The City of Wichita is preparing for the arrival of dockless e-scooters. As part of this preparation, the City requested that Toole Design review how other cities have accommodated these new modes of transportation through effective policy with the intention of identifying the type of regulation needed, the items that need to be addressed by this policy, and any changes to other policies that might need to be addressed.

Toole Design conducted a scan of 12 Midwestern communities that have dockless e-scooters operating in their jurisdictions and observed the following trends:

- Most cities were reacting to the unregulated arrival of e-scooters. In some cases, policy development included interaction with the e-scooter vendors and in other cases followed cease-and-desist letters or collection of scooters. Because of the timelines, many policies follow similar structures with some local variations,
- The type of policy used to regulate dockless e-scooters varied depending on the city and included creation of new ordinances, resolutions, permit programs, license agreements, or contracts,
- In most cases, e-scooters are not clearly defined as a vehicle type in local and state codes and therefore create confusion about how they should be regulated or where they are allowed to operate. Depending on the jurisdiction they may be considered bicycles, e-bikes, toy vehicles, small vehicles, or motor vehicles. Many cities have combined the development of new e-scooter policies with updated vehicle or other codes to more clearly define e-scooters and other dockless mobility devices,
- Almost all programs are set up as pilot programs with varying lengths from 4 months (to avoid inclement weather conditions) to 12 months. There are some cities with no term limits,
- Policies can be worded to only deal with e-scooters or more commonly to deal with “shared mobility”, “dockless mobility devices” or other terminology used to refer to dockless bikes, e-bikes, e-scooters, and in some cases other approved dockless devices,
- In terms of content, almost every e-scooter policy addresses the following issues:
  - Fleet size: establishing minimum and maximum numbers of vehicles as well as criteria for when the program can be expanded and by how much,
  - Service area: most often this is the City boundaries – the area under the jurisdiction of the regulating agency,
  - Permit fees: these vary greatly, but typically include a one-time permit fee plus some form of annual fee per vehicle. This is discussed in more detail below,
  - Parking regulations: almost all policies include where dockless vehicles can and cannot be parked. This typically includes parking required on the sidewalk, scooters in an upright position, maintaining adequate sidewalk clearances, ensuring vehicles do not obstruct key features. This part of the policy often also sets time limits in which companies must relocate non-compliant vehicles (typically within 2 hours),
o Data sharing: all policies request that real-time data be shared in either GBFS or API format and that (typically) monthly reports be provided to detail usage, number of scooters in service, reported crashes, repair information, illegal parking instances, rebalancing, customer complaints, theft and vandalism, etc. Many of the policies reviewed required that companies distribute user surveys developed by the cities,
o Insurance and Indemnity: all policies reviewed include these requirements that must be fulfilled by the permit applicant,

- Several policies address the following issues:
o Allowable operations: whether e-scooters can be ridden on the street or the sidewalk or both depends on how they are defined in local vehicle codes. In some cases it is identified that the vehicle codes will need to be reviewed and adapted to fit e-scooters,
o Helmets: most policies either “encourage” users wear helmets or where the interpretation of a scooter as a motor-powered vehicle requires users to wear a helmet,
o Vehicle speeds: the maximum speed is typically set at 15 mph or lower, however Tulsa, OK allows speeds up to 20 mph,
o Education and Outreach: either specifically outlines education and outreach resources that need to be provided by the company or requests that the company provides a plan to outline its strategy,
o Equity: a number of policies explicitly require that a certain number of scooters or a percentage (typically 20%) be available in underserved areas. This is typically required through a once daily rebalancing to these areas. Some policies also require the companies to provide an equity plan and/or how they will provide payment options for non-smart phone and credit card users,
o Removal and impoundment: several policies explicitly call out that the City can remove and/or impound scooters in violation of the parking requirements. Some specify impound and storage fees that could be charged to the company and in other cases, e.g., in Denver, CO and Columbia, MO, these cities collect a performance bond ($30 per vehicle) that is collected upfront and then can be used towards auditing, removing, and storing improperly parked vehicles,

- Very few policies address the following issues:
o Denver identifies parking areas to be provided by the companies at a rate of 1 zone per 10 vehicles,
o Operating times: the City of Columbia, MO requires that scooters be inactive between dusk and dawn,
o Inclement weather: Kansas City, MO requires that scooters be removed during snow and that operations be halted during rain and snow.

The tables below show some of the variation in key criteria such as fleet size (Table 1) and permit fees (Table 2).

Table 1: Summary of Pilot Program Fleet Sizes and Expansion Criteria

<table>
<thead>
<tr>
<th>City</th>
<th>Min.</th>
<th>Max.</th>
<th>Expansion Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas City, MO</td>
<td>100</td>
<td>-</td>
<td>Up to 500 with City approval based on achieving over 3 trips per vehicle per day</td>
</tr>
<tr>
<td>Columbia, MO</td>
<td>300</td>
<td>500</td>
<td>Up to 750 with City approval based on achieving over 3 trips per vehicle per day</td>
</tr>
<tr>
<td>Jefferson City, MO</td>
<td>150</td>
<td>-</td>
<td>City discretion based on achieving over 3 trips per vehicle per day for at least 2 months of operations</td>
</tr>
<tr>
<td>Stillwater, OK</td>
<td>None</td>
<td>No max.</td>
<td></td>
</tr>
<tr>
<td>Tulsa, OK</td>
<td>50</td>
<td>400</td>
<td>City discretion based on achieving over 3 trips per vehicle per day for at least 2 months of operations</td>
</tr>
</tbody>
</table>
Applying these models to a mock system of 500 scooters making an average of 3 trips per scooter per day for 6 months (180 days) for a total of 270,000 trips. The models above would earn the following returns for the program:

- Denver: $15,150 guaranteed revenue plus $15,000 performance bond to offset any costs with enforcing parking behavior,
- Minneapolis: $100,000
- Portland: $72,750

The most effective model to generate revenue for the city would be to charge a $20 - $30 per scooter maintenance fee and a $0.10 to $0.25 per trip surcharge. One off permit fees are generally low revenue earners for the agency.
APPENDIX

Kansas City, MO

Bird first dropped scooters on Wednesday, August 15, 2018 (approximately 100 scooters)

Photo of scooters parked neatly on a sidewalk

City set up an “Interim Operating Agreement for Implementation of a Shared Active Transportation Operation” on July 30, 2018

- Pilot program
- Term: 6 months
- Licensure: needs a business license from the City
- Staff and Contact: local point-of-contact; visible phone number to report concerns
- Fleet size: 100 “small” vehicles minimum (dockless bikes, scooters, e-bikes, e-scooters, skateboards, other small-wheeled vehicles), may expand up to 500 with City approval based on ridership of over 3 trips per vehicle per day
- Service area: Kansas City limits
- Fees: $500 permit fee at commencement; $1 per vehicle per day at the end of each calendar month
- Parking regulations:
  - Cannot park in the street
  - Cannot block the throughway zone, ADA ramps, etc.
  - Park upright on hard surface in the frontage or furnishing zone
- Operating space: must be operated on the street (i.e., banned from sidewalks)
- Helmets: “helmet use is encouraged”
- Data sharing:
  - General Bike Share Feed Specifications (GBFS) format
  - Utilization, compliance, operations, parking complaints, crashes, damaged or lost vehicles
  - Anonymized demographic data
- Speed: less than 15 mph
- Education and outreach
- Inclement weather: remove vehicles during snow; stop operations during rain and snow
- Default and termination
- Removal of vehicles
- Maintenance: maintain small vehicles in “good working manner”; removes any City responsibility for maintenance
- Abatement:
  - Company needs to abate default conditions within 2 hours
  - Small vehicle in the same position for more than 72-hours can be removed by the City
- Indemnification, Liability and Insurance

City website:

City currently has two operators: Bird and Lime, but are open to other companies operating under the same provisions

Revenue sharing goes towards building better bike infrastructure

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1 https://www.ajc.com/technology/banned-other-cities-bird-electric-scooters-arrive-kansas-city/ZoJ9nVBqN0QSzg90Ct1YxO/
3 http://kcmo.gov/scooters/
Injury report conducted by the City:

19 reported incidents involving e-scooters between July and October 31, 2018; manual review of 96,850 EMS records

- 1 person transported to Emergency; 11 taken to hospital for treatment; 5 refused treatment or transportation; 2 cancelled by the caller
- 4 probable fractures or dislocations; others were abrasions and pain in limbs
- 3 involved motor vehicles; remainder were riders losing balance and falling

Safety video by KC Streetcar regarding operations of scooters around the Streetcar

Columbia, MO

Bird first dropped scooters in August 2018 (approximately 350 scooters)

City set up an "Interim Operating Agreement for Implementation of a Shared Active Transportation Operation" (not approved as per 11/09/18; will be heard at Council Meeting on 11/19/18)

- BASED ON KANSAS CITY BUT WITH MORE RIGOROUS TERMS
  - Pilot program
  - Term: 1 year
  - Licensure: needs a business license from the City
  - Contact: local point-of-contact; visible phone number to report concerns
  - Fleet size: 300 "small" vehicles minimum (dockless bikes, scooters, e-bikes, e-scooters, skateboards, other small-wheeled vehicles) up to 500 maximum initially; may expand up to 750 with City approval based on ridership of over 3 trips per vehicle per day
  - Service area: City limits
  - Fees: $10,000 regulatory fee within 30 days of signatory; $1 per vehicle per day paid quarterly
  - Parking regulations:
    - Cannot park in the street
    - Cannot block the throughway zone, ADA ramps, etc.
    - Park upright on hard surface in the frontage or furnishing zone
  - Operating space: must be operated on the street (i.e., banned from sidewalks, parks, and trails)
  - Helmets: "riders must wear helmets when riding small vehicles"
  - Data sharing:
    - Real-time feeds via API
    - Utilization, compliance, operations, parking complaints, crashes, damaged or lost vehicles, parking compliance, maintenance reports, others
    - Anonymized demographic data
  - Speed: less than 15 mph
  - Education and outreach
  - Daily removal: vehicles need to be inactive between the later of dusk or 8PM and remain inactive until dawn the following day
  - Inclement weather: remove vehicles during snow; stop operations during rain and snow
  - Default and termination
  - Removal of vehicles

5 https://vimeo.com/29298033
• Maintenance: maintain small vehicles in "good working manner"; removes any City responsibility for maintenance
• Time for Corrective Actions:
  o Company needs to abate default conditions within 2 hours
  o Small vehicle in the same position for more than 72-hours can be removed by the City
• Impoundment:
  o Vehicles can be impounded by the city for impacting the "health, safety, or welfare of City residents or visitors"
  o $100 per impounded vehicle
• Performance Bond: $30 per small vehicle; used by the City for costs associated with auditing, removing, and impounding small vehicles
• Indemnification, Liability and Insurance

University reactions:

• Cliff Jarvis, Columbia College’s representative to the council, said at the meeting the college does not allow Bird scooters and considers them abandoned property if they are left on campus.  
• MU said in a statement that its stance on Bird has not changed and that the company has not been working with the university to educate users about helmets and other safety measures. "Currently, they are not welcome on our campus, and we are deeply disappointed that the company has not worked with us to roll them out in a safe manner," MU spokeswoman Liz McCune said.

Jefferson City, MO

Jefferson City Parks and Recreation Commission approved a one-year contract with Spin in May 2018 (150 bicycles and scooters)

928 trips taken on the bikes between July 23 and September 1 (75 regular bikes) – other good information on early program use here

Could not access a copy of the contract, although it is referred to in the May meeting agenda for the City’s Parks and Recreation Commission (here)

City website

Stillwater, OK

Bird dropped 40 scooters on Thursday, August 23, 2018

Issue was taken to City Council as a discussion item on 08/27/18. Minutes from that meeting show that Council required that Bird submit:

• An Itinerant Merchant License Application ($50 per year)

1 http://www.jeffersoncitymo.gov/meetings_and_agendas/citizen_boards_commissions_and_committees.php
2 http://documents.jeffcitymo.org/WebLink8/0/doc/468573/Page1.aspx
3 http://www.jeffersoncitymo.gov/programs_and_activities/outdoor_recreation/biking/bike_share.php
• A Right-of-Way Agreement Application

Bird is voluntarily paying the City $1 per scooter per day\(^\text{15}\)

**Norman, OK**

Bird dropped “several dozen” scooters on August 17, 2018

Operating without proper permits; City Development Coordinator gave Bird formal notification to remove the scooters by September 12, 2018; City impounded approximately 100 scooters\(^\text{16}\)

City is drafting a Revocable License Agreement that will go to Council

**Tulsa, OK**

City amended their “Licenses” ordinance to establish a licensing process for shared active transportation\(^\text{17}\)

• Added a new chapter titled “Shared Active Transportation” to the “Licenses” ordinance
• Permit: “Shared Active Transportation Permit”
• Department Responsible: City of Tulsa Finance Department
• Term: 1 year
• Cost:
  o Permit fee: see Title 49
  o Maintenance fee: $20 per small vehicle per year
  o Infrastructure fee: $30 per small vehicle per year (active transportation improvements)
  o Non-profit and agency-funded program are exempt from fees
• Staff and Contact: local operations; visible phone number to report concerns
• Fleet size:
  o Bikes (including e-bikes) and scooters are separate:
    o Bikes: 50 minimum to 400 maximum
    o Scooters: 50 minimum to 400 maximum
    o May expand with City approval based on ridership of over 3 trips per vehicle per day and operations of at least 2 months
• Parking regulations:
  o Must park on sidewalk or hard surface in landscape / furniture zone
  o Must maintain 5’ sidewalk
  o Incorrectly parked vehicles to be removed within 24 hours
  o Safety hazards within 2 hours
• Safety requirements
  o Less than 20 mph
  o Helmets: “helmet use is encouraged”
• Distribution:
  o 20% rebalanced once per day in underserved communities
  o Equity plan
  o Users have to have an option for non-smartphone and credit card users
• Data sharing:

\(^\text{16}\) [http://www.oudaily.com/a_and_e/norman-impounds-more-than-electric-bird-scooters/article_e76c332a-b860-11e8-9eb4-3b4d94f279be.html](http://www.oudaily.com/a_and_e/norman-impounds-more-than-electric-bird-scooters/article_e76c332a-b860-11e8-9eb4-3b4d94f279be.html)
\(^\text{17}\) [http://councildocs.tulsacouncil.org/SuperContainer/RawData//7JNAGUJ1019201834616/18-780-1.pdf?a=1](http://councildocs.tulsacouncil.org/SuperContainer/RawData//7JNAGUJ1019201834616/18-780-1.pdf?a=1)
Utilization, compliance, operations, parking complaints, crashes, damaged or lost vehicles
- Anonymized demographic data
- No inclement weather policy
- Insurance
- Termination

Helmets:

The city doesn’t legally require scooter riders or bicyclists to wear helmets, though officials and the companies advise their use. Doctor noted riders can obtain a helmet from the companies. Bird offers free helmets to those who pay shipping costs. Lime provides them to riders with more than $10 in their account.18

**Oklahoma City, OK**

City amended their “Licenses” ordinance to establish a licensing process for shared active transportation19

- Added a “Shared Vehicle Businesses” to Chapter 13 of the Municipal Code
- Applicant requires:
  - Proof of business filing
  - Registered agent’s information
  - Revocable permit
- Term: 1 year
- Cost:
  - Permit fee: $302 per year
  - $30 per vehicle per year
  - Removal fee: $100 per hour of staff time (if needed)
  - Storage fee: $5 per day per vehicle (if needed)
- Staff and Contact: local operations; visible phone number to report concerns
- Fleet size:
  - 250 maximum “shared vehicles” initially
  - May add another 100 vehicles with City approval based on ridership of over 3 trips per vehicle per day
- Parking regulations:
  - Must park on sidewalk or hard surface in landscape / furniture zone
  - Other parking restrictions
  - Relocate non-compliant within 2-hours (1-hour on private property)
- Data sharing:
  - Format not specified
  - Utilization, compliance, operations, parking complaints, crashes, damaged or lost vehicles
  - Anonymized demographic data
- No inclement weather policy
- Insurance, Indemnification
- Termination

Photo20

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18 https://www.tulsaworld.com/homepagelatest/before-zipping-around-tulsa-on-an-electric-scooter-learn-the/article_421cb412-c3da-5b12-92e6-03ac17a2955b.html
19 https://agenda.okc.gov/sirepub/cache/2/y2qzq345n2i0k45evectqc55/422982211092018103027145.PDF
20 https://newsok.com/article/5605493/scooter-service-receives-okc-permits
**Aurora, CO**

City created a permit program on October 2, 2017 for “bicycle sharing” programs\(^{21}\)

- Created through the Director of Public Works
- Created for “bicycles” – e-bikes are mentioned and allowed – no mention of scooters
- Applicant requires:
  - Permit application
  - Insurance
  - Description
  - Education and outreach plan
  - Equity plan
- Term: 1 year
- Cost:
  - Less than 500 bicycles: $2,500
  - 501 – 1,000 bicycles: $5,000
  - 1,001 – 2,000 bicycles: $7,500
  - Over 2,000 bicycles: $10,000
- Staff and Contact: local operations; visible phone number to report concerns
- Fleet size: 250 bicycles minimum
- Service area: city limits with emphasis on service in certain areas
- Parking requirements
  - Specific requirements outlined
  - Relocate non-compliant within 2-hours
- Operating space: can be on sidewalk or street (note: this is not related to e-scooters)
- Helmets: “helmet use is encouraged”
- Data sharing:
  - Format not specified
  - Number of bicycles, utilization, origin-destination, users and demographics, reported collisions
  - Requirement to distribute an annual customer survey developed by the City
- No inclement weather policy
- Insurance, Indemnification
- Termination

Before one year of operations, both companies pulled their bikes from the program (Ofo closing USA operations; Lime focusing on Denver)\(^ {22}\)

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**Denver, CO**

Bird and Lime first dropped scooters in May 2018\(^{23}\)

City issued a notice to cease operations on June 1, 2018\(^{24}\)

City set up a “Dockless Mobility Vehicle Pilot Program” in Summer 2018 (June 29, 2018)\(^{25,26}\)

- Through the Department of Public Works
- Part of the City & County’s Transit Amenity Program
- Pilot program
- Term: 1 year
- Vehicles: bikes, e-bikes, e-scooters, other approved dockless mobility devices
- E-scooters are considered “toy vehicles” and not allowed in the bike lanes or in general traffic, therefore they must be operated on the sidewalk (policy being evaluated)
- Fleet size:
  - Bikes / e-bikes:
    - Up to 5 operators
      - Each operator: 400 vehicles; option to increase to 500 if 100 stay in designated opportunity areas
  - E-scooters:
    - Up to 5 operators
      - Each operator: 250 vehicles; option to increase to 350 if 100 stay in designated opportunity areas
  - Company may have separate bike and e-scooter permits
  - Permits are issued first-come / first-served
- Service area: City limits
- Fees:
  - Bikes / e-bikes:
    - Application fee: $150 per permit
    - Permit fee: $15,000
    - Performance bond: $20 per vehicle
  - E-scooters:
    - Application fee: $150 per permit
    - Permit fee: $15,000
    - Performance bond: $30 per vehicle
- Performance bond used for costs associated with auditing, removing, and storing improperly parked vehicles
- Parking regulations:
  - Must maintain 5’ clear width on sidewalks
  - Other requirements
  - Painted dockless parking zones to be provided by operator at 1 zone per 10 fleet vehicles (10’ x 6’ area)
  - Rebalance at least once per day back to transit and bus stops and opportunity areas
- Equity program is required
- Maintenance: inoperable or unsafe vehicle must be removed within 24-hours

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\(^{26}\) [https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/permits/Dockless-Mobility-Pilot-Permit-Program-Overview_June2018.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/permits/Dockless-Mobility-Pilot-Permit-Program-Overview_June2018.pdf)
• Data sharing:
  o API feed
  o Monthly reporting of utilization, origin-destination, parking compliance at designated zones, vehicle maintenance, parking complaints, theft and vandalism, reported crashes
  o Require annual survey to be developed with DPW
• Coordination meetings with DPW
• Indemnification, Liability and Insurance

Minneapolis, MN
Bird launched 100 scooters on July 10, 2018; Lime launched 100 scooters on July 23, 201827

City entered into a License Agreement with two scooter companies on August 3, 2018. Sets up a pilot program to operate until November 30, 201828

• Department of Public Works
• Pilot program
• Term: 4 months (August 3 – November 30, 2018)
• Vehicles: e-scooters
• Fleet size:
  o 200 max. for the first 2 months
  o 400 max. for the remainder of the pilot
• Fees:
  o $20 per scooter
  o $1 per scooter per day voluntary fee to assist with infrastructure improvement
• Parking regulations:
  o Must not impede the pedestrian path of travel of access to a number of listed features
• Data sharing:
  o Comprehensive and anonymized data sharing
• Indemnification, Liability and Insurance

City website29

St. Paul, MN
Bird and Lime first dropped scooters in May 201830

City issued a notice to cease operations on June 1, 201831

City Council approved a resolution allowing a pilot program for electric scooters (August 1, 2018)32, 33

• Pilot program
• Term: until November 30, 2018


29 http://www.minneapolismn.gov/publicworks/trans/WCMS-212816
• Vehicles: e-scooters  
• Fleet size: 150 scooters  
• Service area: City limits  
• Fees: $1 per day per scooter  
  o If needed:  
    ▪ $35 per scooter per move from unauthorized location  
    ▪ $20 per day per scooter for storage  
• Parking regulations:  
  o Must be parked in the boulevard section of the sidewalk  
  o Must maintain 5’ clear width on sidewalks  
  o Other requirements  
  o Must be parked upright  
  o Must move non-authorized parked vehicles within 2 hours  
• Maintenance: must be maintained in a “safe and operable condition”  
• Data sharing:  
  o API feed  
  o Monthly reporting of number of scooters in and out of service, utilization, reported crashes, repair information, instances of illegal parking, rebalancing, GPS movement data, customer complaint report, theft and vandalism  
  o Require annual survey to be developed with City  
• Indemnification, Liability and Insurance

City also has a separate contract with Lime to provide dockless bikes

**Edina, MN**

Has a dockless bikeshare agreement with Lime

Although not scooter, the contract itself has an interesting layout including a “Service Level Agreement” table

**Portland, OR**

City set up a “Shared Electric Scooters Permit Application” on July 23, 2018

• Pilot program  
• Term: 120 days  
• Fleet size:  
  o Multiple vendors allowed to share up to 2,500 e-scooters  
  o Each permittee must deploy 100 scooters minimum – 200 maximum initially  
  o Deploy rest of allotted scooters within 3-weeks  
• Service area: City boundaries  
• Fees:  
  o Permit application fee: $250  
  o Pilot Permit fee: $5,000  
  o Per-trip Surcharge: $0.25 per trip  
• Parking regulations:  
  o Park on sidewalk in furnishing zone  
  o Other requirements

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- Must move non-compliant vehicles within 48-hours; emergency situations 20-60 minutes
- Operating space: must be operated on the street (i.e., banned from sidewalks)
- Helmets: users must wear a helmet
- Data sharing:
  - API data format
  - Utilization, compliance, operations, parking complaints, crashes, damaged or lost vehicles, etc.
  - Companies must share survey developed by the City
- Speed: less than 15 mph
- Education and outreach
- Default and termination
- Maintenance: plan required as part of permit
- Indemnification, Liability and Insurance

City website\(^{35}\)

Survey results made public\(^{36}\)

\(^{35}\) https://www.portlandoregon.gov/transportation/77294

\(^{36}\) https://www.portlandoregon.gov/transportation/article/700917