standing business practices in the taxicab industry may complicate data reporting, as there are different ways to track wait times for customers who call in advance and for street hails.

Wait times for transportation network company rides averaged four minutes in March 2016, according to our analysis of Transportation records.

**Figure 6**  
**Companies are not reporting all required data to the City**

<table>
<thead>
<tr>
<th></th>
<th>Taxicab companies</th>
<th>Transportation network companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rides</td>
<td>✓✓✓✓✓✓✓✓✓</td>
<td>✓✓</td>
</tr>
<tr>
<td>Canceled/unfulfilled rides</td>
<td>✓✓✗✗✗✗✓</td>
<td>✓✓</td>
</tr>
<tr>
<td>Wheelchair rides</td>
<td>✓✓✗✗✗✗✓</td>
<td>✓✓</td>
</tr>
<tr>
<td>Origin ZIP code</td>
<td>✓✓✓✓✓✓✗</td>
<td>✓✓</td>
</tr>
<tr>
<td>Destination ZIP code</td>
<td>✓✓✓✓✗✗✗</td>
<td>✓✓</td>
</tr>
<tr>
<td>Wait time</td>
<td>✓✓✗✗✗✗✗</td>
<td>✓✓</td>
</tr>
<tr>
<td>Ride duration</td>
<td>✓✓✓✓✓✓✗</td>
<td>✓✓</td>
</tr>
<tr>
<td>Miles traveled</td>
<td>✓✗✓✓✓✗✗</td>
<td>not required</td>
</tr>
</tbody>
</table>

✓ = yes  (✓) = partially  ✗ = no

Source: Audit Services analysis of sampled Transportation Bureau records

The Transportation Bureau said it expects to get company data that meets the code requirements in six to twelve months. It is also planning to work with the Bureau of Technology Services to build a database that will enable better analysis.

**With unverified ride data, the City may be undercollecting fees**

The City charges fees to cover its regulatory costs. It is at risk of collecting fees based on inaccurate data, and specifically undercollecting. Previously, the City charged an annual permit fees to taxicab drivers and companies. Now, the City charges a $0.50 fee per ride, and the number of rides are reported by companies. Companies must
pay this fee to the City, but pass it on to passengers. This fee structure increases the likelihood that companies may underreport their ride data to lower their costs. To protect against this risk, the City must ensure it has accurate ride data.

The Transportation Bureau has not verified the ride data from any transportation network company or taxicab company for accuracy or completeness (see Figure 7), even though the bureau thought that a few taxicab companies may have underreported their ride volume in early 2016. In a 2015 report, the bureau found taxicab records were “often missing or incomplete.” The extent of underreporting may have been about 300 rides per day at one company, which would amount to a daily loss of $150 in uncollected City fees. Taxicab drivers may underreport rides when they do not record them, use a third-party payment processor, or do not turn on the meter. Companies could also underreport rides to the City.

The Transportation Bureau said it trusts the data reported by transportation network companies because these companies use technology-based dispatch platforms, making it easier to collect and review data. The bureau also relied on airport staff who confirmed company data at one point. Transportation checked some data for reasonableness by comparing subtotals against monthly airport ride data, but was unable to do more because it did not have a staff position to analyze the voluminous data. Given the signs that some of the self-reported data by taxicab companies may have been inaccurate, Transportation should confirm data submitted by companies through more robust verification.

Figure 7 Transportation Bureau has not verified ride data of any company

<table>
<thead>
<tr>
<th>Taxicab companies</th>
<th>Transportation network companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verifed data</td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2</td>
</tr>
</tbody>
</table>

✓ = verified  × = no verification  ✗ = no verification despite accuracy concerns

Source: Audit Services analysis of Transportation Bureau process
Even if the City wanted to analyze ride data for patterns of under-reporting or other compliance issues, data it requires is not detailed enough for more systemic analyses. For example, ZIP codes alone do not allow analysis of specific geographic points of interest. The City is also not getting much data on drivers, so it cannot systemically test compliance with the 12-hour maximum drive time per driver or analyze driver issues. For additional data collection, Transportation officials told us they would need more staff and some companies would need to change their systems.

The Transportation Bureau plans to work with vendors of taxicab meters to get standardized reports, but current City code makes taxicab companies responsible for reporting. Transportation also plans to cross-reference taxicab and transportation network company data with inspection results and airport data. It hired a new staff member to focus on data analysis in the summer of 2016.

**Transportation Bureau could analyze customer complaints and collision reports more systemically**

Some customers complain to the Transportation Bureau about service issues, which is a key avenue for the City to learn about problems. Transportation logged about 30 complaints from January through May 2016. For context, companies reported more than 1 rides during this period.

Eleven complaints were about unsafe driving and six alleged that drivers refused to transport a passenger. While these complaints are about specific cases and may not reflect overall service, they are red flags related to Council’s concerns when the City adopted the new policy in 2015.

Examples of complaints were:

- “I was tailgated by this vehicle for a number of blocks. … the [company name] driver must have been at 60+ [miles per hour] as he passed me. The driver was also interacting with a dash-mounted mobile device while driving.”
- “Twice within a single month I have had a driver attempt or flat out refuse service because I have a guide dog service animal.”

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1) Redacted in accordance with confidentiality agreement and City Attorney's Office's advice.
Transportation refrained from penalizing drivers when it believed it did not have enough evidence to prove a code violation. Even when complainants gave information that made allegations plausible, Transportation staff did not consistently follow up on those complaints because they said they did not have sufficient information to investigate. Transportation told us, as an improvement to their process, they now send a warning letter with educational information to every driver named in a complaint. Transportation does not inform complainants of the results, but plans to do so in the future.

Transportation did not analyze complaints for trends and patterns, beyond anecdotes, to inform its enforcement or education work. Transportation explained that it was moving away from paper-based records and plans to get a new record-keeping system that shows related files in a single view.

Customers may also complain directly to companies, but in these cases the City would likely not get involved.

_Collision reports lack detail and may be incomplete:_ Transportation receives some reports from companies when their drivers are involved in collisions. Reports are required by code for all collisions that result in injuries or more than $1,500 in damage. The Transportation Bureau can suspend drivers who have six such collisions in a 3-year period.

For example, one company reported 24 collisions from January through April 2016 and another company reported 157 collisions from January through May 2016. These reports included many rear-end collisions.

Taxicab companies file their collision reports on a Transportation Bureau form, but the information is too brief to be useful. Transportation network companies simply provided the number of collisions involving their drivers without any explanation or identifying information. Transportation staff files, but does not analyze this information, missing the opportunity to understand patterns or penalizing drivers when they might be faulted. Transportation said its current databases and record-keeping systems do not offer a convenient view of all relevant records related to a case, which hindered fuller analysis.
Because Transportation has not analyzed collision reports, it cannot determine if companies report all collisions as required. Transportation said it relied on companies to meet their reporting requirements. When collisions are underreported or inconsistently reported, Transportation cannot infer collision rates or determine how safe a company is. Transportation said it wants to suspend drivers who have more collisions than the code allows. Transportation staff see collisions when they look up a driver’s state motor vehicle records.

Some companies designated their collision reports as confidential trade secrets and sought to exempt them from public disclosure, even though safety-related records from other types of government inspections of private businesses are public records by law.

**Too early to tell effect of transportation network companies on taxicab industry**

When Council was debating whether to allow transportation network companies to enter Portland’s market, concerns were raised about their effect on long-standing taxicab companies. The City sees taxicab companies as one avenue for small businesses and minority-owned businesses to participate in the economy. The taxicab industry across the country is concerned that adding more drivers and cars could have negative consequences for taxicab companies.

We found that it is too early and data is too limited to draw conclusions about the effect of transportation network companies on the demand for taxicabs. Transportation network company rides now outnumber taxicab rides, but the number of taxicab rides appears steady, as shown in Figure 3. It is important to note that ride data is incomplete and has not been verified by the Transportation Bureau.

The community task force also noted concerns about drivers’ working conditions and incomes, environmental impacts, and traffic congestion. To evaluate these concerns, Transportation needs more and better data.
Transportation Network Companies and Taxicabs

**Prices vary now, but the City lacks price data**

The City no longer regulates the prices taxicabs charge passengers. Before 2015, the City had set a maximum price for taxicab rides to prevent taxicabs from overcharging customers.

Regulations now require taxicabs and transportation network companies to be transparent in pricing. Dynamic pricing is permitted, which means companies may charge higher prices when demand for rides is high. Transportation officials and transportation network companies said that dynamic pricing encourages more drivers to work when demand for rides is high.

**Transportation network companies are cheaper than taxicabs, except maybe when dynamic prices are used**

Prices vary widely now. Some taxicab companies charge the same rates as they did under the old regulations, but some companies have raised their rates. We estimated the price of a ride from the airport to downtown at $36 under the old regulations. The same trip can now cost up to $52.

Transportation network companies charge less than taxicabs, so the airport-to-downtown trip costs about $25. Transportation network companies, however, can also raise their prices dynamically at any time.

Rates are not directly comparable because taxicab rates are per mile and transportation network company rates are per mile and per minute. Different companies also have different base charges, extra charges, and discounts.

**The City does not track dynamic pricing systemically**

Transportation network companies do not report to the City when or how often they activate dynamic pricing. The City also does not know how much customers actually paid for each ride. City code does not require companies to report actual prices paid, and transportation network companies might argue that price data is confidential.

City code only requires companies to notify the City of their price rates, and the Transportation Bureau has publicly posted each company’s rates on its website. Transportation network company passengers, however, get an incomplete picture from the City-published rates, because the rate schedules do not show how expensive dynamic pricing can become.
The City has the authority to stop dynamic pricing during emergencies declared by the Mayor. This was to protect customers from high prices after an extreme example of dynamic pricing was reported in another city. The Transportation Bureau said it would be able to see dynamic pricing in real time when they open a transportation network company application on their smartphone. Transportation managers believed this was a sufficient way to track dynamic pricing.

Dynamic pricing is also prohibited for wheelchair-accessible rides, which Transportation says it would enforce when it receives a complaint.

**Other matter related to pricing**
During our audit work, we found outdated price information posted for two taxicab companies, which may have confused customers. Transportation had not updated its website after one taxicab company raised its prices. Another company was still showing old rates on its website. We referred these two issues to the bureau for follow-up.

Since 2015, Transportation has proactively inspected selected drivers and cars after their company let them drive.

The new policy also shifted many of the responsibilities for compliance to the companies, which now certify that their drivers passed background checks and meet other City requirements. Companies also certify that vehicles passed third-party inspections to meet City standards. Under the new policy, Transportation was supposed to focus more on customers and standards rather than administering individual permits and performing background checks.

Transportation carries out two types of inspections: (1) It selects drivers and vehicles on the road for surprise inspections and (2) it reviews selected company files every week. The City did not carry out these types of inspections under the old taxicab regulations.

**Inspections on the road reveal drivers’ behavior**
The Transportation Bureau makes about 150 surprise inspections on the road per month. Inspectors choose taxicabs waiting in the city center and take rides in taxicabs and transportation network company vehicles, pretending to be customers.
Inspections last about five minutes and cover a large number of code requirements and are also used to educate drivers. We saw that inspectors checked required documents, vehicle condition, and state motor vehicle records. Inspectors also educated and encouraged drivers to drive safely. When appropriate, inspectors warned drivers about lack of insurance documents, malfunctioning security cameras, low tire tread, and unsafe driving.

Figure 8  Transportation staff inspect drivers and vehicles

Source: Audit Services
These first-hand observations allow the bureau to address driver conduct and safe driving – which makes this a proactive inspection program.

To address the large number of new vehicles, Transportation has added resources to its inspections by redeploying some parking enforcement officers. This, however, takes time away from their regular duties of parking enforcement, and Transportation has not yet developed a long-term plan or performance measures to manage these new resources.

**Inspections of company records found some ineligible drivers**

The Transportation Bureau also reviewed company records for about 600 transportation network company drivers since the summer of 2015. It found about 30 transportation network company drivers who should be ineligible because of suspended driver licenses or their driving record, and also 200 lesser documentation issues. This type of inspection is especially important now, because companies perform their own background checks and vehicle inspections.

According to Transportation, each taxicab company and transportation network company was complying with the City's minimum insurance requirements at the time of our audit.

**Transportation Bureau should address gaps in its inspections**

The Transportation Bureau did not prioritize inspections based on data analysis, potentially causing misalignment of resources. Transportation has not yet systemically used data from past inspections to guide future inspections. It has inspected 500 taxicabs and 1,000 transportation network company vehicles, even though transportation network companies make up a much larger proportion of rides, as shown in Figure 3, and transportation network companies may have higher turnover among drivers.

Inspection results also showed that three out of ten drivers did not carry a business license, one out of four taxicab drivers did not carry their meter inspection certificate, and one out of five drivers did not carry their company insurance documents. One out of eight taxicab security cameras was malfunctioning. See Figure 9. The Transportation Bureau, however, has not yet used these results to systemically focus its resources or to target specific issues for future inspections.
Figure 9  Common problems found during inspections

<table>
<thead>
<tr>
<th>Problem</th>
<th>Problems found</th>
<th>As a % of inspections</th>
<th>Time period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business license document</td>
<td>210</td>
<td>28%</td>
<td>Jan-May 2016</td>
</tr>
<tr>
<td>Meter inspection document</td>
<td>76</td>
<td>25%</td>
<td>Jan-May</td>
</tr>
<tr>
<td>Company insurance document</td>
<td>141</td>
<td>18%</td>
<td>Jan-May</td>
</tr>
<tr>
<td>Camera</td>
<td>54</td>
<td>13%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>Transportation network company placards</td>
<td>76</td>
<td>9%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>Tire tread</td>
<td>30</td>
<td>8%</td>
<td>April-May</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>88</td>
<td>7%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>City fee shown on receipt</td>
<td>11</td>
<td>7%</td>
<td>April-May</td>
</tr>
<tr>
<td>Personal insurance</td>
<td>19</td>
<td>7%</td>
<td>April-May</td>
</tr>
<tr>
<td>First aid kit</td>
<td>68</td>
<td>6%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>Signage/decals</td>
<td>51</td>
<td>5%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>Vehicle registration</td>
<td>21</td>
<td>5%</td>
<td>April-May</td>
</tr>
<tr>
<td>Rates posted</td>
<td>4</td>
<td>3%</td>
<td>April-May</td>
</tr>
<tr>
<td>Meter seal</td>
<td>4</td>
<td>3%</td>
<td>April-May</td>
</tr>
<tr>
<td>Wheelchair ramp</td>
<td>4</td>
<td>3%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>State motor vehicle records</td>
<td>7</td>
<td>2%</td>
<td>April-May</td>
</tr>
<tr>
<td>“No smoking” stickers</td>
<td>6</td>
<td>1%</td>
<td>August 2015-May 2016</td>
</tr>
<tr>
<td>Hands-free device</td>
<td>11</td>
<td>1%</td>
<td>Jan-May</td>
</tr>
<tr>
<td>Sum</td>
<td>881</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not all items were inspected during each inspection; some drivers had multiple problems; some drivers were not inspected.

Source: Audit Services analysis of Transportation records

Surprise inspections become ineffective when companies or drivers recognize the inspector and change their behavior. For example, some drivers and a taxicab dispatcher recognized Transportation Bureau staff from previous inspections. Although the bureau already takes some measures to disguise its inspections, it has no assurance against company-level evasion. For example, when a known City inspector requests a ride, a company could send one of its better drivers and cars.

Transportation uses the list of on-the-road inspections to select drivers for company records checks. This results in duplicate inspections of drivers Transportation already reviewed, and leaves a gap for drivers who were not selected for on-the-road inspections. Moreover, the number of drivers’ records inspected per week per company is not based on company size or risk.
Transportation said it will move toward a risk-based, targeted inspection program. It also wants to analyze more data elements and identify issues in real time. Officials said they would continue penalizing non-compliant drivers and emphasized that fines for companies are stiff.

As a result of its inspections, Transportation sent about 200 warnings to the taxicab and transportation network industries, suspended about 30 drivers, and issued fines about 10 times. Transportation sent most of these warnings, suspensions, and fines to drivers, rather than to companies. Many of the 30 suspended drivers were found ineligible because of suspended driver licenses or their driving record, but were driving nevertheless. Because companies consider the number of drivers confidential, the City cannot publicly put these figures into perspective.

Most warnings were about documentation and other minor compliance issues. Very few written warnings and suspensions were about driver conduct, unsafe vehicles, or bad service.

Transportation believes that companies have done sufficient work to bring their drivers into compliance. We remain concerned that compliance issues including collision data, ride statistics, and rates paid may not be reported to or analyzed by the Transportation Bureau.

It was important to City Council and the community task force it formed that companies provide accessible services to disabled passengers. For example, the task force wanted to measure the wait times for customers who need a wheelchair-accessible car and compare them among companies. The code prohibits dynamic pricing for wheelchair-accessible service and requires that passengers with vision impairments or service animals be accommodated.

Anecdotally, service problems persist: We observed one taxicab dispatcher fail to provide alternatives or referrals when that company’s accessible van was unavailable. Transportation found similar problems in five of its inspections, which was 11 percent of the time.
When Transportation called companies to provide wheelchair-accessible vans, it took more than 30 minutes for them to arrive 23 percent of the time.

Transportation network companies have contracted with other companies to provide wheelchair-accessible vans on their behalf. Ride data shows that only a handful of wheelchair rides are taken each week with transportation network companies.

**Figure 10**  
**Wheelchair-accessible van**

Source: Audit Services
The Transportation Bureau does not have sufficient data to understand taxicab companies' wheelchair services. Many taxicab companies did not report wheelchair rides separately and also did not report wait times. The bureau said the two largest taxicab companies provided the bulk of wheelchair rides, and there was little demand for wheelchair service at the smaller companies.

Transportation is unsure whether there is a problem with service and is planning several more steps to define the problem and explore solutions.

The new policy shifted responsibility for background checks and vehicle inspections from the City to the companies that provide rides. Two transportation network companies and one taxicab company handle their own background checks now, but the Transportation Bureau is still checking driver backgrounds as a service to some taxicab companies for a fee. This is a substantial workload for Transportation staff.

Administering the new $0.50 per-ride fee also requires more administrative work by Transportation, including collecting and summarizing ride data for each company and sending invoices.

Transportation recently added three staff positions to respond to the increased workload, and expects to add more staff as needed.

The Transportation Bureau intends to cover its regulatory costs by charging fees to companies, which pass the costs on to passengers. The policy goal is to recover all costs and charge fees equitably. The City set the current fee at $0.50 per ride based on a rough estimate of ride volume.

In Fiscal Year 2015-16, fee revenue covered 83 percent of the $1.4 million costs of regulation. This shortfall happened because the City stopped charging taxicab and transportation network company fees for part of 2015 and began the new fees in January.
For Fiscal Year 2016-17, the Transportation Bureau expects revenues to cover the full cost of regulation, budgeted at $2.3 million. The costs have grown as the bureau added three new positions and funding for consultants. By our estimate, the fee may be generating more revenue than the City needs for Fiscal Year 2016-17. Transportation managers said they would review its fees in the future when they have better ride data. City code requires Transportation to estimate ride statistics every year to set the fee.

Transportation has not yet developed or charged fees for cases when it spends resources to follow up on a single company, driver, or vehicle after finding compliance issues. The bureau said this could drive small companies out of business and have adverse effects on the City’s goals to support small and minority-owned businesses.

**Conclusion**

Since Council changed the City’s policy on taxicabs and transportation network companies in 2015, an increasing number of passengers have taken rides in taxicabs and transportation network companies. Passengers can choose from more companies and a variety of prices.

The Transportation Bureau launched new inspections of drivers, vehicles, and company records to adapt its regulatory approach. These inspections have focused on safety and compliance with record-keeping requirements.

To further meet Council’s policy direction, the bureau now needs to focus on getting all the ride data that companies are required to report. It also needs to verify the data for accuracy and completeness, and analyze it for service quality concerns, such as canceled rides, availability in underserved areas, long wait times, and access for disabled passengers.
**Recommendations**

To better meet Council's policy goals, we recommend the Commissioner-in-charge direct the Transportation Bureau to:

1. Educate companies about the data required and take enforcement action against companies that continue to fail to provide it.

2. Analyze data regularly for service levels and disparities.

3. Ensure that the companies’ self-reported data is accurate and complete.

4. Use customer complaints and collision reports systemically to inform inspections, enforcement, and education actions. Also revise the collision report form to obtain sufficient information.

5. Determine what information is needed to measure the use of and effects of dynamic pricing to best achieve Council's policy goals.

6. Establish goals and performance measures for its inspections. This can inform staffing levels, too.

7. Adjust inspection processes so resources are deployed to areas of highest risk. Ensure inspections are a surprise to drivers and companies and are not targeting the same companies and drivers too frequently.

8. Determine if $0.50 per ride is appropriate to recover regulation costs, as part of the annual fee-setting.
Our audit objectives were to describe the taxicab and transportation network company customers’ experiences; assess how drivers and companies are complying with City code, regulations, and fees; and analyze how the Transportation Bureau can more effectively regulate the industry. We focused on taxicabs and transportation network companies, but the Transportation Bureau regulates other for-hire transportation industries such as limousines, party buses, and shuttles.

We reviewed City code and reports. We reviewed Transportation’s records about companies, fare schedules, complaints, and other reportable matters for the period of August 2015 through June 2016, or January through June 2016. We analyzed ride data provided by the bureau. We found it reasonable for our audit purposes, but did not test its reliability in detail. We interviewed Transportation staff about management and operations. We rode with inspectors to observe their process. We reviewed media reports about issues in the industry.

We reported data about the transportation industry at a level of detail that would not conflict with current confidentiality agreements between the City and several companies, according to advice we received during the audit from the City Attorney’s Office and the Transportation Bureau. After our audit fieldwork concluded, and separate from our audit, the District Attorney ordered the Transportation Bureau on September 23, 2016 to release more detailed data publicly because it would be in the public interest; this order was still under review by the courts.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
RESPONSE TO THE AUDIT
October 7, 2016

Mary Hull Caballero
City Auditor
1221 SW Fourth Ave, Room 140
Portland, OR 97204

Dear Auditor Hull Caballero:

I appreciate the opportunity to review and respond to your audit of the Transportation Network Companies and Taxicabs.

Since the new regulations were implemented in January of this year, we have been focusing our efforts on ensuring that Portlanders and our visitors have safe and accessible service to for-hire transportation. As part of this work, we have instituted a vigorous on-street inspection program to assess not only the quality of service, but more importantly, the safety of the services provided by Transportation Network Companies and Taxicabs. Additionally, we are also collecting ridership data from the industry but have more work to do in collaboration with our industry partners to get the required data in both compliant and compatible formats. This will help us more effectively analyze the performance of the industry, guide enforcement, and inform discussions regarding adjustments to the regulations.

These efforts, and your audit, highlight that much has been accomplished in the first nine months, but more needs to be done.

I want to take the opportunity to respond to some of the key points in your recommendations.

You note that we should, “Educate companies about the data required and take enforcement action against companies that continue to fail to provide it.” We have done quite a bit in this area and will continue to keep informing companies about data requirements. However, in our assessment, knowledge of what is required is not the issue; technology is. Many of the smaller taxicab companies don’t have the technological ability to capture this data and we are providing them technical assistance to help them comply.

The audit suggests that we, “Analyze data regularly for service levels and disparities.” It also recommends the we, “Ensure that the companies’ self-reported data is accurate and complete.” We have recently added staff to help us better analyze data and to make certain that the companies’ data is both accurate and complete. In addition, we are in the final stages of purchasing a software system to help us track and manage the thousands of drivers and vehicles in the Portland market. We are also
working with the Bureau of Technology Services to develop a software package to assist us with analyzing the volume of data that will help us highlight and make corrections for the missing data points.

The audit also recommends that we, "Determine what information is needed to measure the use of and effects of dynamic pricing to achieve Council’s policy goals." Council was clear when passing new regulations that rates in the private for-hire market shall be unregulated. In the coming months we will be working with our partners in other cities to define what data is needed to determine if dynamic pricing helps achieve some of Council’s goals, most notably 24/7 service and a reduction in the numbers of impaired drivers on the road. The latter result would support PBOT’s Vision Zero goals.

Finally, you suggest, "Determine if the $0.50 per ride is appropriate to recover regulation costs, as part of the annual fee-setting." The existing regulations already contemplate this as our regulatory services are provided on a cost recovery basis. The subsequent ride fee will be adjusted accordingly. We are also exploring the possibility of using some of these monies to establish an accessibility fund to help providers offset some of the costs of providing wheel chair accessible services. Providing such service is a stated goal of Council.

Your review provides us with three additional recommendations:

- “Use customer complaints and collision reports systemically to inform inspections, enforcement, and education actions. Also revise the collision report form to obtain sufficient information.”
- “Establish goals and performance measures for its inspections. This can inform staffing levels, too.”
- “Adjust inspection processes so resources are deployed to areas of highest risk. Ensure inspections are a surprise to drivers and companies and are not targeting the same companies and drivers too frequently.”

My staff is developing strategies and plans to address each of them. Moving forward, we expect to make significant progress on these recommendations, and will make other improvements that will help ensure that the Transportation Network Companies and Taxicabs continue providing safe, reliable and accessible service.

Please accept my personal thanks for your team’s work on this audit, especially through the efforts of Minh Dan Vuong. The staff found him to be both professional and helpful in his observations.

Sincerely,

Leah Treat
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Office of the City Auditor
1221 SW 4th Avenue, Room 310
Portland, Oregon 97204
503-823-4005
www.portlandoregon.gov/auditservices

Transportation network companies and taxicabs: Transportation Bureau needs to monitor service, not just safety

Report #488, October 2016

Audit Team: Minh Dan Vuong

Mary Hull Caballero, City Auditor
Drummond Kahn, Director of Audit Services

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