REQUEST FOR PROPOSALS

A PROJECT TO PROVIDE A CUSTOMER SERVICE CENTER AND BACK OFFICE SYSTEM
FOR RIVERLINK'S OHIO RIVER BRIDGES

VOLUME III
REFERENCE INFORMATION DOCUMENTS

A PROJECT OF
THE INDIANA FINANCE AUTHORITY

ISSUED September 30, 2020

Indiana Finance Authority
One North Capitol Avenue, Suite 900
Indianapolis, Indiana 46204

CONTENTS

Section 1: Joint Board Authority

https://riverlink.com/about/joint-board/

Section 2: Agency Website References

Kentucky Public Transportation Infrastructure Authority: Louisville Bridges Project

https://transportation.ky.gov/KPTIA/Pages/default.aspx

INDOT Ohio River Bridges: Library

https://www.in.gov/indot/3696.htm

Section 3: E-ZPass References

IAG Operating / Reciprocity Agreements and File Specifications

https://e-zpassiag.com/interoperability

Section 4: Indiana Walk-Up Center Lease

LEASE AGREEMENT

Between

QUARTERMASTER STATION, LLC

LANDLORD

And

<u>***TENANT***</u>

Kapsch TrafficCom IVHS Inc.
(Walk Up Center)

Initials

TABLE OF CONTENTS

Initials

EXHIBITS

A.   **LEASED PREMISES**
B.   **DEVELOPED PARCEL**
C.   **ALTERATIONS AND IMPROVEMENTS**
D.   **BASE RENT**
E.   **RULES AND REGULATIONS**

Initials

LEASE AGREEMENT

The Quartermaster Station
Jeffersonville, Indiana

THIS LEASE AGREEMENT, hereinafter known as the "Lease", entered into effect this 29ᵗʰ day of **July, 2015**, between Quartermaster Station, LLC, a Indiana limited liability company, whose principal place of business is 4010 Dupont Circle, Suite 700, Louisville, KY, 40207 hereinafter known as "Landlord" and **Kapsch TrafficCom IVHS INC. ("KAPSCH")**, whose principal place of business will be the Leased Premises (as herein defined), hereinafter known as "Tenant"."

WITNESSETH:

In consideration of the rent hereafter reserved and the covenants herein contained, each party to this Lease hereby agrees:

(1) PREMISES:

Landlord does hereby lease and demise to the Tenant and Tenant does hereby take and rent of Landlord, the following Leased Premises:

Approximately two thousand four hundred (2,400) square feet located in existing building to be built out at **103 Quartermaster Court, Jeffersonville, IN 47130.** That portion which is leased to Tenant is designated in red on the floor plan attached as Exhibit "A" and is hereinafter known as the "Leased Premises." The entire building, of which the Leased Premises form a part is hereinafter known as the "Building." The leased premises will be situated upon a tract of land hereinafter known as the "Developed Parcel", which is more particularly described in Exhibit "B".

(2) NON-EXCLUSIVE PARKING:

Landlord hereby grants to Tenant the right to use the off street parking located on the Developed Parcel surrounding the Building in a manner conducive to good business practice whereby Tenant uses parking spaces at no charge on a non-exclusive basis in common with other tenants of the Building. Such parking, in conjunction with the visitors parking area, shall be for the use of the Tenant's officers, agents, employees, and visitors on a non-reserved basis. Landlord reserves the right, however, to designate, for the specific account of Tenant, specific parking areas or spaces within the Developed Parcel.

If the Landlord designates a portion of the parking area for employee parking, employees of the Tenant shall use that portion of the parking area, thereby leaving the remaining parking spaces in the parking area open for visitor in and out traffic.

(3) TERM:

The term of this Lease (the "Term") shall be for **Seven (7) years,** (as herein defined). The parties expect the Commencement Date and Term to be on **November 1, 2015 and ending October 31, 2022** subject however to the terms of Paragraph 4 and further subject to any of the conditions or covenants of this Lease or pursuant to law. Tenant shall be given, two, three year options to renew the lease.

(4) CONDITIONS OF AND IMPROVEMENTS TO LEASED PREMISES:

Immediately upon execution of this Lease, Landlord shall commence to secure its building permit and thereafter construct those improvements to the Leased Premises indicated on Exhibit "C". Landlord shall proceed diligently with said work and use its best efforts to complete same within **90 days** from securing its building permit, but, if the improvements are not substantially completed or the Leased Premises be not available for occupancy by said date, Tenant shall have no claim against Landlord due to such delay, excepting only that the Term of this Lease shall not commence until the Leased Premises

Initials

are deemed to be available to Tenant, and the Term shall expire **Seven (7) years** thereafter as set forth in Section 3 above.

Immediately after the actual commencement date of this Lease has been determined, if at variance with Paragraph 3, Landlord and Tenant shall execute a written instrument fixing the commencement and termination dates of this Lease.

Tenants taking possession shall be conclusive evidence that Leased Premises were then in good order and satisfactory condition, except for the completion of punch list items, if any.

Notwithstanding anything else to the contrary in the Paragraph 4, if Landlord is not able to complete alterations or improvements to the Leased Premises due to delays caused by Tenant, its employees, agents or contractors, the Term of this Lease shall not be delayed, but shall commence according to Paragraph 3.

High level schedule of activities:
- Lease approved - 7/17/2015
- Previous tenant removed from premises - 7/21/2015
- All restaurant materials both inside and out removed from premises by - 7/27/2015 (best attempt)
- Schematic plans by – 8/15/2015
- Acquire Permits by – 8/31/2015
- Build out complete – 11/1/2015

(5) SECURITY DEPOSIT:

Tenant shall deposit with Landlord upon execution hereof the sum of Two thousand nine hundred dollars (**$2,900.00**) as security for Tenant's faithful performances of Tenant's obligations hereunder. If Tenant fails to pay rent or other charges due hereunder, or otherwise defaults with respect to any provision of this Lease, Landlord may use, apply or retain all or any portion of said deposit for the payment of any rent or other charge in default or for the payment of any other sum to which Landlord may become obligated by reason of Tenant's default, or to compensate Landlord for any loss or damage which Landlord may suffer thereby. If Landlord so uses or applies all or any portion of said deposit, Tenant shall within ten (10) days after written demand therefore deposit funds with Landlord in an amount sufficient to restore said deposit to the full amount previously stated. Said Security Deposit shall not earn interest thereon for the benefit of Tenant. No trust relationship is created herein between Landlord and Tenant with respect to said Security Deposit.

In the event that Tenant performs all of its obligations hereunder, said Security Deposit (or so much thereof as has not been used up and applied by Landlord as provided above) shall be returned to Tenant after the termination of this Lease, and after an inspection by Landlord establishing that Tenant vacated the Leased Premises in substantially the same condition (broom swept clean) in which it was received by Tenant, ordinary wear and tear excepted. The Security Deposit, which is returned to Tenant, may, at Landlord's option, be returned to the last assignee, if any, of Tenant's interest hereunder.

(6) BASE RENT:

(a) As annual base rent for the use and occupancy of the Leased Premises during the initial Term, Tenant shall pay to Landlord rent pursuant to the schedule attached as Exhibit "D". **Tenant shall pay its first month's rent to Landlord on November 1, 2015.**

The annual base rent is to be payable in equal monthly installments, ("monthly base rent") in advance on the first day of each and every month during the initial or extended Term of this Lease, except that Tenant shall pay the first installment of monthly base rent on November 1, 2015.

(b) Tenant agrees to pay as supplemental base rent for the use of said Leased Premises an amount equal to ten percent (10%) of any monthly base rent payment, which is not received by Landlord within five (5) days of the date, said

5

Initials

monthly base rent is due. Said supplemental base rent shall be in addition to any other amounts due under this Lease.

(c)   Rent shall be mailed or transferred electronically by Tenant to Landlord at such place as Landlord may designate in writing. Rent shall be payable promptly without deduction or setoff or prior demand thereof by Landlord. All payments shall be in U.S. dollars, in cash or by check or EFT, all checks subject to collection.

RENT COMMENCEMENT: November 1, 2015

(7)   ESCALATION OF BASE RENT:

Tenant's monthly base rental shall remain the same for 7 years. Effective November 1, 2022, Tenant's base rental shall be increased 5% upon exercising the first, three year option and remain at such amount until October 31, 2025. Rental is noted in Exhibit "D".

(8)   ADDITIONAL RENT:

In addition to the amounts imposed in Paragraphs 6 and 7, Tenant agrees to pay as additional rent for each month during the Term of this Lease, the amounts required by Paragraphs 9, 10 and 11.

(9)   MAINTENANCE OF COMMON AREAS; UTILITIES:

(a)   Landlord shall arrange to keep the exterior parking lot, driveways, and sidewalks in good condition and repair, clean and free from snow, ice, rubbish and other obstructions; provide water and sewage; arrange periodically for grass cutting, landscaping and yard maintenance; and arrange for illumination of the parking lot, grounds, and common exterior Building signs serving the Developed Parcel. Landlord shall also pay property management fees, licenses, permits, inspection fees, and the cost of all labor, contracted labor, materials and other services paid or incurred by Landlord in the operation and maintenance of the Building and Developed Parcel.

(b)   For each calendar year Tenant shall reimburse Landlord for its percentage **(1.655%)** thereafter, its "Pro Rata Share" of the cost of the services enumerated in Paragraph 9(a). Such Pro Rata Share shall be adjusted if Landlord expands the Building. Tenant shall pay to Landlord, simultaneously with monthly base rent, the sum of **$700.00 per month,** as an advance to be applied against common area expenses referred to above.   In the event Tenant has advanced to Landlord sums in excess of Tenant's Pro-Rata Share, Landlord shall rebate Tenant for the difference. In the event Tenant has advanced to Landlord less than Tenant's pro-Rata Share, Tenant shall pay to Landlord, upon receipt of an invoice, the difference between the Tenant's advances for the calendar year and the amount of Tenant's Pro-Rata Share.

(c)   **Tenant shall pay for all utilities consumed in the Leased Premises and shall arrange for its trash removal.** Landlord, shall install separate meters for natural gas (if available) and electricity. Water and sewage is not included in this item

(10)   TAXES AND ASSESSMENTS:

For each calendar year, Tenant shall reimburse Landlord for its Pro-Rata Share of all real estate taxes and assessments levied or charged against the Building and the Developed parcel. Tenant shall pay to Landlord, simultaneously with monthly base rent, the sum of **$77.00 per month (this amount is included as part of the $700.00 mentioned in Section 9(b))** as an advance to be applied against said taxes and assessments. In the event Tenant has advanced to Landlord sums in excess of Tenant's Pro-Rata Share, Landlord shall rebate Tenant for the difference. In the event Tenant has advanced to Landlord less than Tenant's pro-Rata Share, Tenant shall pay to Landlord, upon receipt of an invoice, the difference between the Tenant's advances for the calendar year and the amount of Tenant's Pro-Rata Share.

Initials

All personal property taxes charges or levied against Tenant's furniture, fixtures and equipment in the Leased Premises shall be paid by Tenant.

(11) INSURANCE:

(a) Landlord shall keep the Building insured against loss by fire or other casualty with extended coverage in an amount determined by the Landlord, and said policies shall include a standard waiver of subrogation clause against Tenant.

In the event the cost of premiums on Landlord's fire and extended insurance increases due to the hazardous nature of the use and occupancy by Tenant of the Leased Premises, then the entire increase in insurance cost shall be paid by Tenant in a lump sum upon receipt of invoice from the Landlord.

(b) Landlord shall at all times maintain public liability insurance for the common areas and the exterior of the Building as well as the sidewalks and the parking lot of the Developed Parcel.

(c) For each calendar year, Tenant shall reimburse Landlord for its Pro-Rata Share of Landlord's insurance premiums. Tenant shall pay to Landlord, simultaneously with monthly base rent, the sum of **$63.00 per month (this amount is included as part of the $700.00 mentioned in Section 9(b))** as an advance to be applied against the annual cost of said insurance. In the event Tenant has advanced to Landlord sums in excess of Tenant's Pro-Rata Share, Landlord shall rebate Tenant for the difference. In the event Tenant has advanced to Landlord less than Tenant's Pro-Rata Share, Tenant shall pay to Landlord, upon receipt of an invoice, the difference between the Tenant's advances for the calendar year and the amount of Tenant's Pro-Rata Share.

(d) The Tenant covenants and agrees that it will, at all times during the Term hereof, at its own expense carry and keep in full force and effect in companies satisfactory to Landlord, public liability insurance in form satisfactory to Landlord, with limits of (a) at least FIVE HUNDRED THOUSAND DOLLARS ($500,000.00) for injury, including death, to any one person, and (b) at least ONE MILLION DOLLARS ($1,000,000.00) for injury, including death in any one casualty, and (c) at least FIVE HUNDRED THOUSAND DOLLARS ($500,000.00) for property damage coverage. Landlord may increase the above limits to such greater amounts of insurance coverage as Landlord may from time to time reasonably require. Tenant shall also, at its own expense, carry plate glass insurance on the Leased Premises. All such policies shall name the Landlord and the Tenant as parties insured, and shall contain a provision that the same may not be canceled or changed without giving to the Landlord at least thirty (30) days written notice prior to expiration or cancellation of any such policy. Tenant shall furnish to Landlord a certified copy of each policy.

(e) All property in the Leased Premises, in the Building or on the Developed Parcel, belonging to Tenant, its agents, employees or invitees or to any other person, shall be there at the risk of Tenant or such other person only, and Landlord shall not be liable for damage thereto or theft, misappropriation, or loss thereof.

In furtherance of this provision, Tenant shall at all times and at its expense maintain insurance against loss by fire or other casualty with extended coverage on its furniture, fixtures, inventory, equipment, supplies and personal property, in an amount determined by Tenant; said policies shall include a standard waiver of subrogation clause against Landlord.

(f) Landlord, its agents and employees shall not be liable for injury to person or damage to property sustained by Tenant, by any occupant of the Leased Premises, the Building or the Developed Parcel, or by any other person, occurring or resulting directly or indirectly from any existing or future condition, defect, matter, or thing in the Leased Premises, in the Building or on the Developed parcel UNLESS LANDLORD IS FOUND TO BE NEGLIGENT. Landlord shall also not be liable for any accident or from any occurrence, act or negligence or

7   Initials

omission of any Tenant, occupant or any other person. Nothing in this Subparagraph (f) shall be deemed to relieve Landlord from liability for damages for bodily injuries to any person caused by or resulting from the gross negligence of Landlord's agents or employees.

(g) Tenant is responsible and shall comply with all pertinent local, state and federal environmental regulations; including air and ground contamination (i.e. EPA spill or ground contamination).

(12) TENANT IMPROVEMENTS:

See attached Exhibit "C".

(13) FIRE OR OTHER CASUALTY:

Should the Leased Premises be damaged or destroyed by any cause and such damage or destruction be of such a nature that it may be repaired or restored within a period of one hundred twenty (120) days after the occurrence, then this Lease shall not terminate, but it shall be the obligation of the Landlord to repair or restore the Leased Premises as nearly as possible to its condition prior to such damage or destruction, and the Landlord shall proceed promptly to make such repairs or restoration; provided, however, that such repairs or restoration can be made by Landlord for an amount not in excess of the amount recovered by Landlord on the fire and extended insurance. There shall be an equitable abatement of rent during the period that the Leased Premises may be wholly or partially unavailable for use by Tenant for the operation of its business.

Should the damage or destruction be of a character that will not permit repair or restoration of the Leased Premises within the one hundred twenty (120) days after the occurrence thereof, or if the cost of such repair or restoration exceeds Landlord's insurance recovery, either Landlord or Tenant shall have the privilege of canceling the unexpired Term of this Lease upon giving written notice to the other within forty-five (45) days after such destruction.

(14) USE OF LEASED PREMISES:

(a) Tenant shall use and occupy the Leased Premises for **Office and customer service functions, open to the public** and for no other purpose without the prior written consent of Landlord, which may be withheld, as example, to prevent a violation of an exclusive use covenant granted by Landlord.

(b) Landlord hereby covenants that the Leased Premises, in its state existing on the date that the Lease Term commences, but without regard to the use of which Tenant will use the Leased Premises, does not violate any covenant or restrictions of record, or any applicable building code, regulation or ordinance in effect on such Lease Term commencement date.

(c) The Tenant hereby covenants and agrees as follows:

    i.   To comply with all Federal, State, County and City laws, ordinances, rules and regulations affecting the use or occupancy of the Leased Premises by Tenant or the business at any time transacted by the Tenant;

    ii.   Not to use the Leased Premises for any disorderly or unlawful purpose or use inconsistent with applicable zoning.

    iii.   To obtain from appropriate governmental agencies at the Tenant's expense any and all permits, licenses, and the like, required to permit Tenant to occupy the Leased Premises and to be at all times in compliance with such permits, licenses, and the like, and all applicable governmental ordinances and regulations;

    iv.   To keep the Leased Premises clean and free from rubbish and to keep the windows and signs neat, clean, and in good order, all at Tenant's sole expense; or Landlord at its sole discretion shall have the right to perform

Initials

these maintenance items and Tenant agrees to reimburse Landlord for its costs;

v. Not to store any material, trash or refuse of any nature whatever within the Leased Premises or on the exterior of the Leased Premises or Developed Parcel nor to erect any screen or fence without the prior written consent of Landlord, which consent may be withheld in Landlord's sole discretion;

vi. To refrain from keeping gasoline, other inflammable material, any explosives or any other hazardous material within the Leased Premises or on the Developed Parcel, or from doing any act or thing which may make void or voidable the Landlord's insurance against fire, and to conform to all rules or regulations from time to time established by the appropriate insurance rating organization;

ENVIRONMENTAL MATTERS:

(a) For the purposes of Section 13(vi), the term "Hazardous Substance" shall be interpreted broadly to include those substances defined as a "hazardous substance", "pollutant" or "contaminant" pursuant to the Compensation Liability Act, 72 U.S.C., 9061 et sec, as amended and regulations thereunder, or any federal, state or local regulation or ordinance; and shall also specifically include without limitation petroleum and petroleum based derivatives, distillates and byproducts, asbestos; and any hazardous waste or other similar material.

(b) Tenant warrants and represents that it shall not use, store, treat, accumulate or transport Hazardous Substances at, on, to or from the Leased Premises during the Lease Term except in the ordinary conduct of its business and in a manner that complies with all federal, state, and local laws, regulations, and ordinances. Tenant additionally warrants and represents that Tenant's occupancy of the Leased Premises and its activities thereon shall not cause or result in any release, leak, discharge, spill, disposal, or emission of Hazardous Substances at, in, or from or under the Leased Premises during or following the Lease Term.

Tenant agrees to indemnify and hold Landlord harmless from any and all claims, damages, fines, judgments, penalties, costs, liabilities, or losses (including, without limitation reasonable sums paid for settlement of claims, attorneys fees, consultant and expert fees) arising during or after the Lease Term from or in connection with the presence of any Hazardous Substances in, on or under the Leased Premises during or after the Lease Term where the presence of such Hazardous Substances is caused by or arises from Tenant's occupancy of the Leased Premises or otherwise from Tenant's activities. Without limitation the foregoing, this indemnification shall include reasonable costs incurred due to any investigation of the Leased Premises or any clean-up, removal or restoration mandated by a federal, state or local agency or political subdivision with respect to any such Hazardous Substances present on the Leased Premises during the Lease Term. The provision of this paragraph shall survive the expiration or termination of this Lease Term.

(c) Landlord warrants and represents that, to the best of its knowledge, any use, storage, treatment, accumulation, or transportation of Hazardous Substances which has occurred in or on the Developed parcel prior to the date hereof has been in compliance with the applicable federal, state, or local laws, regulations, and ordinances. Landlord additionally warrants and represents that, to the best of its knowledge, no release, leak, discharge, spill, disposal, or

9

Initials

emission of Hazardous Substances has occurred in, or under the Developed Parcel prior to the date hereof.

Landlord agrees to indemnify and hold the Tenant harmless from any and all claims, damages, fines, judgments, penalties, costs, liabilities, or losses (including without limitation reasonable sums paid for settlement of claims, attorney's fees, consultant and expert fees) arising during or after the Lease Term from or in connection with the presence of any Hazardous Substances in, or under the Premises prior to the Lease Term. Without limiting the foregoing, this indemnification shall include reasonable cost incurred due to any investigation of the Premises or any clean-up, removal or restoration mandated by a federal, state or local agency or political subdivision, with respect to any Hazardous Substances present on the Premises prior to the Lease Term other than such as may be caused by or arise out of Tenant's occupancy of Lease. The provisions of this paragraph shall survive the expiration or termination of this Lease Term.

(d)   To comply with all the Rules and Regulations which have been adopted by Landlord, attached as Exhibit "E", (or which may be hereafter adopted by Landlord) for the protection and welfare of the Building, the Developed Parcel and other tenants.

(e)   Landlord will warrant that the premises is free from major defects to any of the major systems of the premises which are: Roof, plumbing, heating, air conditioning systems, and electrical systems at signing of the lease and throughout the term and options thereof.

(15) REPAIRS:

(a)   Tenant Repairs:

Tenant agrees that during the full Term of this Lease or any renewal thereof, it will, at its own expense, keep the interior of the Leased Premises in good condition and shall not let the Leased Premises and equipment, fall out of repair, and that it will maintain the Leased Premises and equipment, and make repairs promptly as they become necessary. At commencement of this Lease, Landlord shall supply the Leased Premises with the required bulbs, ballasts, and starters, but replacements thereof shall be at Tenant's expense.

Interior maintenance shall be deemed to include, but shall not be limited to, repairs or replacements required for windows, doors, floors, interior walls, ceilings, painting and decorating, and repairs, to heating, air conditioning, plumbing and electrical fixtures, and equipment. Tenant shall change the filters in the ventilation system on regular intervals. Tenant shall have in place, a maintenance agreement with an HVAC contractor to make annual inspections and repairs. Tenant shall not be responsible for replacement of heating and air condition system or plumbing, or any repair to these items that exceeds $1,000.00 per occurrence unless caused by negligence of Tenant, Tenants employees, or customers

Notwithstanding, the provisions of this Subparagraph 14(a), Tenant shall not be obliged to make such repairs as are necessitated by fire or other perils provided for by extended coverage clauses (whether or not caused by the active or passive negligence of the Tenant) for which damage or loss insurance is carried by the Landlord.

(b)   Landlord Repairs:

Landlord agrees that during the full Term of this Lease, it will, at its own expense, keep the exterior structural parts and roof of the Building in good condition and repair and that it will make such repairs promptly as they become necessary. Exterior repairs shall be deemed to include exterior walls, roof, gutters, downspouts, and plumbing outside the Building. Landlord shall make such interior repairs and replacements as are necessitated by fire or perils provided for
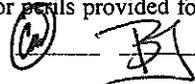
10   Initials

by extended coverage clauses (whether or not caused by the active or passive negligence of the Tenant) for which damage or loss insurance is carried by the Landlord and for which insurance proceeds are recovered, including interior decorating caused by such fire or other perils.

(16) ALTERATIONS:

No alterations, modifications, additions or installations to the Leased Premises shall be made unless the Landlord shall first have given written approval of the plans and specifications thereof, and shall have been protected, to the Landlord's satisfaction, against any cost or damage incident thereto. Prior to any approved construction, Tenant shall first have secured all necessary building and other permits. Tenant agrees to make such alterations, modifications, additions or installations to the Leased Premises as may be required by building, OSHA, or other applicable regulations or local codes in the jurisdiction in which the Leased Premises are located. All such alterations, modifications, additions, or installations, when made, shall become, unless the Landlord elects otherwise as provided in paragraph 16 hereof, the property of the Landlord and shall remain upon and be surrendered with said Leased Premises as a part thereof at the end of the Term of this Lease.

It is specifically agreed to by the Tenant that the above referenced consent by the Landlord may be specifically subject to, among other things, any contractor, subcontractor or supplier of materials being required to execute or have executed a lien waiver in favor of the Landlord and its property prior to any addition, alteration, repair or improvement to the Premises being performed.

(17) FIXTURES AND UNAUTHORIZED USE OF PREMISES:

Tenant shall not without Landlord's prior written consent attach any fixtures in or to the Leased Premises or change, alter, or make additions to the Leased Premises nor permit any annoying sound device, install any additional locks, overload any floor, or deface the Leased Premises. Any attached fixtures or any alterations, additions, or improvements made or attached by Tenant shall on the expiration or termination of this Lease, if requested by Landlord, be promptly removed at Tenant's expense, and the Leased Premises restored by Tenant at its expenses to its original condition, ordinary wear and tear excepted. Any such fixture, alteration, addition and/or improvement not requested to be moved shall remain on the Leased Premises and shall become and remain the property of Landlord. All Tenant's fixtures, installations, and personal property not removed from the Leased Premises upon expiration or termination and not required by Landlord to have been removed as provided in this paragraph shall be conclusively presumed to have been abandoned by Tenant, and title thereto shall pass to Landlord under this Lease as by a bill of sale.

(18) WINDOW COVERINGS AND SIGNAGE:

Tenant shall, at Tenant's expense, install signage identifying Tenant's occupancy. Signage shall meet Landlord's standard specification for Tenant signage, in order to provide harmony of the Building as to the exterior and interior appearances and also for safety and fire hazard purposes.

Tenant shall not install signs in the windows of the Leased Premises or any other part of the Building or Developed parcel without first securing Landlord's written consent and approval, which consent and approval may only be withheld in Landlord's reasonable discretion. Any signs installed by Tenant with Landlord's permission shall be removed by Tenant at the expiration of this Lease, at Tenant's expense, and the Leased Premises shall be restored by Tenant.

(19) INTERRUPTION OF SERVICE:

Landlord does not warrant that any services to be provided by Landlord will be free from interruption due to causes beyond Landlord's reasonable control. Temporary interruption of services or unavoidable delay (not exceeding 4 hours) in the making of repairs shall not be deemed an eviction or disturbance of Tenant's use and possession nor render Landlord liable to Tenant for damage by abatement of rent or otherwise nor relieve Tenant from performance of its obligations under this Lease.

11   *Initials*

(20) **INDEMNIFICATION:**

Tenant shall pay all loss or damage occasioned by or growing out of the use and occupancy of the Leased Premises by Tenant, its agents, and employees, and Tenant will, to the extent allowed by law indemnify, protect, and save Landlord harmless from and against and loss or liability thereby or therefore and from and against any expense, cost, and attorney fees incurred in connection with any such claim.

(21) **WARRANTY OF QUIET ENJOYMENT:**

Tenant, upon paying the rents and keeping and performing the covenants of this Lease to be performed by Tenant, shall peacefully and quietly hold, occupy, and enjoy said Leased Premises during said Term or any renewal thereof, subject to the terms and conditions of that certain lease dated September 8, 2003 between Jeffersonville Department of Redevelopment and Landlord as tenant (the "Ground Lease").

(22) **ASSIGNMENT AND SUBLETTING:**

Tenant shall retain the right to assign this lease at any time, to the Indiana Finance Authority, but shall not mortgage or encumber this Lease nor sublet or permit the Leased Premises or any part thereof to be used by others, without the prior written consent of Landlord in each instance. The consent by Landlord to an assignment or subletting shall not be construed to relieve Tenant from obtaining the consent of the Landlord to any further assignment or subletting. The consent by Landlord will not be given unless: a) the subtenant or assignee assumes the Tenant's obligations under this Lease; b) Tenant remains liable for all its obligations under this Lease, including extensions or renewals provided for herein, and (c) the use of such subtenant or assignee shall not violate any exclusive use covenant granted by Landlord. Consent to any assignment or subletting of the Leased Premises will also not be given by Landlord if Tenant is in default under this Lease. Tenant shall notify Landlord of the name of each proposed assignee or subtenant and shall provide information to Landlord pursuant to the financial standing of the proposed assignee or subtenant and shall offer to surrender such space to Landlord
Landlord reserves the right to require as additional rent, any subtenant or assignee rent which is in excess of the base rent and additional rent then being paid by Tenant pursuant to this Lease, and any other profit or gain realized by Tenant from such assignment or subletting. All sums payable hereunder by Tenant shall be paid as additional rent upon receipt by Tenant or upon request by Landlord.

(23) **EMMINENT DOMAIN:**

Tenant agrees that if the Leased Premises, or any part thereof shall be taken or condemned for public or quasi-public use or purpose by any competent authority, Tenant shall have no claim against Landlord and shall not have any claim or right to any portion of the amount that may be awarded as damages or paid as a result of any such condemnation, whether such amount be awarded for diminution in value to the leasehold or to the fee. It is agreed that the full amount of such award, if any, made by the taking authorities shall be paid to and retained by Landlord, free of any claim by Tenant to any portion thereof and all rights of Tenant to damages therefore, if any, are hereby assigned by Tenant to Landlord. In the event that all or substantially all of the Leased Premises shall be taken or condemned by any governmental authority, then the Term of this Lease shall cease and terminate from the date on which the Tenant is required, by such taking authority, to surrender possession of said Leased Premises and the Tenant shall not have nor make any claim against Landlord for the value of any unexpired Term of this Lease. In the event that a portion of the Leased Premises shall be taken or condemned by any governmental authority, then this Lease shall continue in full force and effect, and rent shall abate in an amount which bears the same ratio to the annual base rent as the value of the floor space taken bears to the value of the total floor space of the Leased Premises. All rentals and other sums payable by Tenant hereunder shall be adjusted to the date on which Tenant is required, by the taking authority, to surrender possession of the Leased Premises or portion of the Leased Premises so taken.

Initials

(24) **NOTICES:**

All notices required, or permitted, to be given to Tenant under this Lease shall be given to it at **Kapsch TrafficCom IVHS INC., 107 Quartermaster Court, Jeffersonville, IN 47130 with a copy to Kapsch TrafficCom IVHS INC., 8201 Greensboro Drive | Suite 1002 | McLean, VA 22102 | USA.** Any such notice to Landlord under this Lease shall be given to it at 4010 Dupont Circle, Suite 700, Louisville, KY, 40207. All notices shall be in writing and sent by certified mail, postage prepaid.

Notice so mailed shall be effective upon the third day after its deposit into the mails, Notice given in any other manner shall be effective under this Paragraph 23 only if and when received by the addressee.

(25) **REDELIVERY OF PREMISES:**

The Tenant shall, on the expiration of this Lease Term, deliver up the Leased Premises in broom swept condition, as good order and condition as it now is or may be put by Landlord, reasonable use and ordinary wear and tear thereof and damage by fire or other unavoidable casualty, condemnation or appropriation excepted. Tenant shall promptly surrender all keys to the Leased Premises to Landlord.

(26) **DEFAULT; REMEDIES UPON DEFAULT:**

(a) If any voluntary or involuntary petition in bankruptcy shall be filed by or against Tenant, or any voluntary or involuntary proceeding in any court shall be instituted to declare Tenant insolvent or unable to pay Tenant's debts, or Tenant makes an assignment for the benefit of its creditors, or a trustee or receiver is appointed for Tenant or for the major part of Tenant's property, then Landlord may forthwith terminate this Lease

(b) If Tenant defaults in the prompt payment of rent and such default shall continue for five days after the due date, or if Tenant defaults in the performance or observance of any other provisions of this Lease and such other default shall continue for ten days after notice thereof shall have been given to Tenant or if Tenant abandons the Leased Premises, then Landlord either may terminate Tenant's right to possession without terminating this Lease or may terminate this Lease. Tenant will be given the opportunity to assign the lease to the Indiana Finance Authority as described in Paragraphs 22 before the remedies provided in this paragraph are initiated.

(c) Upon any termination of this Lease or upon any termination of the Tenant's right to possession without termination of this Lease, the Tenant shall surrender possession and vacate the Leased Premises immediately, and Landlord may enter the Leased Premises in such event with or without process of law and retake possession of the Leased Premises and may expel or remove the Tenant and any others who may be occupying or within the Leased Premises and remove all property therefrom without relinquishing the Landlord's right to rent or any other right given to the Landlord hereunder or by operation of law.

(d) If the Landlord elects to terminate the Tenant's right to possession only without terminating this Lease, the Landlord may, at its option, enter into the Leased Premises, remove the Tenant's signs and other evidences of tenancy, and take and hold possession thereof as provided in Subparagraph (c) without such entry terminating this Lease or releasing the Tenant from the Tenant's obligation to pay the rent for the full Term, and in any such case, the Tenant shall pay forthwith to the Landlord a sum equal to the entire amount of the rent specified in Paragraphs 6, 7 and 8 of this Lease for the residue of the stated Term plus any other sums then due hereunder. Upon and after entry into possession without termination of this Lease, Landlord may but need not relet the Leased Premises or any part thereof for the account of the Tenant for such rent, for such time and upon such terms as the Landlord in its sole discretion shall determine. Landlord shall not be required to accept any tenant offered by the Tenant or to observe any instructions given by the Tenant about such reletting. In any such case, the Landlord may make repairs, alterations, and additions in or to the Leased Premises and

13   *Initials*

redecorate the same to the extent deemed by the Landlord necessary or desirable, and the Tenant shall, upon demand, pay the cost thereof together with the Landlord's expenses of the reletting. If the consideration collected by the Landlord upon any such reletting for the Tenant's account is not sufficient to pay the full amount of unpaid rent reserved in this Lease together with cost of repairs, alterations, additions, redecorating and the Landlord's expenses, the Tenant shall pay to the Landlord the amount of each deficiency upon demand; and if the consideration so collected from any such reletting is more than sufficient to pay the full amount of the rent reserved herein, together with the costs and expenses of the Landlord, the Landlord at the end of the stated Term of this Lease shall account for the surplus to the Tenant.

(e)   Any property which may be removed from the Leased Premises by the Landlord pursuant to the authority of this Lease or of law to which the Tenant is or may be entitled may be handled, removed, or stored in a commercial warehouse or otherwise by the Landlord at the risk, cost, and expense of the Tenant. The Tenant shall pay to the Landlord, upon demand, all expenses incurred in such removal and all storage charges against such property. Any such property of Tenant not removed from the Leased Premises or retaken from storage by Tenant within thirty (30) days after the end of the Term of this Lease, however terminated, shall be conclusively deemed to have been forever abandoned by Tenant.

(f)   If Tenant violates any of the terms and provisions of this Lease or defaults in any of its obligations hereunder other than the payment of rent or other sums payable hereunder, such violation may be restrained or such obligation enforced by injunction

(g)   All rights and remedies of Landlord herein enumerated shall be cumulative and none shall exclude any other right or remedy allowed by law.

(27) **HOLDING OVER:**

Tenant shall pay Landlord for each month, or part thereof that Tenant retains possession of the Leased Premises or any part thereof after termination or expiration of the Term of this Lease double the amount of the monthly rent then required by the terms hereof and also pay all damages sustained by Landlord by reason of such retention.

(28) **RIGHTS RESERVED BY LANDLORD:**

Landlord shall have the following rights exercisable without notice and without liability to Tenant:

(a)   To change the name or street address of the Building; must provide 90 day written notification to Tenant

(b)   To have pass keys to the Leased Premises;

(c)   To approve the weight, size and location of safes, computers, and other heavy articles or equipment in and about the Leased Premises and to require all such items and other office furniture and equipment to be moved in and out of the Building only at such times and in such manner as Landlord Tenant's sole risk and responsibility.

(d)   Landlord or its agents shall have the right to enter the Leased Premises only during regular business hours and with 24 hour written notification for the purpose of inspecting the same, showing the same to prospective purchasers, lenders, or tenants, making such alterations, repairs, improvements or additions to the Leased Premises as Landlord may deem necessary or desirable. Landlord may at any time place on or about the Leased Premises any ordinary "For Sale" signs. Exception to be under emergency access needed.

(f)   Within six (6) months prior to the date of the expiration of this Lease, Landlord or its agents shall have the right to enter the Leased Premises at all reasonable times

14   *Initials*

for the purpose of exhibiting the Leased Premises to prospective tenants. only during regular business hours and with 24 hour written notification

(29) **BROKER'S COMMISSION:**

Tenant represents that it has dealt directly with (and only with), _**Hoagland Commercial Realtors**_ and **Grisanti Group Commercial Real Estate** as brokers in connection with this Lease and that no other broker negotiated or participated in the negotiations of this Lease or submitted or showed the Leased Premises to it or is entitled to any commission in connection therewith. Landlord shall be liable for the payment of any commission due to the broker named in this paragraph; however, if there is a violation of the representation herein made by Tenant, and any other broker claims a commission from Landlord, Tenant shall indemnify, to the extent allowed by law and hold the Landlord harmless from such claim.

(30) **ESTOPPEL CERTIFICATE:**

(a)   Tenant shall at any time upon not less than ten (10) days' prior written notice from Landlord execute, acknowledge and deliver to Landlord a statement in writing: (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified, is in full force and effect) and the date to which rent and other charges are paid in advance, if any, and (ii) acknowledging that there are no uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed. Such statement shall be in a form as Landlord, purchaser or mortgagee shall require. Any such statement may be conclusively relied upon by any prospective purchaser or mortgagee of the Leased Premises.

(b)   Tenant's failure to deliver such statement within ten (10) days shall be a material default under this Lease or, at Landlord's option, Tenant's failure to furnish such statement shall be conclusive upon Tenant. (i) that this Lease is in full force and effect, without modification except as may be represented by Landlord, (ii) that there are no uncured defaults in Landlord's performance, and (iii) that not more than one month's rent has been paid in advance or such failure may be considered by Landlord as a default by Tenant under this Lease

(c)   If requested by any purchaser or mortgagee, Landlord shall execute such statement on behalf of Tenant as Tenant's attorney-in-fact. Tenant does hereby make, constitute and appoint Landlord as Tenant's attorney-in-fact and in Tenant's name, place and stead to execute such statement in accordance with this Paragraph 29.

(31) **LANDLORD'S LIABILITY:**

(a)   The term "Landlord" as used herein shall mean only the owner or owners at the time in question of the fee title. In the event of any transfer of such title, Landlord herein named (and in case of any subsequent transfers, then the grantor) shall be relieved from and after the date of such transfer of all liability as respects Landlord's obligations thereafter to be performed, provided that any funds in the hands of Landlord or the then grantor at the time of such transfer, in which Tenant has an interest, shall be delivered to the grantee. The obligations contained in this Lease to be performed by Landlord shall, subject as aforesaid, be binding on Landlord's successors and assigns, only during their respective periods of ownership.

(b)   Tenant shall look solely to the estate and property of Landlord in the Developed Parcel for the collection of any judgment (or other judicial process) requiring the payment of money by Landlord in the event of any default or breach by Landlord with respect to any of the terms and provisions of this Lease to be kept, observed, and performed by Landlord, subject, however, to the prior rights of any mortgagee of all or any part of the property; no other assets of Landlord shall be subject to levy, execution or other judicial process for the satisfaction of Tenant's claim. Nothing in this Lease shall be construed in any event whatsoever to impose any personal liability upon the trustees, officers or the shareholders of the

15   _Initials_

Landlord, or of the general or limited partners or members comprising the Landlord, as Landlord herein or otherwise.

(32) **INCORPORATION OF PRIOR AGREEMENTS; AMENDMENTS:**

This Lease including any exhibits, schedules or attachments, hereto, contains all agreements of the parties with respect to any matter mentioned herein. No prior agreement or understanding pertaining to any such matter shall be effective. This Lease may be modified in writing only, signed by the parties in interest at the time of the modification. Except as otherwise stated in this Lease, Tenant hereby acknowledges that neither any cooperating broker on this transaction nor the Landlord or any employees or agents of any of said persons has made any oral or written warranties or representations to Tenant relative to the condition or use by Tenant of said Leased Premises, the Building or the Developed Parcel.

(33) **WAIVERS:**

(a) No provision of this Lease will be deemed waived by either party unless expressly waived in a writing signed by the waiving party. No waiver shall be implied by delay or any other act or omission of either party. No waiver by either party of any provision of this Lease shall be deemed a waiver of such provision with respect to any subsequent matter relating to such provision. Landlord's consent or approval respecting any action by Tenant shall not constitute a waiver of the requirement for obtaining Landlord's consent or approval respecting any subsequent such action.

(b) Subsequent acceptance of rent or any other amounts by Landlord or its employees or agents shall not reinstate or extend the Term or Tenant's right to possession after termination of either of the same and shall not constitute a waiver of any breach by Tenant of any term or condition of this Lease, regardless of Landlord's knowledge of such breach at the time such rent is accepted, such acceptance of rent shall not preclude the Landlord from continuing or beginning an action for possession of the Premises. The acceptance of rent, or of the performance of any other term or condition by any person other than Tenant, including any transferee, shall not constitute a waiver of Landlord's right to approve any transfer.

(34) **SEVERABILITY:**

If any provision of this Lease shall at any time be deemed to be invalid or illegal by any court of competent jurisdiction, this Lease shall not be invalidated thereby; and in such event this Lease shall be read and construed as if such invalid or illegal provision had not been contained herein.

(35) **RECORDING:**

This Lease shall not be placed of record; however, either Landlord or Tenant shall, upon request of the other, execute, acknowledge and deliver to the other a "short form" memorandum of this Lease for recording purposes.

(36) **CUMULATIVE REMEDIES:**

No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

(37) **BINDING EFFECT:**

Subject to any provisions hereof restricting assignment or subletting by Tenant, this Lease shall be binding upon and inure to the benefit of the parties, their heirs, personal representatives, successors and assigns.

(38) **SUBORDINATION:**

(a) The Tenant accepts this Lease subject and subordinate to any ground lease, mortgage, deed of trust, or any other hypothecation or security now or hereafter

16   *Initials*

placed upon the Developed Parcel and to any and all advances made on the security thereof and to all renewals, modifications, consolidations, replacements and extensions thereof including, but not limited to, the Ground Lease. If any mortgagee, shall elect to have this Lease prior to the lien of its mortgage, and shall give written notice thereof to Tenant, this Lease shall be deemed prior to such mortgage, whether this Lease is dated prior or subsequent to the date of said mortgage, or the date of recording thereof.

(b)   Although the provisions of Paragraph 37(a) shall be self-operative, Tenant agrees, upon request of Landlord or Landlord's lender, to execute any documents required to effectuate any attornment, a subordination or to make this Lease prior to the lien of any mortgage.

(39)   AUTHORITY:

If Tenant is a corporation, trust, general or limited partnership, each individual executing this Lease on behalf of such entity represents and warrants that he or she is duly authorized to execute and deliver this Lease on behalf of said entity and shall, at the execution of this Lease, deliver to Landlord evidence of such authority satisfactory to Landlord.

(40)   CONFLICT:

Any conflict between the printed provisions of this Lease and the typewritten or handwritten provisions shall be controlled by the typewritten or handwritten provision (provided each such change is initialed by both parties).

41)   GOVERNING LAW; FORUM:

This Lease is made under and is to be governed by the laws of the State of Indiana. Any action arising out of this Lease shall be brought only in a court of competent jurisdiction in Clark County, Indiana.

(42)   ADDITIONAL CONDITIONS AND PROVISIONS:

Any additional provisions or conditions are set forth in the form of an addendum attached to and herein made a part of this Lease. The Tenant agrees the Landlord is not required to provide any services to the Tenant, unless set forth herein in writing to the contrary.

(43)   This item removed as approved by both Tenant and Landlord

(44)   USE PROHIBITIONS:

No immoral, improper, offensive or unlawful use shall be permitted by Tenant, its subtenants and/or assigns within the Quartermaster Station; and all valid laws, zoning ordinances and regulations of all governmental bodies having jurisdiction shall be observed.   In addition to the foregoing, no Tenant, subtenant or assigns within the Quartermaster Station shall use the Premises for any of the following restricted uses:
  (i)   adult entertainment activities (as defined in the City of Jeffersonville/ Clark County zoning ordinances) or as an adult entertainment facility or adult bookstore;
  (ii)   massage parlor;
  (iii)   tattoo parlor;
  (iv)   methadone or similar drug treatment center;
  (v)   bingo hall or operating any other game of chance; or
  (vi)   abortion clinic
Any violation of the foregoing use prohibition shall be considered a default under this Lease, which among other remedies, may result in the termination of this Lease by Landlord and/or the City of Jeffersonville.

Initials

IN WITNESS WHEREOF, Landlord and Tenant have hereunto executed this Lease as of the day and year first above written.

Brian W Sanest
WITNESS

_____
WITNESS

LANDLORD:

QUARTERMASTER STATION, LLC

By: _____

Printed: P.B. Jones

Title: Mgr

Date: 7/29/15

TENANT:

Kapsch TrafficCom IVHS Inc

By: _____

Printed: CHRISTOPHER MURRAY

Title: PRESIDENT AND CEO

Date: 7/16/15   7/16/15

_____
WITNESS

_____
WITNESS

Initials _____ _____

STATE OF _____)
) SS:
COUNTY OF _____)

    Be It Remembered that on the _____ day of _____, 20___, before me, a Notary Public in and for said County and State, personally appeared _____ as _____, Landlord in the foregoing Lease Agreement, and for and on behalf of said corporation acknowledged the signing and executing of said instrument, that the signing and execution of said instrument is his free act and deed, his free act and deed as such officer, and the free act and deed of said corporation for the uses and purposes in said instrument mentioned.

    In Testimony Whereof I have hereunto subscribed my name and affixed my Notarial seal on the day and year last aforesaid.

                        _____
                        NOTARY PUBLIC

                        My Commission Expires: _____

STATE OF *VA*)
) SS:
COUNTY OF *Fairfax*)

    Be It Remembered that on the *16* day of *July*, 20*15*, before me, a Notary Public in and for said County and State, personally appeared *Christopher Murray* as *President* and *CEO* of *Kapsch TrafficCom IVHS Inc.* Tenant in the foregoing Lease Agreement, and for and on behalf of said corporation acknowledged the signing and executing of said instrument, that the signing and execution of said instrument is his free act and deed, his free act and deed as such officers, and the free act and deed of said corporation for the uses and purposes in said instrument mentioned.

In Testimony Whereof I have hereunto subscribed my name and affixed my Notarial seal on the .

day and year last aforesaid.

                  Saida Williams
                  NOTARY PUBLIC

                  My Commission Expires: *6/30/19*

Initials ____ ____

EXHIBIT "A"

LEASED PREMISES

Initials

EXHIBIT "B"

DEVELOPED PARCEL

Initials

EXHIBIT "C"

ALTERATIONS AND IMPROVEMENTS
Provided by Landlord
(WORK LETTER)

The Tenant accepts the Premises in "as is, where is" condition, except for any specific provisions contained in the Lease to the contrary. The Tenant agrees the Landlord is not required to provide any services to the Tenant, unless set forth herein in writing to the contrary.

Landlord will complete the turn key build out per final approved drawing submitted by Tenant. Specs for construction are listed below.

- Tenants architectural plans will take precedence over the following items if in contradiction with any of the following
- The basic building finished with all utility services extended to or into the building. All Site improvements completed including driveways, sidewalks, curbing, curb cuts, parking and landscaping.
- Flooring finished with 4" reinforced concrete slab surface troweled smooth.
- Interior demising walls finished with 3 5/8" metal studs from floor to underside of roof deck, 24" on center, covered with 5/8" fire coded drywall with sound blanket, taped, sanded and ready to receive finish.
- Ceiling to be 10" high and covered with 2'x4' acoustical lay-in panels on exposed metal grid system.
- Two (minimum) complete restroom approximately 5'8" x 5'10" with hollow core door, vinyl covered
  floor, commode, sink, mirror, privacy lock hardware, toilet paper dispenser and six (6) gallon water heater.
- Storefront door will consist of a single plate glass door and lock. The delivery door will be a metal hollow door with hardware, weatherstrip, threshold and metal frame.
- Lighting will consist of 2'x4' lay-in fluorescent light fixtures to provide an average of one (1) per every one hundred (100) square feet of retail area.
- Electrical will consist of 100 AMP, 3 phase, 4 wire service. Any increase in the service size to be paid by Tenant. Conventional electric outlets will be located in the walls not less than twenty-five (25) feet apart on the demising walls. A total of one (1) outlet will be installed in the lavatory. A hot junction box will be installed from the Tenant's panel to the storefront area for Tenant's sign service.
- Telephone connection will consist of one (1) rough in-box and pull string to be located on the wall at a location specified on the interior layout plans for final wiring by Tenant.
- Heating and air conditioning will consist of a combination gas heating and electrical cooling system, such units to be controlled by thermostat located in the sales area. The supply distribution will be by metal duct and recessed ceiling diffusers. Air conditioning size will be provided one (1) ton per three hundred fifty (350) square feet of leasable area.
- Paved Parking area behind the Leased premises to accommodate delivery trucks and up to 6 parking spots for Tenant parking.
- Removal of ALL restaurant remnants behind the Leased premises of the building

(This space intentionally left blank)

Initials

EXHIBIT "D"
BASE RENT

PERIOD	BASE	MO. PASS THRUS	TOTAL MO. RENT	TOTAL ANNUAL RENT
Years 1-7	$2,900.00	$700.00	$3,600.00	$43,200.00
Years 8-10	$3,045.00	$700.00	$3,745.00	$44,940.00

In addition to the monthly installments of Annual Rent and Additional Rent, the Tenant agrees to pay Landlord all applicable sales, use and/or other taxes (whether Federal, State or local), applicable to this Lease.

23

Initials

RULES AND REGULATIONS

Between

Quartermaster Station, LLC
("Landlord")

and

KAPSCH TrafficCom IVHS Inc.
("Tenant")

Definitions

Wherever in these Rules and Regulations the word "Tenant" is used, it shall be taken to apply to and include Tenant and its agents, employees, invitees, licensees, subtenants, and contractors, and is to be deemed of such number and gender as the circumstances require. The word "Landlord" shall be taken to include the employees and agents of the Landlord.

Construction

The streets, sidewalks, entrances, and other common areas provided by Landlord shall not be obstructed by Tenant, or used by it for any other purpose than for ingress and egress.

Washrooms

Restrooms, water closets and other water apparatus shall not be used for any purpose other than those for which they were constructed.

General Prohibitions and Covenants

In order to insure proper use and care of the Building, Tenant shall not:

(a)   Allow any sign, advertisement or notice to be fixed to the Building. inside or outside, without Landlord's consent;

(b)   Make improper noises or disturbances of any kind;

(c)   Mark or defile water-closets, restrooms, walls, windows, doors or any other part of Leased Premises

(d)   Place anything on the outside of the Building, including roof setbacks, window ledges and other projections

(e)   Fasten any article, drill holes, drive nails or screws into the Building walls, floors, woodwork, window mullions, or demising partitions without Landlord's consent;

(f)   Interfere with the heating or cooling apparatus;

(g)   Install any shades, blinds, or awnings without the Landlord's consent;

(h)   Install call boxes or any kind of wire in or on the Building without Landlord's consent or direction;

(i)   Change the locks of any doors to the Leased Premises without furnishing Landlord duplicate keys;

(j)   Give its employees or other persons permission to go upon the roof of the Building without Landlord's consent; and no roof or exterior wall penetrations shall be made without consent of Landlord;

(k)   Advertise the business, profession or activities of Tenant in any manner involving the Building name and address which violates the letter or spirit of any code of ethics

Initials

adopted by any recognized association or organization pertaining thereto or use the name of the Building for any purposes other than that of the business address of the Tenant;

(l)   Carry on or permit to be carried on upon said Leased Premises or any part thereof any immoral or illegal business, gambling, the selling or pools, lotteries or any business that is prohibited by law

In addition, Tenant agrees that:

(a)   All entrance doors in the Leased Premises shall be left locked when not in use;

(b)   Canvassing, soliciting or peddling in the Building is prohibited and Tenant shall cooperate to prevent the same;

(c)   Freight, furniture, business equipment, merchandise and bulky matter of any description shall be delivered to and removed from the Leased Premises at the sole risk of Tenant

Business Machines

Business machines and mechanical equipment which cause vibration, noise, cold or heat that may be transmitted to the Building structure or to any other leased space outside Leased Premises shall be placed and maintained by Tenant, at its sole cost and expense, in settings of cork, rubber or spring type vibration eliminators or by other methods acceptable to Landlord, sufficient to absorb and isolate such vibration, noise, cold or heat.

Rights Reserved by Landlord

Without abatement or diminution in rent, Landlord reserves and shall have the right:

(a)   To control and operate the public portions of the Building and the public facilities, as well as facilities furnished for the common use of the tenants, in such manner as it deems best for the benefit of the tenants generally. No tenant shall invite to the Leased Premises, or permit the visit of, persons in such numbers or under such conditions as to interfere with the use and employment of the entrances, corridors, elevators and facilities of the Building by other tenants;

(b)   To install and maintain a sign or signs on the exterior of the Building;

(c)   To approve all sources furnishing Tenant signs;

(d)   To erect, use and maintain pipes and conduits in and through the Leased Premises;

(e)   During the last six (6) months of the Lease Term or any part thereof, if during or prior to that time Tenant vacates the Leased Premises, to decorate, remodel, repair, alter or otherwise prepare the Leased Premises for reletting;

(f)   To constantly have pass keys to the Leased Premises;

(g)   To grant anyone the exclusive right to conduct any particular business or undertaking in the Building;

(h)   To exhibit the Leased Premises to others and to display "For Rent" signs on the Leased Premises; and

(i)   To take any and all measures, including inspections, repairs, alterations, additions and improvements to the Leased Premises or to the Building as may be necessary or desirable in the operation of the Building;

(j)   To close or temporarily suspend operation of entrances, doors, corridors or other facilities for the specific purpose of performing repairs, provided that Landlord shall cause as little inconvenience or annoyance to Tenant as it is reasonable necessary in the circumstances, and shall not do any act which permanently reduces the size of the Leased Premises. Landlord may do any such work during ordinary business hours. If such work is done during other hours at Tenant's request, Tenant shall pay Landlord for overtime and any other expenses incurred.

Landlord may enter upon the Leased Premises and may exercise any or all of the foregoing rights hereby reserved without being deemed guilty of an eviction or disturbance of Tenant's use or possession and without being liable in any manner to Tenant.

Regulation Change

Landlord reserves the right to make such other and further reasonable Rules and Regulations or to rescind, alter or waive any rule or regulation, as in the judgment of Landlord, may from time to time be needful for the safety, appearance, care and cleanliness of the Building and for the preservation of good order therein. Landlord shall not be responsible to Tenant for any violation of Rules and Regulations by any other Tenants.

Initials

Section 5: Kentucky Walk-Up Center Lease

LEASE AGREEMENT

THIS LEASE AGREEMENT ("Lease") is made and entered into this *13* day of July 2015 ("Effective Date"), by and between East Main Commercial, LLC, a Kentucky, Limited Liability Company ("Lessor") and **Kapsch TrafficCom IVHS, Inc**, a Delaware Corporation ("Lessee").

AGREEMENT:

NOW, THEREFORE, in consideration of the promises and mutual covenants contained herein and other valuable consideration, the parties agree as follows:

1. **Description of Leased Premises and Term.**

   1.01   **Leased Premises.** Lessor does herby lease to Lessee and Lessee does herby lease from Lessor that certain real property consisting of approximately 1,988 square feet of space known as Units 102 and 103 (the "Premises") in the property commonly known as Park Place Lofts, 400 East Main Street, Louisville Kentucky (the "Building"). The Building and the underlying real estate shall be referred to as the "Property". The Premises is depicted on **Exhibit A** attached hereto and incorporated herein by reference.

2. **Term.**

   2.01   **Initial Term.** The term of this Lease shall commence on August 1, 2015 and Lessee's obligation to pay rent shall commence on November 1, 2015 (the "Commencement Date") and shall expire on October 31, 2022 (the "Initial Term"), subject to earlier termination or extended as hereinafter provided.

   2.02   **Extended Term.** Following the expiration of the Initial Term and provided Lessee is not in default under the Lease, Lessee may extend the Lease for three (3) additional three (3) year terms (an "Extended Term") on all of the terms and conditions of this Lease, except Base Rent shall be the then fair market value for comparable office/retail space in the CBD but in no event less than the rental rate in the final year of the prior lease term. The Base Rent shall not exceed $20 per square foot in the first renewal term. To exercise an Extended Term, Lessee shall provide written notice to Lessor no less than 180 days prior to the expiration of the then current term. The Initial Term and each Extended Term shall be collectively referred to as the "Term."

3. **Base Rent.**

   3.01   **Base Rent.** Lessee agrees to pay Lessor during the Initial Term Base Rent as set forth in the table below, payable in equal monthly installments on the first day of each month of the Initial Term in advance, without demand. Rent for any partial month shall be prorated on a daily basis.

Year	Monthly Base Rent
Year 1-7	$2,236.50

   3.03   **Additional Rent:** In addition to the Base Rent Lessee shall pay as "Additional Rent" during the term of the Lease and any extension or renewal thereof, Lessee's share of the Taxes, Insurance

1

and Common Expenses. Initially, Lessee agrees to pay Lessor as Additional Rent equal monthly installments of Three Hundred Seventy Six Dollars ($376.00) each, on the first day of each month. The first monthly payment of Additional Rent shall include any prorated rental for the period from the Commencement Date to the first day of the first full calendar month after the Commencement Date.

(A) **Insurance**. "Insurance" shall mean all premiums for fire and extended coverage, liability and property damage insurance. Lessor shall carry such insurance which shall be in such amounts as Lessor or Lessor's lender deems necessary.

(B) **Taxes**. "Taxes" shall mean all real estate taxes and assessments levied or charged against the Premises.

(C) **Common Expenses**. "Common Expenses" is defined in Article I, Paragraph 1.1.F of the Master Deed of Park Place Lofts of record in Deed Book 8646 Page 57 Jefferson County Kentucky Clerk's office. A copy of said Article I Paragraph 1.1 of the Master Deed is attached hereto as **Exhibit B** and made a part hereof.

The Additional Rent provided for in this Section 3.03 shall be paid by Lessee in monthly installments on the first day of each calendar month, in advance, in an amount estimated by Lessor prior to the initial rental year and prior to each calendar year thereafter. Lessor shall give Lessee written notice of such estimated amounts at least thirty (30) days before the first payment of such amounts is due from Lessee. Within ninety (90) days after the end of each calendar year, Lessor shall use commercially reasonable best efforts to furnish Lessee with a statement of the actual amount of Lessee's share of such costs and expenses for such period. If the total amount paid by Lessee under this Section 3.03 for such period shall be less than the actual amount due for Lessee for such period as shown on such statement, Lessee shall pay to Lessor the difference between the amount paid by Lessee and the actual amount due, such deficiency to be paid within thirty (30) days after the furnishing of each such statement; and if the total amount paid by Lessee hereunder for any such period shall exceed such actual amount due from Lessee for such period as shown on such statement, such excess shall be credited against the next installment of Base Rent due from Lessee to Lessor under this Section 3.03.

4. **Lessee Insurance**.

4.01 **Liability Insurance**. Lessee, at Lessee's sole cost and expense, agrees that it shall at all times during the Term carry and maintain in full force and effect, for the mutual benefit of Lessor, commercial general liability insurance in a combined single limited amount of not less than One Million Dollars ($1,000,000.00) per occurrence insuring against bodily injury or death, and property damage.

4.02 **Property Insurance**. Lessee, at Lessee's sole cost and expense, agrees that it shall at all times during the Term, insure all contents of the Premises against loss or damage by fire and all risks comprehended by standard extended coverage endorsements in amounts acceptable to Lessor.

4.03 **Workers' Compensation Insurance**. Lessee shall maintain workers' compensation insurance in the minimum amounts as required by Kentucky law, as amended.

2

5. **Use**

5.01   **Use In Compliance With Law**. Lessee covenants and agrees that the Premises shall be used as a walk-up center that will provide services to the general public and/or affiliated businesses and for no other purpose without first obtaining Lessor's prior written consent, which consent shall not be unreasonably withheld. Lessee covenants that Lessee shall procure and maintain all necessary licenses and permits required in connection with the operation of Lessee's business on the Premises.

6. **Maintenance and Repairs**.

6.01   **AS IS**. Lessee accepts the premises "AS IS" and acknowledges there are no representations or agreements between Lessor and Lessee as to the condition or repair of the Premises and also acknowledges that it is not entitled to any Lessee improvements or rent payment credits.

Lessee agrees that it will pay, or cause to be paid, all costs of labor, services and/or materials supplied in the prosecution of any work done, or caused to be done, on the Premises on behalf of Lessee, and Lessee will keep the Premises free and clear of all mechanics' liens and other such liens on account of work done for Lessee or persons claiming under Lessee. Upon Lessor's request at any time prior to the completion of any Lessee Work or Improvements, Lessee shall procure and deliver to Lessor a waiver of mechanics' lien with respect to the Premises, executed in recordable form by Lessee's contractor and subcontractors, and should Lessor request, by each of Lessee's subcontractors and suppliers.

If Lessee desires to contest any claim of such mechanics' lien it shall either (a) post a mechanics' lien release bond issued by a responsible corporate surety in an amount sufficient to satisfy statutory requirements therefor in the state where the premises are located or (b) furnish Lessor with adequate security for the amount of the claim plus estimated costs and interest and (c) promptly pay or cause to be paid all sums awarded to the claimant on its suit.

If Lessee shall be in default of any of its covenants by failing to provide security for or satisfaction of any mechanic's lien, then Lessor, in addition to any other rights or remedies it may have, may (but shall not be obligated to) discharge said lien by (a) paying the claimant an amount sufficient to settle and discharge the claim (b) posting a mechanics lien release bond. or (c) taking such action as Lessor shall deem appropriate, and in which event, Lessee shall pay as Additional Rent, on Lessor's demand, all costs (including reasonable attorney fees and expenses) incurred by Lessor in settling and discharging said lien together with interest thereon from the date of Lessor's payment of said costs.

6.02   **Lessee Maintenance and Repair**. Lessee, at its cost and expense shall maintain and repair the Premises, including, but not limited to, all exterior or interior parts of all door, windows, plate glass in and surrounding the Premises, including heating and air condition systems exclusively serving the Premises. Lessee shall maintain in effect a service contract to provide regular scheduled maintenance on said systems. Lessee shall not be responsible for replacement of heating and air condition systems or any repair that exceeds $1,000.00 unless caused by negligence of Lessee, Lessee's employees, or customers. Lessee shall also maintain furnishings, security systems, all floors, interior walls, ceilings lighting fixtures and bulbs in the Premises; all in good working order and in compliance with all applicable governmental rules, laws, codes and regulations. The provisions of this Paragraph 6 shall not apply in the case of damage or destruction by fire or other casualty covered by standard fire and extended coverage insurance or by eminent domain.

6.03   **Lessor Maintenance**. Lessor shall maintain all Common Areas, the foundation of the Building and Premises, exterior walls and roof of the Building, elevators, water mains, gas lines, main

exterior sewer lines, sidewalks, private roadways, parking areas; excluding any damages caused by the negligence of Lessee. Lessor shall deliver the Premises in "broom clean" condition and all equipment shall be in good working condition.

6.04 **Utilities.** The Premises are separately metered for electricity. Lessee shall be responsible for and shall promptly pay all charges for telephone service and for cable, internet, electricity, gas, sewer and all other utilities used upon or furnished to the Premises which are metered by a separate meter for the Premises.

6.05 **Window Coverings and Signage.** Lessee shall, at Lessee's expense, install signage identifying Lessee. Prior to installation, all signage shall be approved by Lessor and the Condominium Council, such approval not to be unreasonably withheld or delayed. Lessee shall remove any signs installed by Lessee at the expiration of this Lease, in accordance with Section 10 hereof.

7. **Mutual Indemnity.**

   (a) Lessee shall defend and hold Lessor harmless from and against any and all causes of action, losses, claims, costs, expenses, or damages, direct or indirect (including, without limitation, attorneys' fees and disbursements), alleged or proven, whatsoever arising from the negligence or willful misconduct of Lessee in the Building, Property or Premises.

   (b) Lessor shall defend and hold Lessee harmless from and against any and all causes of action, losses, claims, costs, expenses, or damages, direct or indirect (including, without limitation, attorneys' fees and disbursements), alleged or proven, whatsoever arising from the negligence or willful misconduct of Lessor in the Building, Property or Premises.

8. **Waste; Nuisance.** Lessee shall use, maintain and occupy the Premises in a lawful and proper manner and shall not commit waste on the Premises. Lessee shall not conduct any activity in the Premises or Common Area not considered appropriate for a first class commercial office building.

9. **Alterations.** Lessee shall not make or permit any alterations of the Premises without the prior written consent of Lessor (except for the removal of the walls which has already been approved by Lessor), which consent shall not be unreasonably withheld.

10. **Surrender and Holdover.** At the Termination of this Lease by lapse of the Term, or otherwise. Lessee shall yield up immediate possession of the Premises to Lessor in as good a condition and repair as on the Commencement Date, reasonable use and wear excepted. In addition, Lessee, at Lessee's sole cost and expense, shall remove all of its furniture, equipment and trade fixtures and repair damage to the Premises caused as a result of this removal. All fixtures that are part of the realty shall become Lessor's property. If Lessee should remain in possession of the Premises after expiration or termination of this Lease, such holding over shall be deemed a tenancy from month to month subject to the terms and conditions of this Lease as are applicable to a month-to-month tenancy and Base Rent shall increase by 110% over the immediately preceding term.

11. **Default.**

11.01 **Events of Default.** An event of default under this Lease shall be deemed to occur upon the happening of any one of the following events (an "Event of Default") whether voluntarily or involuntarily and, without limitation, whether brought about by operation of law or pursuant to or in

4

compliance with any judgment, decree or order of any court or any order, rule or regulation of any governmental body:

    (a) If Lessee shall default in the payment of Base Rent or any other sum required to be paid by Lessee pursuant to the provisions of the Lease for more than ten (10) days after written notice of nonpayment from Lessor to Lessee; or

    (b) If Lessee shall default in the performance of any other duty of Lessee pursuant to this Lease, and such default shall continue in whole or in part for a period of thirty (30) days (or such additional time as may be reasonably necessary) following written notice given after such default by Lessor to Lessee and specifying such default; or

    (c) If Lessee shall dissolve, shall sell all or substantially all of its assets, make a general assignment for the benefit of its creditors, seek any reorganization, liquidation, or composition of its debt, shall admit that it cannot pay its debts as they become due, or shall file a petition seeking relief under any bankruptcy, insolvency or reorganization law; or

    (d) If proceedings in bankruptcy are instituted against Lessee, or a receiver is appointed for all or substantially all of Lessee's business or assets, or a trustee is appointed by Lessee after a petition for Lessee's reorganization under the Federal Bankruptcy Act of 1985 or any future law having the same general purpose, is filed and if such bankruptcy, receivership or trusteeship is not dissolved within sixty (60) days following written notice, by Lessor to Lessee, specifying such default.

    (e) All notifications shall be sent and proof of receipt via Registered Signed for mail.

11.02 **Remedies.** If an Event of Default shall occur, Lessor shall have any one or more of the following remedies at Lessor's election:

    (a) Without taking possession of the Premises, Lessor may require strict performance of all the covenants and obligations hereof as the same shall accrue and shall have the right to specific performance of all of the Lessee's obligations hereunder; or

    (b) Lessor may without any further demand or notice to declare this Lease terminated, in which event, in addition to any other remedy Lessor may have, Lessor may recover from Lessee all actual damages Lessor incurs by reason of such breach, including the reasonable cost of recovering the Premises located thereon, which amount shall be due and payable form Lessee within thirty (30) days of receipt of an invoice.

11.03 **Remedies Cumulative.** No remedy herein or otherwise conferred upon or reserved to Lessor shall be considered exclusive of any other remedy, but the same shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute, and every power and remedy given by this Lease to Lessor may be exercised from time to time and as often as occasion may arise or as may be deemed expedient. No delay or omission of Lessor to exercise any right or power arising from any default shall impair any such right or power or shall be construed to be a waiver of any such default or any acquiescence therein.

11.04 **Lessor Default.**

5

(a) Lessee may notify Lessor in writing in accordance with this Lease, that Lessee believes Lessor has failed to perform an obligation of Lessor required by this Lease, which failure to perform shall both violate Lessor's obligation to maintain the Building and materially interfere with the business operations of Lessee from the Premises (a "Lessor Default"). Lessor shall have thirty (30) days after such notice to cure a Lessor Default (or such additional time as is reasonably necessary to correct the Lessor Default so long as Lessor is diligently pursuing to cure such Lessor Default to completion.

(b) If Lessor or any Current Lender (herein defined) fails to cure a Lessor Default within the cure periods specified above and below, then Lessee may elect to cure the Lessor Default and Lessor shall be responsible for all reasonable and necessary costs of such Lessee cure incurred by Lessee; including any attorneys' fees. Lessor shall pay the same to Lessee within thirty (30) days of Lessee providing Lessor an invoice, and if not paid, Lessee may offset such amounts from the Base Rent obligations of the Lessee under this Lease or pursue any and all remedies available at law or in equity.

(c) If Lessor has previously provided Lessee with written notice specifying the name and address of Lessor's current mortgagee(s) (each, a "Current Lender"), Lessee also agrees to simultaneously provide a copy of any notice of Lessor Default provided to Lessor (a "Lessor Default Notice") to each identified Current Lender. Lessee agrees that: (a) each Current Lender shall have a period of thirty (30) days from the date the Lessor Default Notice is provided to each Current Lender to remedy a default by Lessor under this Lease and (b) Lessee shall not exercise any of its rights or remedies under this Section until such additional cure period has expired.

12. **Waiver of Subrogation.** Each of the parties to this Lease hereby waives all causes of action and rights of recovery against the other party, and their respective successors, officers, employees, agents and assigns for any loss or damage occurring to the Premises, fixtures, merchandise and personal property of every kind located in and about the Premises resulting from any perils covered by insurance regardless of cause or origin, including the negligence of either party, their respective heirs, administrators, successors, officers, employees, agents, guests, invitees, customers, and assigns to the extent of any recovery under a policy or policies of insurance, provided that any such policy or policies will not be invalidated in whole or in part by this subrogation. To the extent necessary to effect the foregoing waiver of subrogation, each of the parties agrees to obtain from their respective insurance carriers endorsements to such policies of insurance waiving the right of subrogation of the insurance carrier.

13. **Assignment or Subletting.** Lessee shall not assign, convey, transfer, mortgage, pledge, or otherwise encumber this Lease or sublet or permit to be used or occupied by anyone other than Lessee, all or any part of the Leased Premises. Notwithstanding the foregoing, Lessee may assign this Lease or sublet the Premises to any entity controlling, controlled by, or under common control with Lessee as well as the Indiana Finance Authority. In the event the Lease is assigned or sublet to an agency of Indiana or Kentucky, the language, "to the extent allowed by law," shall be added to the beginning of paragraph 7.

14. **Presence and Use of Hazardous Materials.** Lessee shall not keep in or about the Premises for use, disposal, generation, storage or sale or allow the release or generation from the Premises of any hazardous materials or hazardous substances, which include any materials or components thereof now or hereafter designated as petroleum products, hazardous, dangerous, toxic or harmful in any provisions of law, statutes, ordinances, rules, regulations, permits, licenses, judgments, decrees, orders, or awards or standards promulgated by any federal, state or local governmental authorities.

6

15. **Damage to Leased Premises.** In case the Premises is partially damaged by fire or other casualty, but not rendered untenantable, the Premises shall be repaired by Lessor to the extent insurance proceeds are available within one hundred and eighty (180) days. If the damage renders the Premises untenantable, Lessor or Lessee may elect to terminate this Lease on sixty (60) days written notice. Any Base Rent or Additional Rent due hereunder shall be abated during the period the Premises are untenantable.

16. **Miscellaneous.**

16.01 **Notice and Demands.** All notices to or demands upon Lessor or Lessee desired or required to be given under any of this provisions herof shall be in writing by facsimile, electronic mail or U.S. first class mail in an envelope properly stamped and addressed:

If to Lessor:	If to Lessee:
East Main Commercial, LLC	Kapsch TrafficCom IVHS, Inc
3725 Blakemore Lane	8201 Greensboro Drive, Suite 1002
Lagrange, Kentucky 40031	McLean, VA 22102

16.02 **Successors in Interest.** All of the covenants, agreements, conditions and undertakings in this Lease shall extend and inure to be benefit of and be binding upon the successors and permitted assigns of the parties hereto.

16.03 **Saving Clause.** If any term or provision of this Lease or any application thereof shall to any extent to be held invalid or unenforceable, the remaining terms and provisions of this Lease shall not be affected thereby, but each term and provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

16.04 **Quiet Enjoyment.** Lessee, on paying the rents and observing and keeping the covenants, agreements, conditions and obligations of Lessee under this Lease, shall lawfully, peaceably and quietly hold, occupy and enjoy the Leased Premises during the term of this Lease without hindrance by Lessor.

16.05 **Merger Clause.** This Lease contains the entire Agreement between the parties relating to Lessee's occupancy of the Leased Premises and there are no agreements, representations, or warranties, oral or written, which are not set forth herein. This Lease may not be amended or revised, except by a writing signed by the parties.

16.06 **Choice of Law.** This Lease shall be constructed and enforced in accordance with the laws of the Commonwealth of Kentucky.

16.07 **Right of Access.** Upon at least twenty-four (24) hours prior notice, Lessor may enter the Premises during normal business hours to maintain, repair and replace the Premises and to show the Premises to prospective lessees, purchasers and lenders.

16.08 **Parking.** Lessee shall have the use of parking space #1 in the private parking lot as well as garage space #3 free of charge.

16.09 **Lessee to abide by Condominium Master Deed, By-Laws and Rules.** Lessee acknowledges receipt of a copy of the Master Deed and Declaration establishing Park Place Lofts which the Premises constitute a part of, a copy of the By-laws of Park Place Lofts Council of Co-Owners, Inc. and a copy of the Rules of Park Place Lofts. Lessee agrees to abide by and comply with all the terms and conditions set out in said documents, except for monetary obligations imposed on the owners of Units in

Park Place Lofts. Lessee shall not be a member of the Council of Co-Owners and not have a vote on any Condominium matters as said voting rights are reserved for Lessor, who shall do so in good faith.

The undersigned parties have executed this Lease on the date first written above.

LESSOR:

LESSEE:

EAST MAIN COMMERCIAL, LLC
a Kentucky Limited Liability Company

By: _M-Walee_
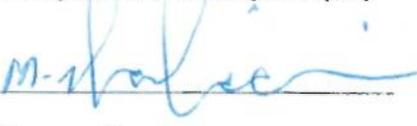
Its: Manager-Member

Date: 7-13-15

Kapsch TrafficCom IVHS, INC,
a Delaware Corporation

By: _____
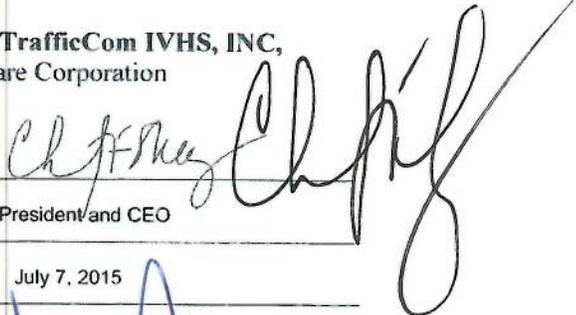
Its: President and CEO

Date: July 7, 2015

By: _____
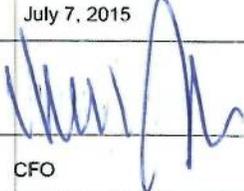
Its: CFO

Date: July 7, 2015

8

EXHIBIT "A"

Located at 400 East Main St. Louisville, KY and being Units 102 and 103 Park Place Lofts, established in Master Deed dated June 23, 2005 of recorded in Deed Book 8646, Page 57 and by Amendment to Master Deed dated March 7, 2006 of record in Deed Book 8792, Page 754 and all Amendments thereto and of record in Condominium Book 108, Pages 98 through 102 and Condominium Book Plat 113, Page 3, and all Amendments thereto, all in the office of the County Clerk of Jefferson County, Kentucky.

MASTER DEED AND DECLARATION
Establishing
PARK PLACE LOFTS

LHD EAST MAIN, LLC, a Kentucky limited liability company d/b/a Park Place Lofts (the "Declarant"), executes this Master Deed and Declaration (the "Master Deed") this 23 day of June, 2005, as its plan for ownership in condominiums of certain property located at 400 East Main Street, Louisville, Jefferson County, Kentucky, 40202 to be known as Park Place Lofts.

WITNESSETH:

WHEREAS, the Declarant is the owner in fee simple of the real property (the "Land") more particularly described on Exhibit A attached hereto and made a part hereof; and

WHEREAS, the Declarant desires to create a condominium property regime by submitting the Land, together with the improvements and structures now existing and hereafter erected on such Land, and all easements, rights and appurtenances belonging thereto (said Land, improvements, structures, easements, rights, and appurtenances are together referred to as the "Property") to the provisions of the Horizontal Property Law of the Commonwealth of Kentucky, KRS 381.805 to KRS 381.910 (the "Horizontal Property Law").

NOW, THEREFORE, Declarant hereby submits said Property to the provisions of the Horizontal Property Law and declares that said Property shall be a condominium property regime (hereinafter referred to as the "Regime") pursuant to the Horizontal Property Law, and pursuant to the following provisions:

ARTICLE 1
Definitions

1.1   Definitions. Certain terms as used in this Master Deed shall be defined as follows:

A.   "Affiliate" means: (i) any Person which directly or indirectly is in control of, is controlled by or is under common-control with, a Unit Owner, (ii) any Person who is a partner, member, trustee or officer of a Unit Owner or of any Person described in clause (i) above, or (iii) as to a natural person, such person's spouse, lineal descendants, parents and/or siblings. For purposes of this definition, "control" of a Person shall mean the power, direct or indirect, to direct or cause the direction of the management and policies of the Person whether through the ownership of voting securities or by contract or otherwise.

B.   "Amendment" means any modification of this Master Deed approved and recorded in accordance with the provisions of any applicable statute, this Master Deed, and the Bylaws (if any).

C.   "Bylaws" means the bylaws of the Council, approved and adopted by the Council in its sole discretion, which shall govern and control, in part, the administration and affairs of the Regime. Unless and until such Bylaws are adopted, this Master Deed shall be construed as if no Bylaws exist.

EXHIBIT "B"   M-5

D. "Building" means the buildings now being constructed on the Land, to contain approximately 52,200 gross square feet, and which shall contain all of the Units in the Regime. The location of the Building on the Land and the area of the Building are as set forth on the Plans.

E. "Common Elements" means all of the Property, except the present and future Units, including the outside walls and roof of the Building, the foundation and structural support of the Building, all columns, girders, and beams, the Land and improvements on the Property, all utility or other pipes and material located outside of the Units except such as are part of the Units, all central installations for the furnishing of utilities and other services to the Units, all driveways, roadways, grass areas, and sidewalks, and the lobbies, halls, stairs, stairwells, elevators and elevator shafts, common restrooms and utility rooms in the Building, to the extent the same are not a part of any Unit and as more fully described in Article III below.

F. "Common Expenses" means, except where the provisions of this Master Deed provide otherwise, all charges, costs and expenses incurred by the Council for and in connection with the administration and operation of the Regime, including, without limitation thereof: operation, ownership, maintenance, repair, replacement and restoration (to the extent not covered by insurance) of the General Common Elements and the twenty nine (29) designated parking spaces located on the Property that constitute part of the Limited Common Elements; any additions and alterations thereto; all liability for loss or damage arising out of or in connection with the General Common Elements and their use; all premiums for insurance required to be carried under Article IX; costs and expenses incurred in acquiring a Unit pursuant to judicial sale; all administrative, accounting, legal and managerial expenses of the Council; real estate taxes not separately assessed and billed to the Unit Owners; and all charges for utilities not separately metered, including without limitation, building security lights, water service and garbage collection; provided, however, if the rate for any of the common utilities or garbage collection service is increased as a result of a particular Unit Owner's excessive or particular use, the Council may collect such increase from that Unit Owner. All of the above shall constitute Common Expenses of the Regime for which each Unit Owner shall be severally liable monthly. The Regime's Common Expense budget shall include a reserve for capital replacements. No cost of maintaining, repairing, replacing, restoring, operating or owning any part of a Unit shall be included in Common Expenses. Except as provided elsewhere in this Master Deed, Common Expenses shall be apportioned among the Unit Owners based upon each Unit Owner's Expense Percentage and not on the basis of the number of Units owned.

G. "Condominium Documents" means, collectively, the Master Deed, Bylaws and any Rules enacted by the Council.

H. "Council of Co-owners" or "Council" means all of the Unit Owners who shall act as a group in accordance with this Master Deed, any Amendments thereto, the Bylaws and any other governing documents enacted by the Council. The Council may, but shall not be required to, incorporate itself as a nonstock, nonprofit corporation in accordance with KRS 273.161 to KRS 273.390.

I. "Expense Percentage" means the percentage computed by dividing the square footage of each Unit by the total square footage of all Units, and used to allocate Common Expenses to each Unit.

J. "Garage Unit" means a Unit as described in Section 2.4.

K. "General Common Elements" means all of the Common Elements, except for any Limited Common Elements, as more fully described in Article III below.

2

L. "Limited Common Elements" means and includes those Common Elements designated by this Master Deed to be reserved for the exclusive use of a particular Unit as more fully described in Article IV below.

M. "Person" means any natural person, firm, corporation, partnership, limited liability company, association, trust, or other legal entity or any combination thereof.

N. "Plans" means the plans and specifications for the Regime which are being filed of record with the Clerk of Jefferson County, Kentucky simultaneously with the recordation of this Master Deed, and which may be found in Apartment Ownership Book 108, Pages 48 through 109, Clerk's File No. 2044, as such plans and specifications may be amended in accordance with Section 2.1.

O. "Residential Unit" means a Unit as described in Section 2.3.

P. "Rules" means any rules and regulations which may be adopted from time to time by the Council as to the use and appearance of the Units and the Common Elements; provided, however, none of the Rules shall materially alter the rights and obligations of the Unit Owners as set forth in this Master Deed and in the event of a conflict between the provisions of the Rules and this Master Deed, the provisions of this Master Deed shall control.

Q. "Transfer" shall mean any sale, lease for a period of longer than two (2) years (including any renewal periods), transfer by bankruptcy, transfer by operation of law, disposal or passage under judicial order, and all other types of transfers, whether direct or indirect (including, but not limited to, in the case of a Unit Owner that is not a natural person, a transfer of all or a controlling interest in the Unit Owner), voluntary or involuntary; provided however, such term shall not include any mortgage by a Unit Owner to a bank or other financial institution to secure indebtedness of the Unit Owner.

R. "Unit" means an enclosed space within the Building measured from the interior unfinished surfaces of walls, ceilings, and floors, having a direct exit to a thoroughfare or to a Common Element leading to a thoroughfare. A Unit shall be either a Residential Unit or a Garage Unit, each as described in Article II hereof. Notwithstanding that some of the following might be located in the General Common Elements or Limited Common Elements, the plumbing, electrical wiring and equipment, telephone lines, doors, windows (including the glass, muntins, and sash, but not structural components such as the header and window frame), skylights and other equipment located within or connected to a Unit for the sole purpose of serving that Unit exclusively are a part of the Unit; the maintenance, repair and replacement of same being the responsibility of the Unit Owner, except to the extent that the casualty insurance policy carried by the Council covers such repair or replacement.

S. "Unit Owner" means any Person having record title to a Unit.

ARTICLE II
Units

2.1 Description of Units. The Regime is hereby divided into forty (40) Units. Thirty two (32) of the Units shall be Residential Units and eight (8) of the Units shall be Garage Units, each as described in this Article II. The Plans shall set forth the layout, location within the Building, and dimensions of each Unit. Upon completion of construction of the Units, the either Declarant or the Council shall be and is hereby authorized, without any requirement to obtain consent of any Unit Owner or other Person, to amend this Master Deed

3

Section 6: Current 3rd Party Providers

Current Prime and Subcontractors

- Current prime, Lane, E-ZPass Processing, Host: Kapsch

- BOS and CSC: Gila, LLC. dba Municipal Services Bureau

- Image Review: Global Agility Solutions

- Out of State Lookups: Duncan Solutions, Inc.

- Transponder Distributor: CSG Systems Inc. (formerly BusinessInk)

- Toll Card Activations: Interactive Communications Intl dba InComm

- Mailhouse: RevSpring, Inc.

- Credit card Merchants
  - Clearent
  - USA ePAY

Section 7: ICDs

BOS-KY DMV ICD

LSIORB BOS-DMV ICD

Version: 0.1

September 9, 2016

Prepared for:
LSIORB River Bridge Project

Prepared by:
Gila, LLC
8325 Tuscany Way, Bldg. 4
Austin, TX 78754

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Revision History

• Revision	• Date of Release	• Purpose
• Initial Draft	• 9/09/2016	•
•	•	•
•	•	•
•	•	•

Sign-Off and Approvals

• Name	• Role	• Date
•	•	•
•	•	•
•	•	•
•	•	•

- **INTRODUCTION**

o **Purpose**

The purpose of this document is to clearly specify the characteristics of the BOS interface that is to be established between the BOS and the Indiana and Kentucky DMVs. Unless another ICD is agreed upon, this document contains the format of all communications between the BOS and the DMV systems.

o **References**

• Reference	• Location
•	•
•	•

o **Acronym**

• Term	• Definition
• BOS	• Back-Office System
• DMV	• Department of Motor Vehicles
• FTP	• File Transfer Protocol
• ICD	• Interface Control Document
• SFTP	• SSH File Transfer Protocol
• VTR	• Vehicle Title and Registration

- ## VTR LOOK-UP REQUESTS

o ## File Locations and Naming Conventions

▪ ### File Transfer Timetable

The VTR File is created and sent by MSB to the designated DMV site, once a day (if data is available for transmission) by 5:00AM (EST).

▪ ### File Name

DMV_REQ_YYYYMMDDHHMMSS.XML

Example:

```
1  DMV_REQ_20151201001015.XML

2  DMV request file created on 00:10:15 on 12/01/2015
```

▪ ### Look-Up Request Files

Look-up request files will be stored in the ftp://FTP_Server/FTP_Request_Folder/input/sending directory of the SFTP server. Once the request has been processed, the DMV system is responsible for moving the request file to the …input/archive directory.

o ## Look-Up Request

The table below specifies the elements of the file:

•	Element	•	Description
•	<Request>	•	Root element
•	<TimeStamp>	•	Date/Time of file creation
•	<PlateList>	•	Parent container for <Plate> Elements
•	<Plate>	Each <Plate> element represents a look-up request. Each element contains two required arguments: • Number (int): The License Plate number for which a look-up is being requested. • Type (string): The type of plate for which a look-up is being requested. • *Note: Only full plate numbers with both required arguments will be included in file for look-up request. No partial plates/records.*		

An example .xsd file is included below:

Request.xsd   Request.sample.xml

o   **Look-up Request Processing Requirements**
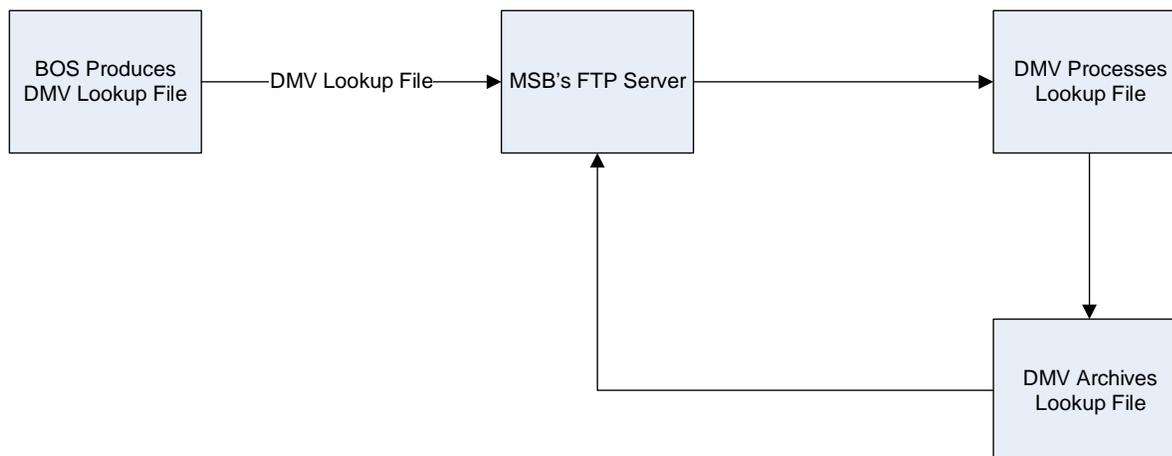
Figure 1. Look-Up Request Process Flow

1. The BOS produces the DMV Lookup file. The system queries transactions that are in a workflow status of DMV_READY with the corresponding state's plates (IN or KY), which means that the transaction is an official video bill transaction but has not been matched.
2. The workflow level will be set to "DMV_Waiting_Response".
3. MSB will securely FTP the vehicle registration lookup file to the DMV's FTP Server. It will be in the "DMV Outbound" folder.
4. The DMV will get the vehicle registration file using SFTP and process the file.
5. The DMV will move the vehicle registration lookup file to the "DMV Outbound Archive" directory once it has been processed.
6. Any errors during processing of the file will be recorded in the system logging framework. An alert will be created in MOMS.
7. Operationally, these errors will have to be addressed.

- ## VTR LOOK-UP RESPONSES

o ### File Locations and Naming Conventions

▪ #### File Transfer Timetable

The VTR File is created and sent by DMV to the designated MSB site, once a day (if data is available for transmission) by 6:00AM (EST).

▪ #### File Name

DMV_RES_YYYYMMDDHHMMSS.XML

Example:
```
3  DMV_RES_20151201001015.XML

4  DMV response file created on 00:10:15 on 12/01/2015
```

▪ #### Look-Up Response Files

Look-up response files will be stored in the ftp://FTP_Server/FTP_Request_Folder/output/sending directory of the SFTP server. Once the response has been received, the BOS is responsible for moving the response file to the …output/archive directory.

o ### Vehicle Look-Up Response

The table below specifies the elements of the file:

• Element	• Description
• <DMVResponse>	• Root element
• <TimeStamp>	• Date/Time of file creation
• <Responses>	• Parent Container for <Response> elements
• <Response>	• Each <Response> element represents a separate response, sent for a corresponding Vehicle Look-Up Request.
• Child Elements of <Response>	
• <PlateNumber>	• <PlateNumber> elements accept a string that represents the license plate number for which the look-up was requested. • Note:
• <PlateState>KY</PlateState>	• <PlateState> elements accept a string that represents the state the plate is registered in.
• <PlateType>57</PlateType>	• <PlateType> elements accept an int that is a code for a type of plate. This still needs to be determined.
• <LastRegisteredDate>	• <LastRegisteredDate> is a date elements that represents the last day that the car is still registered.

• `<LastChangedHandsDate>`	• `<LastChangedHandsDate>` is a date element that represents the last date the car was sold, or otherwise changed ownership.
• `<ExpirationYear>`	• `<ExpirationYear>` elements accept an int and represents the year the registration tag expires.
• `<ExpirationMonth>`	• `<ExpirationMonth>` elements accept a string that represents the month the registration tag expires
• `<Vehicle>`	• `<Vehicle>` elements are a parent container for information pertaining to the vehicle
• `<Leinholder>`	• `<Leinholder>` elements are a parent container for information pertaining to the lienholder of a vehicle for which a DMV hold was placed.
• `<RegisteredOwners>`	• `<RegisteredOwners>` elements are a parent container for `<Owner>` elements.
• `<Owner>`	• `<Owner>` elements are a parent container for information pertaining to a registered owner of a vehicle.
• Child Elements of `<Vehicle>`	
• `<VIN>`	• `<VIN>` elements accept int arguments representing the VIN number for the vehicle.
• `<VehicleMake>`	• `<VehicleMake>` elements accept a string representing the make of the vehicle.
• `<VehicleModel>`	• `<VehicleModel>` elements accept a string representing the model of the vehicle
• `<VehicleYear>`	• `<VehicleYear>` elements accept an int representing the year of the vehicle model.
• `<VehicleColorPrimary>`	• `<VehicleColorPrimary>` elements accept a string representing the primary color of the vehicle.
• `<VehicleColorSecondary>`	• `<VehicleColorSecondary>` elements accept a string representing the secondary color of the vehicle.
• `<VehicleClass>`	• `<VehicleClass>` elements accept a string representing the vehicle classification of the vehicle
• `<Exempt>`	• `<Exempt>` elements accept an int of '0' or '1' with '1' indicating the vehicle is an "Exempt" vehicle.
• `<Stolen>`	• `<Stolen>` elements accept an int of '0' or '1' with '1' indicating the vehicle is an "Stolen" vehicle.
• `<Government>`	• `<Government>` elements accept an int of '0' or '1' with '1' indicating the vehicle is a "Government" vehicle.
• `<Hotlist>`	• `<Hotlist>` elements accept an int of '0' or '1' with '1' indicating the vehicle is an "Hotlist" vehicle.

•	<Salvaged>	• <Salvaged> elements accept an int of '0' or '1' with '1' indicating the vehicle is an "Salvaged" vehicle.
• Child Elements of <LienHolder>		
•	<FirstName>	• Accepts a string for the first name of the lienholder
•	<MiddleName>	• Accepts a string for the middle name of the lienholder
•	<LastName>	• Accepts a string for the last name of the lienholder
•	<BusinessName>	• Accepts a string for the name of the business lienholder associated to the vehicle. Is nullable.
•	<Address>	• Accepts a string with the address of the lienholder
•	<City>	• Accepts a string with the city the lienholder is located in.
•	<State>	• Accepts a string with the state the lienholder is located in
•	<Zip>	• Accepts a string with the lienholder's zip code
•	<Country>	• Accepts a string with the lienholder's country
• Child Elements of <Owner>		
•	<FirstName>	• Accepts a string for the first name of the registered owner
•	<MiddleName>	• Accepts a string for the middle name of the registered owner
•	<LastName>	• Accepts a string for the last name of the registered owner
•	<BusinessName>	• Accepts a string for the name of the business registered owner associated to the vehicle. Is nullable.
•	<Address>	• Accepts a string with the address of the registered owner
•	<City>	• Accepts a string with the city the registered owner is located in.
•	<State>	• Accepts a string with the state the registered owner is located in
•	<Zip>	• Accepts a string with the registered owner's zip code
•	<Country>	• Accepts a string with the registered owner's country

An example .xsd file is included below:

Response.XSD

Response.sample.XML

o   **Look-up Response Processing Requirements**
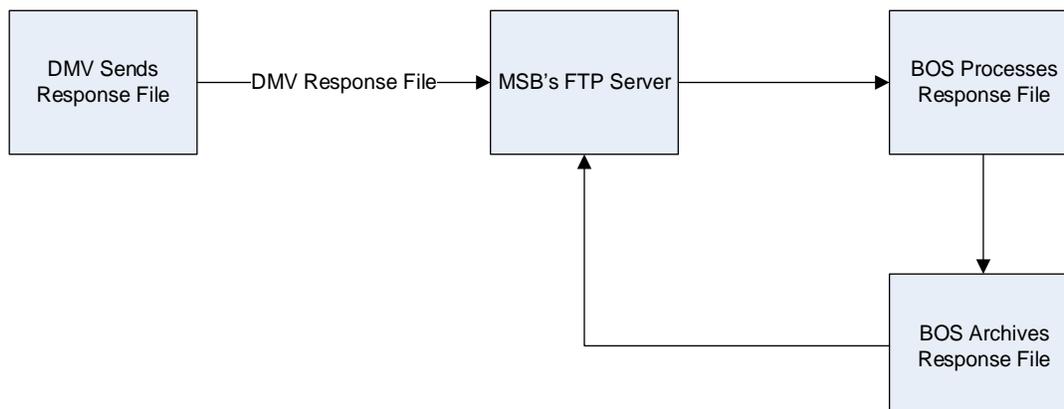
Figure 2. Look-up Response Process Flow

1. DMV sends a response file to MSB's FTP server using SFTP. They will place it in the "DMV Inbound" directory.
2. The BOS will pick up the response file on MSB's FTP server.
3. The BOS will process the records in the response file and load them in the generic DMV interface inbound table.
4. The system will try to find an existing account associated with the LPN that already exists. If an account already exists, it will update account information and assign the transactions. If an account does not exist, an unregistered video bill account will be created and the transactions will post to that account. Transactions that are matched will have a workflow status of "POSTED_VBILL".
5. Once the BOS is done is processing the file, it will move it to the "DMV Inbound Archive" directory.
6. Any error records encountered during processing will be recorded in the system logging framework. An alert will be created in MOMS.
7. There is a maximum of three (3) tries to DMV. If a match cannot be found after the third attempt, the transaction will be closed. The status reason will be "- LPN not found".

- **DMV HOLD REQUEST**

o **File Locations and Naming Conventions**

▪ **File Transfer Timetable**

The Hold Request File is created and sent by MSB to the designated DMV site, once a day (if data is available for transmission) by 5:00AM (EST).

▪ **File Name**

DMV_HOLDREQ_YYYYMMDDHHMMSS.XML

Example:
```
5  DMVHOLDREQ151201001015.XML

6  DMV Hold Request file created on 00:10:15 on 12/01/2015
```

▪ **Look-Up Response Files**

Look-up response files will be stored in the ftp://FTP_Server/FTP_Request_Folder/output/sending directory of the SFTP server. Once the response has been received, the BOS is responsible for moving the response file to the ...output/archive directory.

o **DMV Hold Response**

The table below specifies the elements of the file:

• Element	• Description
• <DMVHoldRequest>	• Root element
• <TimeStamp>	• Date/Time of file creation.
• <HoldRequest>	• Parent container for <Hold> elements
• <Hold>	Each <Hold> element represents a release request, and has three required attributes: • *Plate (string):* License Plate Number for which the release is requested • *TRXId (int):* The violation number to which the DMV hold was requested • *Type (int):* The type of plate referred to in the *Plate* argument.

An example .xsd file is included below:

DMVHoldRequest.xsd   DMVHoldRequest.sample.xml

- ## DMV HOLD RELEASE REQUEST

o ## File Locations and Naming Conventions

▪ ### File Transfer Timetable

The Hold Release File is created and sent by DMV to the designated MSB site, once a day (if data is available for transmission) by 6:00AM (EST).

▪ ### File Name

DMV_RES_YYYYMMDDHHMMSS.XML

Example:
```
7  DMV_HOLDREL_20151201001015.XML

8  DMV Hold Release file created on 00:10:15 on 12/01/2015
```

▪ ### Look-Up Response Files

Look-up response files will be stored in the ftp://FTP_Server/FTP_Request_Folder/output/sending directory of the SFTP server.

o ## DMV Release Response

The table below specifies the elements of the file:

• Element	• Description
• <DMVHoldRelease>	• Root Element
• <TimeStamp>	• Date/Time of File Creation
• <HoldRelease>	• Parent container for one or more <Release> elements
• <Release>	• Each <Release> element represents a release request, and has three required attributes: • *Plate (string):* License Plate Number for which the release is requested • *TRXId (int):* The violation number to which the DMV hold was requested • *Type (int):* The type of plate referred to in the *Plate* argument.

An example .xsd file is included below:

DMVHoldRelease.XSD   DMVHoldRelease.Sample.XML

- **SFTP SERVER CHARACTERISTICS**

The BOS-DMV interface uses an SFTP server as intermediary to transfer look-up request files and look-up response files.

o **FTP Site Details**

The FTP server is specified below:

•	Site URL	•	ftp.msb.orb.com
•	Username	•	OrbsftpUser
•	Password	•	Password1!
•	Explorer URL	•	ftp://Username1@ftp.msb.orb.com

Indiana BMV

The Indiana Bureau of Motor Vehicles interface is currently being updated. The most recent access can be found on this site:

https://galaxy.bmv.in.gov/TollingService/swagger/ui/index

LSIORB TSP Project

Roadside System- Back Office System

Interface Control Document (ICD)

PL-3052-312_Attchment 1

Version: 00-06

1 Introduction

1.1 Document Scope

This document's scope includes the interfaces between the Facility Host and the BOS in Figure 1-1 below. These are the only interfaces between Kapsch and MSB equipment that involve transactions, posting and reconciliation.
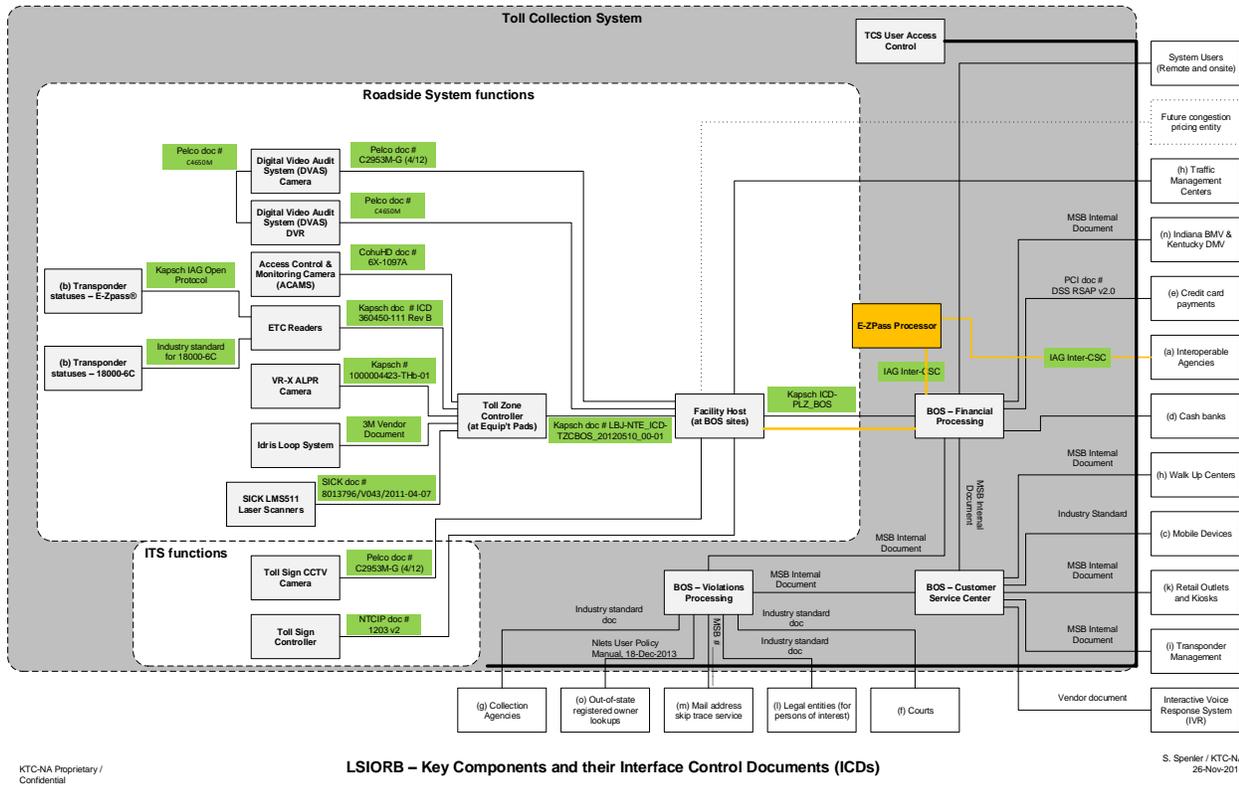
Figure 1-1: LSIORB Toll Collection System Interfaces

1.2 Document Objectives

The objective of this document is to define the details regarding the highlighted interfaces such that the pieces of equipment on each side of each interface can be independently configured and tested prior to deployment and system level testing.

2 Terminology

2.1 List of Acronyms

Acronym	Definition
Account	As defined by RD.5 (Business Rules and Operating Procedures)

Acronym	Definition
ACK	Acknowledgement File: The Acknowledgment File shall be created by the From Agency/CSC (the Agency/CSC which received the file) to inform the To Agency/CSC (the Agency/CSC which sent the original file) that the file transmitted was received in its entirety. An Acknowledgement File shall be sent for each of the above referenced files. (Per RD.4)
AET	All-Electronic Tolling
BOS	Back Office System
CSC	Customer Service Center
CSV	Comma Separated Values
Customer	The owner of any vehicle that passes through the LSIORB toll zone or has opened an account with LSIORB
DB	Data Base
Duplicate Transaction (technical duplicate)	Multiple transactions generated by the same vehicle at the same Tolling Point and on the same direction, within a predefined interval of time that is caused by the incorrect recording of a single passage multiple times.
FTP	File Transfer Protocol
GUI	Graphical User Interface
HTTPS	Hypertext Transfer Protocol Secure
ICTX	Transaction File: Created by the Away Agency/CSC to inform the Home Agency/CSC of all toll transactions occurring at Away Agency/CSC facilities for valid tags and license plates belonging to the Home Agency/CSC. (Per RD.4)
Interface Control Document (ICD)	This document, which describes the data interface and the specifics of fields, files, naming conventions, etc., with which each party must comply when exchanging data through these interfaces interfaces.
Interoperable Transaction	A Transaction that involves either (a) an LSIORB customer using a different E-Zpass toll facility, or (b) a customer from another E-Zpass agency using the LSIORB toll zones.
INTX	Non-Toll Transaction File: Created by the Host Agency/CSC to inform the Home Agency/CSC of all non-toll transactions occurring at Host Agency/CSC facilities for valid tags belonging to the Home Agency/CSC. (Per RD.4)
Invalid Tag	Any tag that is not listed on the TVL as a Valid Tag
ITAG	Tag Status File: Created by the Home Agency/CSC to inform Away Agencies/CSCs as to the status of each tag associated with an account held by the Home Agency/CSC. This file also informs the Away Agencies/CSCs as to the discount plans associated with each tag. Created by the Home Agency/CSC to inform Away Agencies/CSCs as to

Acronym	Definition
	the updated status of particular new and/or existing tags (Per RD.4)
ITGU	Tag Status Update File: Created by the Home Agency/CSC to inform Away Agencies/CSCs as to the updated status of particular new and/or existing tags associated with an account held by the Home Agency/CSC. Used to periodically report updated information throughout the day so that Agencies/CSCs which have the ability to update their lane systems during the day can do so.
LSIORB	Louisville-Southern Indiana Ohio River Bridges
MOMS	Maintenance On-Line Management System
NACK	Negative acknowledgement
Reconciliation	The process whereby data is exchanged between parties at either end of the interface to ensure that vehicle passages have been correctly converted to charges posted to accounts
REST	Representational State Transfer
RSS	Road Side System
Service Recipient	An entity with authority over designated tolling points.
Tag or Transponder	A radio frequency identification (RFID) device issued to a customer by LSIORB or issued by another E-Zpass agency to one of its customers
Tag Validation List	A file passed to the Toll Zone Controller at the roadside containing a list of all tags considered valid by LSIORB
Tolling Point	A lane or group of lanes that a vehicle passes through which contains a common set of toll fares.
Transaction or Traffic Transaction	The electronic record of the passage of a vehicle through a tolling point
TXN	Transaction
TZC	Toll Zone Controller
Valid Tag	Any tag reported as valid in the Tag Validation List (TVL)
Vehicle Passage	A single passage of a vehicle through a toll zone
VPN	Virtual Private Network
XML	eXtensible Markup Language
XSD	XML Schema Document

2.2 References

Number	Reference
RD.1	Form K, Requirements
RD.2	TP-001: Roadside System and Network System Plan
RD.3	TP-002: Back Office System (BOS) Plan
RD.4	E-ZPass Inter-CSC Interface File and Reporting Specifications, Version CSC 1.51i, 04/08/2014
RD.5	TP-015: Business Rules and Operating Requirements

3 Context

This document is being used by Kapsch to capture system-internal details for the data flow paths between the major portions of the centralized equipment – the Facility Host and the MSB integrated Back Office.

The Facility Host is functionally part of the Road Side System and is used to coordinate all operations at the LSIORB toll zones. It deploys all relevant files and configuration data to the toll zones and collects all transactions and event data from the toll zones. It passes Traffic Transactions on to the Financial Processing function in the MSB integrated Back Office. Additional details can be found in RD.2 (TP-001 Road Side System and Network System Plan).

The MSB integrated Back Office System determines how received Traffic Transactions are posted to accounts, handles remaining ALPR functions, performs all aspects of the LSIORB Customer Service Center, and handles the posting and settlements associated with LSIROB customers. Transactions which are assigned a valid account from another E-ZPass agency are routed instead to the E-ZPass Processor. The MSB integrated Back Office System also accepts the equivalent of Traffic Transactions for LSIORB customer trips in areas serviced by other E-ZPass agencies; these are posted to the local LSIORB customer accounts and corrections and adjustments are made where necessary. Additional details can be found in RD.3 (Back Office System Plan).

The E-ZPass Processor handles all of the consistency checks and aggregation / disaggregation functions needed to interact directly with 16 other E-ZPass CSCs. It accepts and transmits files that conform the E-ZPass Inter-CSC File Interface and Reporting Specification identified above as RD.4.

An functional overview of the data flow between these parts of the centralized equipment is shown in Figure 3-1 below.

Figure 3-1: Key Data Exchanges within the Central Equipment
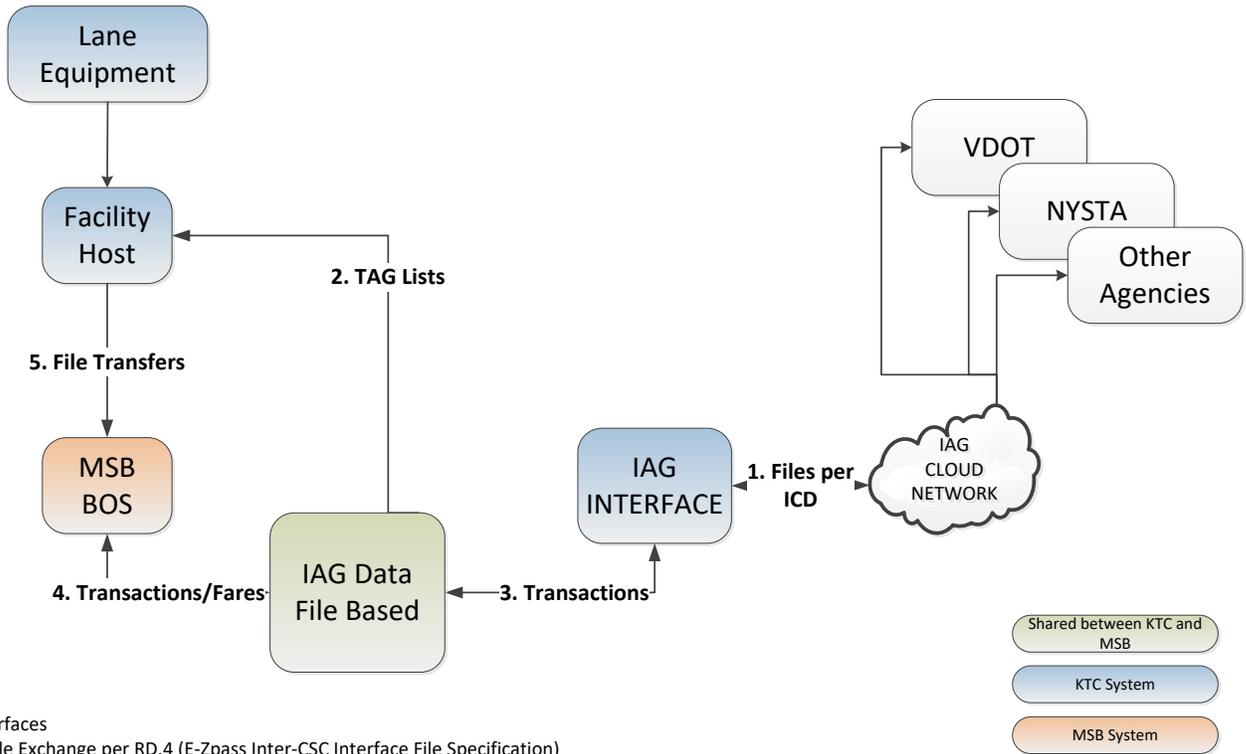
Interfaces
1. File Exchange per RD.4 (E-Zpass Inter-CSC Interface File Specification)
2. Tag Lookup/Plate lists going to the Host
3. Home and Away Transactions Data to/from agencies
4. MSB interface to get/send Transaction data from KTC RSS and from/to IAG Interface
5. Transaction Data, Images and fares xfer to MSB
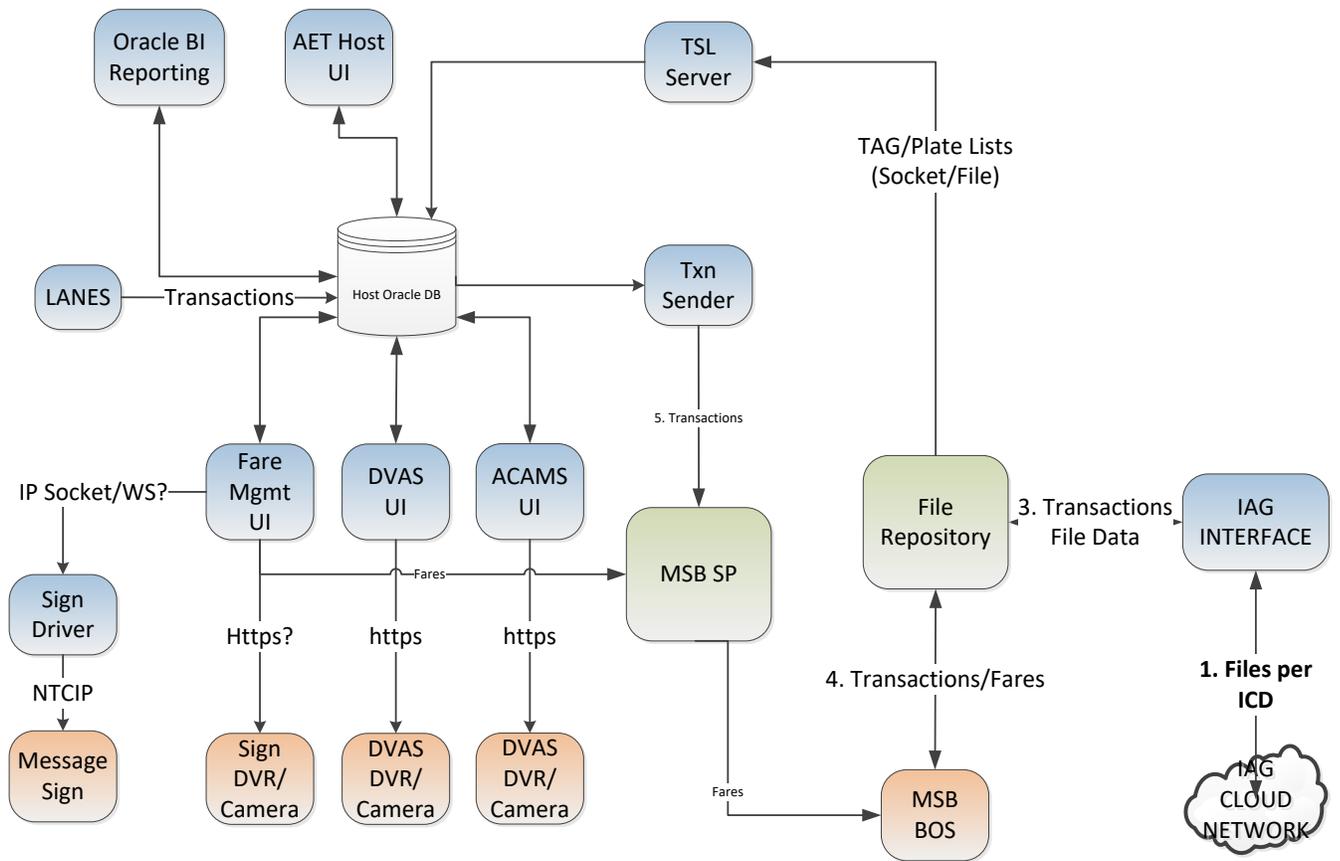
Figure 3-2: Kapsch Facility Host & E-ZPass Processor

4 Kapsch Facility Host-to-MSB Back Office System Interface

4.1 MSB Incoming File Storage

The BOS will accept two types of files: Message files (.csv format) and Image files (.jpg format). Each file-type has its own directory in the server, where those files will be placed by the sending system. Message files are to be placed in the appropriate folder of the "Incoming_files" directory. Image files are to be placed in an appropriate folder of the "Incoming_images" directory. All times shall be in UTC

The MSB shared directory should have the following directory structure

- /: Root directory
  - Incoming_files
    - ICTX (incoming Transaction files)
    - ITXC (incoming Bulk Correction files)
    - IMGF (incoming Image Detail files)
    - ACKF (incoming Acknowledge files)
  - Incoming_images
    - "N" (No-Tag Transactions)
      - Plaza <ID #>
        - YYYY
          - MM
            - DD
              - HH
    - "T" (Tag Transactions)
      - Plaza <ID #>
        - YYYY
          - MM
            - DD
              - HH

To receive image files from the Facility Host, the BOS will allow the Facility Host to send image files directly to the a local, shared directory. An Acknowledgement file is **not** sent for image files (.jpg) format; however, the BOS will acknowledge that all images listed in Image Detail (IMGF) file have been received.

4.2 Facility Host Incoming File Storage

The Facility Host (RSS) has the following directory structure

- /:Root directory
    - ACKF(incoming Acknowledge files)
    - TFRF (incoming Toll Fare files)
    - ITAG(incoming Full TVL files)
    - ITGU(incoming Update TVL files)
    - WTCH (incoming Watch List files)

4.3 File Naming Rules

4.3.1 Message Files

4.3.1.1 CASE INSENSITIVE

Filenames shall be case-insensitive. This rule applies to the CSV message files and to ZIP compressed files. The systems of the parties implementing this Interoperable Interface shall correctly send and receive files independently of the case of ASCII characters on file names. Parties should nonetheless strive to have coherent implementations and systematically apply one of the possible case representations (upper or lower).

4.3.1.2 ZIP FILENAME MATCHES CONTAINED CSV FILENAME

When either system sends a message file, the file will use a .zip file extension and file format. Each ZIP-compressed file shall contain a single (1) CSV message file. The name of that CSV file shall be identical to the ZIP file, but with a .csv file extension, instead of a .zip extension.

ZIP Filename Example:

*SSS-TTT-YYYYMMDDHHMMSS.**zip***

CSV Filename Example:

*SSS-TTT-YYYYMMDDHHMMSS.**csv***

4.3.1.3 MESSAGE FILENAME FORMAT

When either system sends a message file, the file format must be ".zip". The message file must contain a single CSV file of the same name.

This message file must have a filename that conforms to the following format:

SSS-TTTT-YYYYMMDDHHMMSS.zip (for the zip file)

SSS-TTTT-YYYYMMDDHHMMSS.csv (for the csv file contained in the zip file)

Where:

- **SSS**: sender of the message file
    - o   Shall be one of:
        - ▪ "RSS" for the RoadSide System
        - ▪ "MSB" for the MSB BOS
- **TTTT**: type of message file
    - o   Shall be one of:
        - ▪ "TFRF" for Toll Fare message files
        - ▪ "ITAG" for Full Tag Validation List message files
        - ▪ "ICTX" for Transaction files
        - ▪ "ITXC" for Bulk Correction files
        - ▪ "IMGF" for image detail files
        - ▪   "ACKF" for Acknowledgement message files
        - ▪ "ITGU" for Update TVL files
        - ▪ "WTCH" for Watch List files

- **YYYY**: four (4) digit year of the date when the message file was created
- **MM**: two (2) digit month of the year when the message file was created. Shall be left-padded with zeroes (0)
- **DD**: two (2) digit day of the month when the message file was created. Shall be left-padded with zeroes (0)
- **HH**: two (2) digit hour of the day when the message file was created. Shall be left-padded with zeroes (0)
- **MM**: two (2) digit minute of the hour when the message file was created. Shall be left-padded with zeroes (0)
- **SS**: two (2) digit second of the minute when the message file was created. Shall be left-padded with zeroes (0)

The following is an example of a valid file name:

MSB-ITAG-20151210023000.zip

The above example would represent the name of a Tag Validation List message file sent by the MSB, created at 2:30 AM of the 10th of December 2015.

4.3.2 Image Files

4.3.2.1 IMAGE FILENAME FORMAT

The image file names will be formatted as:

PLZ-LN-YYYYMMDD-HHMMSS-G{32}-T.jpg, where:

- PLZ is the alphanumeric plaza identifier
- LN is the alphanumeric lane identifier
- HHMMSS is the transaction time in 24 hour format
- G{32} is the RSS-Assigned GUID
- T is the image type

Filename Example:
001-01-153024-00000000000000005486954896572135-1.jpg

The previous file name is an image for plaza 1, lane 1 at 3:30:24 PM, GUID is *00000000000000005486954896572135*, type = 1 (Front).

4.4 Message File Sending Procedure

When sending a file the sending party shall proceed as follows:

1. Gather the relevant data from database tables
2. Construct the file header block according to the CSV format
3. Construct and append the main data block to the header block
4. Generate record counts and place them in the header block
5. Compress the resulting file using the ZIP format
6. Name the compressed file according to the corresponding file naming rules
7. Transfer the file to the respective Incoming sub-folder on the recipients SFTP server (for the structure of the Incoming files storage)
8. Verify the full and correct transfer of the file (remote file size is equal to the local file size)

4.5 Message File Receiving Procedure

At least once a minute, each system should check the shared directory for new message files. The systems should check each subfolder of the "Incoming" server directory *(///Incoming/ACKF, //Incoming/TFRF*, etc.).

1) If a message file is found check if the file is in ZIP format.
2) If a message file is found check if the file name starts with a dollar sign ($)
3) If the check is positive do nothing and stop the procedure (file is still being transferred by the sender)
4) If the check is negative (message file has been fully transferred) check the .zip file is not a duplicate (has not been sent before)
5) If the check for duplicate zip files is positive (it is a duplicate), send a Negative Acknowledgement indicating a duplicate filename (Acknowledgement file has a result code value of "1")
6) If the check for duplicate zip files is negative (no duplicate), ensure the filesize is not "0"
7) If the check is positive (filesize is "0"), send a Negative Acknowledgement indicating an empty file (Acknowledgement file has a result code value of "2")
8) If the check is negative, validate the filename
9) If the check is negative (message file does not have a size of "0"), verify that the file name abides by the file naming rules and corresponds to the sub-folder where it is (refer the message file naming rules and the structure of the Incoming files storage)If the check fails send a Negative Acknowledgment to the sending party informing of the existence of a non-conforming message file in the Incoming sub-folder and stop the procedure (Acknowledge file shall have the value "3" in the Result Code attribute)
10) If the check succeeds decompress the message file using the ZIP protocol
11) If the decompression fails send a Negative Acknowledgment to the sending party informing of the existence of an invalid compressed message file in the Incoming sub-folder and stop the procedure (Acknowledge file shall have the value "4" in the Result Code attribute attribute)
12) If the decompression succeeds check if there was a single CSV file within the ZIP file
13) If there is more than a single file in the compressed file stop the procedure (Acknowledge file shall have the value "5" in the Result Code attribute)
14) If there is a single file check if it has the same name as the ZIP file (excluding the extension that must be CSV)
15) If the file name does not correspond to the compressed file name (excluding the extension that must be CSV) stop the procedure (Acknowledge file shall have the value "6" in the Result Code attribute)
16) The format, structure of the Header and details must be compliant with file format of message file.
17) If it's not matching with specific format of message file then stop the procedure (Acknowledge file shall have the value "7" in the Result Code attribute)
18) If the message file is syntactically correct perform the common header verifications and the functional verifications for the particular type of message file (refer to the specific sections of this ICD for the verifications to be performed on each type of message file)
19) Send the Positive or Negative Acknowledgment file to the sending party

Kapsch and MSB have agreed to exchange data over this interface using the method shown in Figure 4-1 below.
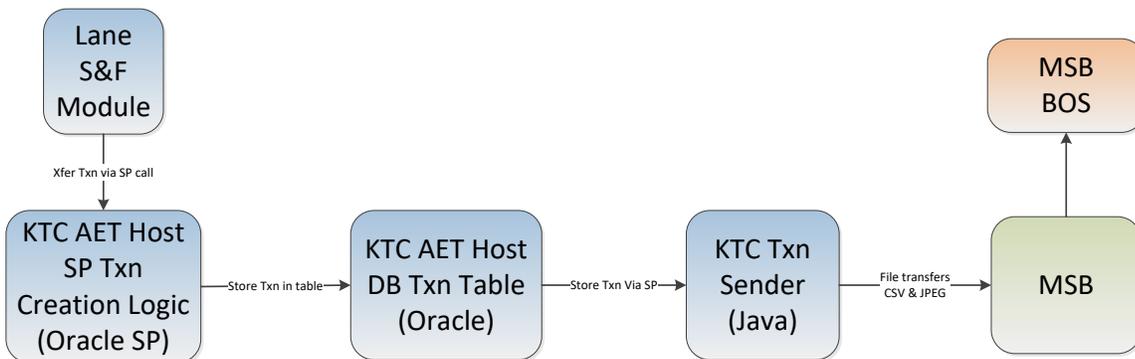
Figure 4-1: Mechanism for Data Exchange between Facility Host and BOS

5   JPEG Image Files

The Toll Zone Controller depending on the transaction conditions will capture one or more (typically three) images of the vehicle that need to be transferred to the BOS.

The Image Files (.jpg format) are pushed periodically from the Facility Host to the local, shared directory. The transfer will be done using local file transfer. The Facility Host will drop each image file received from the Roadside onto the shared directory to be picked up by the BOS.

5.1   Triggers for Generating Images

Image files will be generated in these situations:
- A transaction does not have a valid TAG
- A vehicle on the watch list is observed by the road-side system (RSS)
- A class mismatch is detected between the indicated class (on the most recent Tag Status List) and the class detected by the RSS.

5.2   Image Specifications

The image files will have the following attributes.
- **Data transfer**: All new image files will be tranferred using the SFTP utilities for file copying.
- **Transfer Frequency**: Every 15 minutes (configurable) image files will be transferred to the BOS
- **File Names**: The image file names will be PLZ-LNE-HHMMSS-G{32}-T.jpg
    - PLZ is the alphanumeric plaza identifier
    - LNE is the alphanumeric lane identifier
    - HHMMSS is the transaction time in 24 hour format
    - G{32} is the RSS-Assigned GUID
    - T is the image type

6 CSV Message Files

6.1 CSV File Format

Every ZIP file exchanged between the systems shall contain a single Comma-Separated Values (.csv) file.

A CSV file can be created using these steps:

1. Insert the Header Elements values, separated by commas (",")

2. Add *n* Null (,Null,) elements, where *n* = (# of Detail Elements) – (# of Header Elements).

3. Add a line feed (LF) character after the last Header element. Use UTF-8 LF character (*U+000A)*.

4. Insert the Detail Elements for the first file record, separated by commas

5. Insert the linefeed (LF) characer after the last detail element

6. Repeat Step 4 and Step 5 for each record

Using an imaginary file with 2 header elements and 4 detail elements as an example, the format should resemble the following:

Header Element 1	*, Header Element 2*	*, Null*	*, Null*	*(LF)*
Detail Element 1	*, Detail Element 2*	*, Detail Element 3*	*, Detail Element 4*	*(LF)*
Detail Element 1	*, Detail Element 2*	*, Detail Element 3*	*, Detail Element 4*	*(LF)*
Detail Element 1	*, Detail Element 2*	*, Detail Element 3*	*, Detail Element 4*	*(LF)*

Note the Null elements that pad the Header Elements to match the number of Detail Elements. Also, note that the last record of the file also contains a line feed character at the end of the record. **No whitespace** can be used between data elements, commas, or line feed characters.

6.2 Resend Logic

For all message files, if a file record attribute does not follow the correct format or range, reject the entire file and the RSS will resend up to 3 times. As long as the correct format and range is followed, and the header fields are valid, the BOS will accept the message file

If an acknowledgement (ACKF) file is not received within 5 minutes of a file being sent, the BOS will resend the **same** file. If a message file is resent 2 times (3 times total), the BOS must raise a MOMS alert.

6.3 Transaction Message File (ICTX)

Transaction data is received from the Toll Collection Controllers when a vehicle passing is detected. This information is stored in the Facility Host server, and is transferred periodically from the Facility Host to the BOS. The transaction data is pushed from the Facility Host server. Data transfer for this interface is based on .zip files using local file transfer.In transaction data, In same transaction data, AVDC Class and/Or Authority Map Class must have to available in transaction file. If any of them is not available then BOS will reject the whole file.

ICTX Message File Specification

Transaction files will be identified by the ICTX string found in the file name.

6.3.1 ICTX Message File Attributes Detailed Specification

6.3.1.1 ICTX HEADER DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
File Type	Varchar	ICTX	ICTX	No	N/A	File type
Record count	Int	1000	0-999999999999	No	N/A	Number of records in the file
Transaction File Number	big int	00000000 0000	0000000000000 000000- 9999999999999 999999	No	N/A	A file-level ("batch") number. This number is unique every time an ICTX file is sent by the Facility Host, even if the previous ICTX file has not been acknowledged by an ACKF file.

6.3.1.2 ICTX DETAIL DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
Transaction Number	big int	87892893	0000000000000 000000 – 9999999999999 999999	No	N/A	Serialized Transaction Number : The unique key of a transaction assigned by the TZC.
GUID	VARCHAR (32)	a3e3c3a0f 92d2a4ab af4877b8b 030745	00000000000000 00000000000000 0000 – FFFFFFFFFFFFF FFFFFFFFFFFFF FFFFFF	No	N/A	Unique Transaction identifier.
Tag Index	Int	1	0-99	No	N/A	Tag Index associated with GUID to differentiate between the tags associated to a transaction

Data Element	Format	Example	Range	Null	Default	Description
Transaction Type	Char(1)	"T"	"T", "N", "V"	No	N	'T' – Tag transaction (which may also include image data) 'N' – No Tag Detected (which must include image data) 'V' – Registered video Transaction
Transaction Timestamp	Timestamp	"2015-12-31 23:59:33.999999"	"yyyy-mm-dd hh:mm:ss.nnnnnn"	No	N/A	Zero crossing, Time when the vehicle passed halfway between the Front and Rear Trigger
Toll Zone ID	Char(3)	001	001 - 005	No	N/A	Alphanumeric Plaza Identifier, to be assigned by LSIORB JB. • 001: ECN East End Crossing - NB • 002: ECS East End Crossing - SB • 003: DTN Lincoln Bridge – NB • 004: DTO Lincoln Bridge - NB - Exit 0 • 005: DTS Kennedy Bridge - SB
Lane Number	Char(3)	001	A-Z (case sensitive), 0-9	No	N/A	Alphanumeric Lane Identifier, to be assigned by LSIORB. Starting from right to left in driving direction 0 to X including shoulders.
Group	Char(2)	65	00-99	Yes	Null	Tag Agency group id. IAG=65
Agency	varchar(3)	045	EZ-Pass: 045 Local 6c: 449	Yes	Null	Tag agency unique id.

Data Element	Format	Example	Range	Null	Default	Description
Serial Number	Varchar(10)	12345678	0000000001 – 0016777215	Yes	Null	Tag Serial number read from the tag or as retrieved from the Customer License Plate File for an untagged violation. To be "Null",the value of "Transaction Type" element must be "N". IAG tags are 8 digits long while 6C tags are 10 digits
TagType	Char(1)	"0"	"0"-"6"	Yes	Null	0: Interior OBU (FPT) 1: Exterior FPT (RMT) 2: Exterior OBU (FME/LPT) 3: Toll/Balance 4: CVO 5: Feedback OBU 6: HOT/HOV *7:Reserved*
Tag Validation Status	Char(1)	"1"	1, 2, 3, or 4	Yes	Null	Tag list value 1=Valid 2= low Balance, 3=Invalid/Not Found, 4= Lost Stolen
Watch List	Char(1)	1	0, 1	No	0	Set if the vehicle tag ID or license plate matches an item on the most recent Watch List
TagClass	Int	200	1 - 1131	Yes	Null	The current classification of the vehicle record in the BOS. Class as encoded in the tag; declared class
Declared Axles	Number	2	2 - 10	Yes	Null	Axles associated with the tag(vehicle).

Data Element	Format	Example	Range	Null	Default	Description
TagReadTimestamp	Timestamp	1970-01-01 00:00:01.000001	"yyyy-mm-dd hh:mm:ss.nnnnnn"	Yes	Null	TagReadTime in timestamp form
AVI Write Count	Char (2)	22	00-99	Yes	Null	Total number of times the tag was written to while in the zone. Data currently unavailable
AVI PGM Cycle	Char (1)	S	S, F, C, U, R	Yes	Null	The result of an AVI tag program cycle. S - success, U- unverified , F – failed, C – Cross Read, R – Read Data currently unavailable
Assignment Reads	Char(2)	22	0-99	Yes	Null	Number of tag reads (handshakes) for this transaction reported on the RF channel. Data currently unavailable
Reporting Type	Char(1)	R	R,B	No	R	'R': Real Time 'B': Buffered
Isolated Tag	Number	0	0-1	No	0	Flag to show if the transaction have vehicle information or no. Only Tag is detected. 0=OK 1=Only Tag
Isolated Association	CHAR(12)	Sequential, Primary Key	Values: 000000000000 – 999999999999	Yes	Null	Transaction Number of the tag that correlated that this tag is a phantom.
Tag file name	Varchar(100)	See ITAG/ITGU Filename	See ITAG/ITGU Filename	Yes	Null	Tag file used to determine the status of Tag
Height	int, null	213	0-2598 (centimeters)	Yes	Null	Calculated height of the vehicle measured in centimeters for the current transaction. NULL if not available.
Length	int, null	548	0-2598 (centimeters)	Yes	Null	Calculated length of the vehicle measured in centimeters for the current transaction. NULL if not available.

Data Element	Format	Example	Range	Null	Default	Description
Width	int, null	243	0-2598 (centimeters)	Yes	Null	Calculated width of the vehicle measured in centimeters. NULL if not available.
Speed	int, null	2458	0 – 9999	Yes	Null	Calculated speed of the vehicle measured in miles per hour
Fiber Axles	int, null	2	1-10	Yes	Null	Axles detected by the FO axle detectors
AVDC Class	Number	"1", "2", "3"	1 - 3	Yes	Null	LISORB class based on AVC calculation 1= Class 1 is lowest toll rate 2 = Class 2 is medium toll rate 3 = Class 3 is highest toll rate 2-axle vehicles may be below or above the bar (configurable parameter - short or tall). Short are class 1, tall are class 2 3-axle vehicles and all other axle vehicles greater than 3 may be above below the bar (short or tall). Short are class 2, tall are class 3.
AVDC Confidence	Int	79	0-100	Yes	Null	The probability that the correct vehicle classification has been assigned. Zero indicates classification data not available. Value is a percent.
Degraded Flag	Char(1)	1	0,1	Yes	Null	Set when any of the sensors is not operational. 0 = Not Degraded 1 = Degraded
Automatic Vehicle Identification (AVI) Status	Char(1)	0	0, 1	Yes	Null	0 = OK 1 = AVI System Failure

Data Element	Format	Example	Range	Null	Default	Description
Image Capture and Processing System (ICPS) Status	Char(1)	0	0, 1	Yes	Null	0 = OK 1 = ICPS System Failure
Laser Vehicle Detection Classification (LVDC) System Failure	Char(1)	0	0,1	Yes	Null	0 = OK 1 = LVDC System Failure
Automatic Vehicle Detection and Classification (AVDC)	Char(1)	0	0,1	Yes	Null	0 = OK 1 = AVDC System Failure
Fiber Optic Axle Detectors (FOAD)	Char(1)	0	0,1	Yes	Null	0 = OK 1 = FOAD System Failure
Class mismatch	Char(1)	0	0, 1	Yes	Null	Indicated Class != Detected class (this is a 'flag' not a classification directive for the transaction). This field is not applicable for 6C tags at this time.
Selected License Plate Number	Char(10)	FASTCARZ	A-Z, 0-9	Yes	Null	Selected image LPN.
Selected License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the selected image. NULL if not available.
Front ALPR Confidence	Int	99	0-100	Yes	Null	Percentage confidence received from the OCR engine.

Data Element	Format	Example	Range	Null	Default	Description
Front License Plate Number	Char(10)	FASTCARZ	A-Z, 0-9	Yes	Null	Front image LPN
Front License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the front image. NULL if not available.
Rear ALPR Confidence	Int	99	0-100	Yes	Null	Percentage confidence received from the OCR engine
Rear License Plate Number	Char(10)	FASTCARZ	A-Z, 0-9	Yes	Null	Rear image LPN
Rear License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the rear image NULL if not available.
Number of Images Captured	Int	"3"	0-4	Yes	Null	4 images in a normal image set. Front, Rear, Overview, and Plate Patch. 0 if no images available.
Toll Amount	Number	250	0-99999	No	N/A	Base Toll Amount Per classification and business rules The toll amounst will be in cents.
Toll Rate Schedule Version	Char(8)	00000001	00000000-99999999	No	N/A	TRS Version from the Rate_ID in the Toll Rate Schedule.
Authority Map Class	Number	"1", "2", "3"	1 - 3	Yes	Null	LISORB class based on AVC calculation 1= Class 1 is lowest toll rate 2 = Class 2 is medium toll rate 3 = Class 3 is highest toll rate 2-axle vehicles may be below or above the bar (configurable parameter - short or tall). Short are class 1, tall are class 2 3-axle vehicles and all other axle vehicles greater than 3 may be above below the bar (short or tall). Short are class 2, tall are class 3.

6.3.2 ICTX Message File Functional Verifications

6.3.3 ICTX Message File Functional Verifications

6.3.3.1 ICTX HEADER VERIFICATIONS

Data Element	Result Description	Result
File Type	The value of the "File Type" attribute is not "ICTX".	Reject the file with result code '07'
Record count	The value of Record count in header element does not match the number of contained detail records.	Reject the file with result code '22'
Transaction File Number	The value of the "Transaction File Number" is not the unique sequential File Number.	Reject the file, but with result code '21'

6.3.3.2 ICTX DETAIL VERIFICATIONS

If the transaction number is not the next-sequential number, the transaction file will still be accepted, but the RSS will be notified via a result code 25.

Data Element	Result Description	Result
Transaction Number	Any Transaction Attribute that does not follow the correct format and range	Reject the file with result code '24'
Transaction Number	The Transaction Number is not the next-sequential number (based off of the previous transaction record). **Note:** It does not matter if the most-recently sent ICTX file was successfully acknowledged or not; still base the next sequence number off of that file.	**Accept the file and continue processing,** but return a result code of '25'

6.3.4 ICTX Message File Example

6.4 Bulk Correction File (ITXC)

The Bulk Correction File is required by the business rules. When the RSS sends a ITXC file to the BOS, the BOS will re-process the contained transactions. Image records associated with these transactions will also be resent. The results of this re-processing will be used, instead of the original transaction data. In same transaction, AVDC Class and/Or Authority Map Class is not available then BOS will reject the whole correction transaction file.

6.4.1 ITXC Message File Specification

Bulk correction files will be identified by the ITXC string found in the file name.

6.4.2 ITXC Message File Attributes Detailed Specification

6.4.2.1 ITXC HEADER DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
File Type	Varchar	ITXC	ITXC	No	N/A	File type
Record count	Int	1000	0-999999999999	No	N/A	Number of records in the file
Correction File Number	big int	00000000 0000	0000000000000 000000- 9999999999999 999999	No	N/A	A file-level ("batch") number. This number is unique every time a ITXC file is sent by the Facility Host, even if the previous ITXC file has not been acknowledged by an ACKF file.

6.4.2.2 ITXC DETAIL DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
Transaction Number	big int	87892893	0000000000000 000000- 9999999999999 999999	No	N/A	Serialized Transaction Number : The unique key of a transaction assigned by the TZC.
GUID	VARCHAR(32)	a3e3c3a0f 92d2a4ab af4877b8b 030745	00000000000000 00000000000000 0000 – FFFFFFFFFFFFF FFFFFFFFFFFFFF FFFFFF	No	N/A	Unique Transaction identifier.
Tag Index	Int	1	0-99	No	N/A	Tag Index associated with GUID to differentiate between the tags associated to a transaction

Data Element	Format	Example	Range	Null	Default	Description
Correction Reason	CHAR(2)	2	1-5	No	N/A	'1' – Ignore License Plate Transaction '2' – Ignore Tagged Transaction '3' – Corrected Plaza/Lane Information '4' – Corrected Toll
Transaction Type	Char(1)	"T"	"T", "N", "V"	No	N	'T' – Tag transaction (which may also include image data) 'N' – No Tag Detected (which must include image data) 'V' – Registered video Transaction
Transaction Timestamp	Timestamp	"2015-12-31 23:59:33.99 9999"	"yyyy-mm-dd hh:mm:ss.nnnnnn"	No	N/A	Zero crossing, Time when the vehicle passed halfway between the Front and Rear Trigger
Toll Zone ID	Char(3)	001	001 - 005	No	N/A	Alphanumeric Plaza Identifier, to be assigned by LSIORB JB. • 01: ECN East End Crossing - NB • 02: ECS East End Crossing - SB • 03: DTN Lincoln Bridge – NB • 04: DTO Lincoln Bridge - NB - Exit 0 • 05: DTS Kennedy Bridge – SB
Lane Number	Char(3)	AB1	A-Z (case sensitive), 0-9	No	N/A	Alphanumeric Lane Identifier, to be assigned by LSIORB. Starting from right to left in driving direction 0 to X including shoulders.
Group	Char(2)	65	00-99	Yes	Null	Tag Agency group id. IAG=65

Data Element	Format	Example	Range	Null	Default	Description
Agency	varchar(3)	045	EZ-Pass: 045 Local 6c: 449	Yes	Null	Tag agency unique id.
Serial Number	Char(10)	12345678	0000000001 – 0016777215	Yes	Null	Tag Serial number read from the tag or as retrieved from the Customer License Plate File for an untagged violation. To be "Null",the value of "Transaction Type" element must be "N".
TagType	Char(1)	"0"	"0"-"6"	Yes	Null	0: Interior OBU (FPT) 1: Exterior FPT (RMT) 2: Exterior OBU (FME/LPT) 3: Toll/Balance 4: CVO 5: Feedback OBU 6: HOT/HOV *7:Reserved*
Tag Validation Status	Char(1)	"1"	1, 2, 3, or 4	Yes	Null	Tag list value 0= Not Found, 1=Valid 2= low Balance, 3=Invalid, 4= Lost Stolen
Watch List	Char(1)	1	0, 1	No	0	Set if the vehicle tag ID or license plate matches an item on the most recent Watch List
TagClass	Int	200	–1-1131	Yes	Null	The current classification of the vehicle record in the BOS. Class as encoded in the tag; declared class
Declared Axles	Number	2	2 - 10	Yes	Null	Axles associated with the tag(vehicle).
TagReadTimestamp	Timestamp	1970-01-01 00:00:01.000001	"yyyy-mm-dd hh:mm:ss.nnnnnn"	Yes	Null	TagReadTime in timestamp form

Data Element	Format	Example	Range	Null	Default	Description
AVI Write Count	Char (2)	22	00-99	Yes	Null	Total number of times the tag was written to while in the zone. Data currently unavailable
AVI PGM Cycle	Char (1)	S	S, F, C, U, R	Yes	Null	The result of an AVI tag program cycle. S - success, U- unverified , F – failed, C – Cross Read, R – Read Data currently unavailable
Assignment Reads	Char(2)	22	0-99	Yes	Null	Number of tag reads (handshakes) for this transaction reported on the RF channel. Data currently unavailable
Reporting Type	Char(1)	R	R,B	No	R	'R': Real Time 'B': Buffered
Isolated Tag	Number	0	0-1	No	0	Flag to show if the transaction have vehicle information or no. Only Tag is detected. 0=OK 1=Only Tag
Isolated Association	CHAR(12)	Sequential, Primary Key	Values: 000000000000 – 999999999999	Yes	Null	Transaction Number of the tag that correlated that this tag is a phantom.
Tag file name	Varchar(100)	See ITAG/ITGU Filename	See ITAG/ITGU Filename	Yes	Null	Tag file used to determine the status of Tag
Height	int, null	213	0-2598 (centimeters)	Yes	Null	Calculated height of the vehicle measured in centimeters for the current transaction. NULL if not available.
Length	int, null	548	0-2598 (centimeters)	Yes	Null	Calculated length of the vehicle measured in centimeters for the current transaction. NULL if not available.

Data Element	Format	Example	Range	Null	Default	Description
Width	int, null	243	0-2598 (centimeters)	Yes	Null	Calculated width of the vehicle measured in centimeters. NULL if not available.
Speed	int, null	2458	0 – 9999	Yes	Null	Calculated speed of the vehicle measured in miles per hour
Fiber Axles	int, null	2	1-10	Yes	Null	Axles detected by the FO axle detectors
AVDC Class	Number	"1", "2", "3"	1 - 3	Yes	Null	LISORB class based on AVC calculation 1= Class 1 is lowest toll rate 2 = Class 2 is medium toll rate 3 = Class 3 is highest toll rate 2-axle vehicles may be below or above the bar (configurable parameter - short or tall). Short are class 1, tall are class 2 3-axle vehicles and all other axle vehicles greater than 3 may be above below the bar (short or tall). Short are class 2, tall are class 3.
AVDC Confidence	Int	79	0-100	Yes	Null	The probability that the correct vehicle classification has been assigned. Zero indicates classification data not available. Value is a percent.
Degraded Flag	Char(1)	1	0,1	Yes	Null	Set when any of the sensors is not operational. 0 = Not Degraded 1 = Degraded
Automatic Vehicle Identification (AVI) Status	Char(1)	0	0, 1	Yes	Null	0 = OK 1 = AVI System Failure

Data Element	Format	Example	Range	Null	Default	Description
Image Capture and Processing System (ICPS) Status	Char(1)	0	0, 1	Yes	Null	0 = OK 1 = ICPS System Failure
Laser Vehicle Detection Classification (LVDC) System Failure	Char(1)	0	0,1	Yes	Null	0 = OK 1 = LVDC System Failure
Automatic Vehicle Detection and Classification (AVDC)	Char(1)	0	0,1	Yes	Null	0 = OK 1 = AVDC System Failure
Fiber Optic Axle Detectors (FOAD)	Char(1)	0	0,1	Yes	Null	0 = OK 1 = FOAD System Failure
Class mismatch	Char(1)	0	0, 1	Yes	Null	Indicated Class != Detected class (this is a 'flag' not a classification directive for the transaction). This field is not applicable for 6C tags at this time.
Selected License Plate Number	Char(10)	FASTCARZ	A-Z, 0-9	Yes	Null	Selected image LPN.
Selected License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the selected image. NULL if not available.
Front ALPR Confidence	Int	99	0-100	Yes	Null	Percentage confidence received from the OCR engine.

Data Element	Format	Example	Range	Null	Default	Description
Front License Plate Number	Char(10)	FASTCARZ	A-Z, 0-9	Yes	Null	Front image LPN
Front License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the front image. NULL if not available.
Rear ALPR Confidence	Int	99	0-100	Yes	Null	Percentage confidence received from the OCR engine
Rear License Plate Number	Char(10)	FASTCARZ	A-Z, 0-9	Yes	Null	Rear image LPN
Rear License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the rear image NULL if not available.
Number of Images Captured	Int	"3"	0-3	Yes	Null	3 images in a normal image set. Front & Rear and Overview. 0 if no images available.
Toll Amount	Number	250	0-99999	No	N/A	Base Toll Amount Per classification and business rules The toll amounst will be in cents.
Toll Rate Schedule Version	Char(8)	00000001	00000000-99999999	No	N/A	TRS Version from the Rate_ID in the Toll Rate Schedule.
Authority Map Class	Number	"1", "2", "3"	1 - 3	Yes	Null	LISORB class based on AVC calculation 1= Class 1 is lowest toll rate 2 = Class 2 is medium toll rate 3 = Class 3 is highest toll rate 2-axle vehicles may be below or above the bar (configurable parameter - short or tall). Short are class 1, tall are class 2 3-axle vehicles and all other axle vehicles greater than 3 may be above below the bar (short or tall). Short are class 2, tall are class 3.

6.4.3 ITXC Message File Functional Verifications

For individual ITXC records, if a data field is not in the correct data format or the field value is not within the specified value range, the entire file will be rejected in its entirety. Otherwise the BOS will accept the transaction record.

6.4.4 ITXC Message File Functional Verifications

6.4.4.1 ITXC HEADER VERIFICATIONS

Data Element	Result Description	Result
File Type	The value of the "File Type" attribute is not "ITXC".	Reject the file with result code '07'
Record count	The value of Record count in header element does not match the number of contained detail records.	Reject the file with result code '112'
Correction File Number	The value of the "Correction File Number" is not the unique sequential File Number.	Reject the file, but with result code '111'

6.4.4.2 C DETAIL VERIFICATIONS

Data Element	Result Description	Result
Transaction Number	Any Transaction Attribute that does not follow the correct format and range	Reject the file with result code '113

6.4.4.3 ITXC MESSAGE FILE EXAMPLE

6.5 Image Detail File (IMGF) 4The Facility Host server will send .zip files containing details about recent image files. Note that this specification is not for the actual image files, only a list of details about recent image files; for the actual image file (.jpg format) specifications, refer to the "JPEG Image Files" section.

6.5.1 IMGF Message File Specification

Image detail files will be identified by the IMGF string found in the file name. These files will be in .csv format.

6.5.2 IMGF Message File Attributes Detailed Specification

6.5.2.1   IMGF HEADER DATA ELEMENTS

Data Element	Data Type	Example	Range	Null	Default	Description
File Type	Varchar	IMGF	IMGF	No	N/A	File type
Record count	Int	1000	0-999999999999	No	N/A	Number of records in the file

6.5.2.2   IMGF DETAIL DATA ELEMENTS

Data Element	Data Type	Example	Range	Null	Default	Description
GUID	VARCHAR(32)	a3e3c3a0f92d2a4abaf4877b8b030745	00000000000000000000000000000000 – FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	No	N/A	Unique Transaction identifier.
Lane Number	Char(3)	001	000-999	N	N/A	Alphanumeric Lane Identifier, to be assigned by LSIORB. The Plaza-Lane combination must conform with the master list of Plazas and Lanes, provided by LSIORB.
Plaza Number	Char(3)	003	000-999	N	N/A	Alphanumeric Plaza Identifier, to be assigned by LSIORB Must conform with master list.
Image Type	Char(1)	1	1-6	Y	Null	The image number, where 1 – Front of vehicle image 2 -- Rear of vehicle image 3 – Patch Plate 4-5 -- Reserved 6 -- Overview image

Data Element	Data Type	Example	Range	Null	Default	Description
Image ID	Number(22)	3456234567 6732234673 02	0000000000000000 000000 – 9999999999999999 999999	N	N/A	Unique image id number.
Image File Name	Varchar(100)	See Image File Name Rules	See Image Filename Rules	N	N/A	The filename of the image, as it was saved to the BOS SFTP server.
Image File Path	Varchar(MAX)	/Incoming_i mages/T/00 000/2016/03 /07/21/		N	N/A	The file path of the image file, as it was stored on the BOS SFTP Server.
Trigger Time	Timestamp	"2015-12-31 23:59:33.99 9999"	TBD	N	N/A	Time when the image trigger occurred at the road-side. Formatted as: "yyyy-mm-dd hh:mm:ss. nnnnnn"
OCR Confidence Plate	Number(3)	075	000-100	Y	Null	OCR Confidence level for the whole plate.
OCR Confidence State	Number (3)	065	000-100	Y	Null	OCR Confidence level for jurisdiction(state).
Camera ID	Number (3)	044	000-999	N	N/A	Id number of the camera used to capture the image.
License Plate Number	Varchar(10)	BJJFE32	0-9 and A-Z (case insensitive)	Y	Null	License plate number.
License Plate Jurisdiction	Char(2)	TX	See "Jurisdiction Codes" section.	Y	Null	LPN jurisdiction identifier. The identifier must be on the master list of jurisdiction codes; see "Jurisdiction Codes" section.

6.5.3 IMGF Message File Functional Verifications

6.5.3.1 IMGF HEADER VERIFICATIONS

Data Element	Description	Result if failed
File Type	The value of the "File Type" attribute is of: • "IMGF"	Reject the file with result code '07'
Record count	The Record Count in header is not match with Detail record count(Count perform on Detail Rows)	Reject the file with result code '42'

6.5.4 IMGF Detail Verifications

Data Element	Description	Result if failed
IMGF Attribute	Any IMGF Attribute that does not follow the correct format and range	Reject transaction image file with result code '43'

6.5.5 IMGF Message File Example

6.6 Toll Fare Message File (TFRF)

Toll Fare message files are used whenever the BOS has to inform the RSS of new Toll Fares. The BOS shall send a first Toll Fare message file before start of operations. After this first exchange the data flow does not respect any particular schedule and Toll Fare message files may be sent at any time although they will typically be exchanged once a year.

6.6.1 TFRF Message File Specification

Toll Fare message files are identified by the value "TFRF" in file name.

6.6.2 TFRF Message File Attributes Detailed Specification

The following table presents the definition and semantics of each CSV data element carried in the file.

6.6.2.1 TFRF HEADER DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
File Type	Varchar	TFRF	TFRF	No	N/A	File type
Record count	Int	899	0-999	No	N/A	Number of records in detail of the file

6.6.2.2 TFRF DETAIL DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
Toll Rate Schedule Version	Char(8)	00000001	00000000-99999999	No	N/A	TRS Version from the Rate_ID in the Toll Rate Schedule.
AccountType	Varchar(1)	2	"1", "2", or "3"	No	N/A	Identifier of the Account Type 1 – Tag (Registerd) 2 – Video (Regsited) 3- Video (Unregistered)
VehicleClassType	Varchar(1)	1	"1", "2", or "3"	No	N/A	Identifier of the Vehicle class 1 -Class 1 2- Class 2 3- Class 3
TollAmount	Int	780	0-99999	No	N/A	Value is in cents.
Effective/Start Date	DateTime	yyyy-mm-dd hh:mm:ss		No	N/A	Datetime at which toll fare takes effect.
End Date	DateTime	yyyy-mm-dd hh:mm:ss		Yes	Null	Date Time for the toll fare amount to expire.

6.6.3 TFRF Message File Functional Verifications

6.6.3.1 HEADER VERIFICATION

Data Element	Result Description	Result if failed
File Type	The value of the "File Type" attribute is of: • " TFRF"	Reject the file with result code '61'
Record count	The Record Count in header is not match with Detail record count(Count perform on Detail Rows)	Reject the file with result code '62'

6.6.3.2 DETAIL VERIFICATION

Verification	Result Description	Result if failed
TFRF Attribute	Any TFRF Attribute that does not follow the correct format and range	Reject the file with result code '63'

6.6.4 TFRF Message File Example

6.7 Full Tag Status File (ITAG)

6.7.1 ITAG Message File Specification

The Full Tag Status File shall be created by the BOS to inform the RSS as to the status of **all** Tags associated with an account held by the Back Office and the status of all Tags received from the EPP for E-ZPass away agencies.

6.7.2 ITAG Message File Attributes Detailed Specification

The ITAG Message File will be sent at 9:45 P.M. CST each day.

Example FileName:
MSB-ITAG-20160218053000.zip

MSB ITAG-20160218053000.csv (contained in the .zip file)

6.7.3 ITAG File Data Elements

6.7.3.1 ITAG HEADER ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
File Type	Char(4)	ITAG	Yes	No	N/A	Possible Values: • 'ITAG'
Record count	Int	1000	Yes	No	N/A	Number of detail records in the file.
TVI Version Number	Big Int	00045034 87768593 427	0000000 0000000 00000-9999999 9999999 99999	No		N/A	The sequential version number of the file. Must be unique and must be incremented by 1 for every ITAG or ITGU file.

6.7.3.2 ITAG DETAIL ELEMENTS

Data Element	Format	Example	Range	Null	Default	Description
Tag Agency ID	Char(3)	004	Yes	No	N/A	Tag agency ID.
Tag Serial Number	Char(10)	7692863	Yes	No	N/A	Tag serial number
Vehicle Class	Int	2	1-3	No	N/A	The current classification of the vehicle record in the BOS. '1' – Class One '2' – Class Two '3' – Class Three
Tag Status	Char(1)	2	Yes	No	N/A	Possible Values: 1. Valid 2. Low-balance 3. Invalid (Tag is not valid for use and will not be honored by the Home Agency or CSC) 4. Lost/Stolen (also includes all Tags which are not valid for use and will not be honored by the Home Agency/CSC and for which customer information is not available).

Data Element	Format	Example	Range	Null	Default	Description
License Plate State	Char(2)	FL	See "Jurisdiction Codes" section.	Yes	Null	State/Jurisdiction code for the selected image. NULL if not available.
License Number	VarChar(10)	BJR6668		No	Null	License Plate number.

6.7.4 ITAG Functional Verifications

6.7.4.1   HEADER VERIFICATIONS

Data Element	Description	Result if Failed
File Type	The value of "File Type" is not "ITAG".	Reject the file with result code '71'.
Record count	The Record count in header does not match the Detail record count (the count performed on Detail Rows)	Reject the file with result code '72'.

6.7.4.2   DETAIL VERIFICATIONS

Data Element	Description	Result if Failed
ITAG Attribute	Any ITAG Attribute that does not follow the correct format and range	Reject tag transaction detail in the file with result code '73'

6.7.5 ITAG Message File Example

6.8 Incremental Tag Status File (ITGU)

6.8.1 ITGU Message file specification

The Incremental Tag Status File (ITGU) shall be created by the BOS to inform the RSS as to the status of each **recently-modified** Tag record that is associated with an account held by the Back Office or that is received from the IAG for E-ZPass away agencies.

6.8.2 ITGU Message File Attributes Detailed Specification

Example FileName:
MSB-ITGU-20160218053000.zip

MSB-ITGU20160218053000.csv

6.8.3 ITGU File Data Elements

6.8.3.1 HEADER DATA ELEMENTS

Data Element	Format	Example	Required	Default	Description
File Type	Char(4)	ITGU	Yes	Null	Possible Values: • 'ITGU'
Record count	Int	1000	Yes	Null	Number of detail records in the file.
TVI Version Number	Big Int	00000000 00983758 769	Yes	N/A	The sequential version number of the file. Must be unique and must be incremented by 1 for every ITAG or ITGU file.

6.8.3.2 DETAIL DATA ELEMENTS

Data Element	Format	Example	Required	Default	Description
Tag Agency ID	Char (3)	004	Yes	N/A	Tag agency ID.
Tag Serial Number	Char (10)	7692863	Yes	N/A	Tag serial number.
Vehicle Class	Int	2	Yes	N/A	The current classification of the vehicle record in the BOS. '1' – Class One '2' – Class Two '3' – Class Three
Tag Status	Char(1)	1000	Yes	N/A	Possible Values: 1 – Valid 2 – Low Balance 3 – Invalid (tag is not valid for use and will not be honored by the Home Agency/CSC). 4 – Lost/Stolen (also includes all tags which are not valid for use and will not be honored by the Home Agency/CSC and for which customer information is not available).
License Plate State	Char(2)	FL	No	Null	State/Jurisdiction code for the selected image. NULL if not available.

Data Element	Format	Example	Required	Default	Description
License Number	VarChar (10)	BJR6668	Yes	N/A	License Plate number.

6.8.4 ITGU Functional Verifications

Data Element	Description	Result if Failed
File Type	The value of the "File Type" element is not "ITGU".	Reject the file with result code '81'
Record count	The value of the "Record count" header element does not match the Detail record count (the count performed on Detail Rows)	Reject the file with result code '82'

Data Element	Description	Result if Failed
ITGU Attribute	Any ITGU Attribute that does not follow the correct format and range	Reject the tag status transaction detail in the file with result code '83'

6.8.5 ITGU Message File Example

6.9 Watch List File (WTCH)

6.9.1 WTCH Message File Specification

The Watch List file (WTCH) is sent from the BOS to the Road-Side System (RSS) on a scheduled basis. Each file contains all of the Tags and Plates that are currently on the Watch List, and includes the e-mail address that should be notified when a Tag or Plate is observed by the RSS.

6.9.2 WTCH File Attributes Detailed Specification

Example FileName:
MSB-WTCH-20160218053000.zip

MSB-WTCH-20160218053000.csv

6.9.3 WTCH File Data Elements

Data Element	Format	Example	Range	Null	Description
File Type	Varchar	WTCH	WTCH	No	File type
Record count	Int	1000	0-999999999999	No	Number of records in the file

Data Element	Format	Example	Range	Required	Default	Description
Tag Agency	Char(3)	004	001-127	No	Null	Tag Agency ID
Tag Number	Char(10)	7692863	0-9999999999	No	Null	The tag that is in violation
License Number	VarChar (10)	BJR6668		No	Null	License Plate number
LicensePlate State	VarChar (2)	TX	State Result Code	No	Null	The jurisdiction of the license plate (must be a state from the Master List of State Codes)
Violation Type	Int	1	1	Yes	N/A	The type of value in Tag Lic Number Possible Values: 1: Tag violation 2: LPN violation
Email	Varchar	markPD@ notification.com		Yes	N/A	Email address for the recipients of the enforcement notification.

6.9.4 WTCH Message File Functional Verifications

Data Element	Description	Result if Failed
File Type	Must be "WTCH".	Reject the file with result code '91'
Record count	The RECORD_COUNT in header does not match the Detail record count (the count performed on Detail Rows)	Reject the file with result code '92'

Data Element	Description	Result if Failed
WTCH Attribute	Any WTCH Attribute that does not follow the correct format and range	Reject watch list transaction detail in the file with result code '93'

6.9.5 WTCH Message File Example

6.10 Acknowledgement File (ACKF)

6.10.1 ACKF Message File Specification
Acknowledgement files will be created for every received file and be checked at a configurable rate by both the Sending and the Receiving System.

The ACKF header will contain the file type and file name of the file that is being acknowledged. The details section can contain multiple entries using the following codes. Each file type may have unique codes associated with them.

6.10.2 ACKF Message File Attributes Detailed Specification

Every message file must be responded to with an ACKF file within 5 minutes of the original file being received.

Example FileName:

MSB-ACKF-20160218053000.zip

MSB-ACKF-20160218053000.csv

6.10.3 ACKF Message File Data Elements

6.10.3.1 ACKF HEADER DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default Value	Description
File Type	Varchar	ACKF	ACKF	No		File type
Original File Name	Varchar	MSB-ITAG-20151210023000.ZIP		No	N/A	File name for the file being acknowledged.
File-Level Result Code	Int	5	1-6, 51, 52, etc.	No	N/A	The result code at the file level.

6.10.3.2 ACKF DETAIL DATA ELEMENTS

Data Element	Format	Example	Range	Null	Default Value	Description
ResultCode	Varchar	24	See Result Codes	No	N/A	Result code by file type
Transaction ID or Tag Number	Big Int	87892893	0000000000000000000-9999999999999999999	Yes	Null	Can only be null if File Type is **not** "ICTX"

6.10.4 ACKF Message File Functional Verifications

6.10.4.1 ACKF HEADER VERIFICATIONS

Data Element	Result Description	Result if failed
File Type	The value of the "File Type" attribute is not "ACKF".	Reject the file with result code '07'
Original File Name	The value of the "Original File Name" does not match a previously received File	Reject the file with result code '102'
File-Level Result Code	The file-level result code of file that is being acknowledged is not a valid file-level result code.	Reject the file with result code '103'

6.10.4.2 ACKF DETAIL VERIFICATIONS

Data Element	Result Description	Result if failed
ACKF Attribute	Any ACKF Attribute that does not follow the correct format and range	Reject the file with result code '104'

6.10.5 ACKF Message File Example

7 Master List of Plazas

Plaza ID	Abbreviation	Description
01	ECN	East End Crossing – NorthBound
02	ECS	East End Crossing – SouthBound
03	DTN	Lincoln Bridge – NorthBound
04	DTO	Lincoln Bridge - NorthBound - Exit 0
05	DTS	Kennedy Bridge - SB

8 Agency Master List

Agency ID	Description
000	Manufacturer (Kapsch)
001	Regional CSC
002	New Jersey Highway Authority
003	New Jersey Turnpike Authority
004	New York State Thruway Authority
005	Port Authority of New York & New Jersey
006	Pennsylvania Turnpike Commission
007	South Jersey Transportation Authority
008	MTA Bridges & Tunnels
009	Delaware River Port Authority
010	Virginia DOT
011	Highway 407, Canada
012	MetroDade, Florida
013	Peace Bridge, New York
014	Ambassador Bridge, Michigan
015	Illinois State Toll Highway Authority
016	Maryland Transportation Authority
017	South Carolina DOT
018	New York State Bridge Authority
019	Delaware DOT
020	Advantage I-75
021	Massachusetts Department of Transportation

022	New Jersey CSC
023	New Brunswick (Canada) Highway Corporation
024	West Virginia Parkways Authority
025	Delaware River and Bay Authority
026	New Hampshire DOT
027	Burlington County Bridge Commission
028	Maine Turnpike Authority
029	Delaware River Joint Toll Bridge Commission
030	Indiana Toll Road Concession Company (ITRCC)
031	Ohio Turnpike and Infrastructure Commission (OTIC)
032	Rhode Island Turnpike and Bridge Authority (RITBA)
033	North Carolina Turnpike Authority (NCTA)
034	SRTA Georgia
035	Florida Turnpike Enterprise
036	OOCEA Orlando
037	MDX Miami Dade Expressway
038	Tampa Hillsborough Expressway
039	Lee County Florida
040	Texas DOT
041	North Texas Tollway Authority
042	Harris County Toll Road Authority (HCTRA)
043	Cental TX Regional Mobility Authority (CTRMA)
044	Skyway Concession Company (SCC)
045	RiverLink (KYand IN)
046	E-470 Colorado
047	Northwest Parkway Colorado
048	Louisiana DOT
049	Reserved for future use
050	Bay Area Toll Authority (BATA)
051	Golden Gate Bridge, Highway and Transportation District
052	Transportation Corridor Agencies (TCA)
053	Reserved for future use
054	Reserved for future use
055	Oklahoma Turnpike Authority
056	Kansas Turnpike Authority
057	Washington DOT
058	Utah DOT
059	Niagara Falls Bridge Commission

060	Thousand Islands Bridge Authority
061	Halifax Dartmouth Bridge Commission
062	Southern Connector SC
063	SRTA Georgia
064	Reserved for future use
065 – 127	Reserved for future tag issuing agencies
128	New York State Parking
129	Buffalo Airport
130	McDonalds
131	Port Authority of New York & New Jersey Airports
132	South Jersey Transportation Authority Parking
133 – 999	Reserved for future non-toll facilities.

9   Result Code Master List

The table below contains all of the valid result codes that can be included in an ACKF file. There are three types of result codes: File-Level, Header-Level, and Record-Level.

Result Code	Result Code Description
Generic, File-Level Result Codes	
1	Code for a duplicate .zip file
2	Code for a .zip file with a filesize of "0"
3	Code for an invalid zip file
4	Decompression fails on zip file
5	more than one files within decompressed zip file
6	Code for a CSV file which has an incorrect file format
7	The format, structure of the Header and details must be compliant with file format of message file
ICTX, Header-Level Result Codes	
7	Transaction file has an invalid File Type value
22	The value of Record Count does not match the number of Detail records.
21	The value of the"Transaction File Number" is not the unique -sequential File Number
ICTX, Record-Level Result Codes	
24	Any Transaction Attribute that does not follow the correct format and range

Result Code	Result Code Description
25	Transaction number is not the next-sequential number
ITXC, Header-Level Result Codes	
7	File Type is not "ITXC"
112	The value of Record Count does not match the number of Detail records.
111	The value of the" Correction File Number" is not the unique-sequential File Number
ITXC, Record-Level Result Codes	
113	Any Transaction Attribute that does not follow the correct format and range
IMGF, Header-Level Result Codes	
7	The value of the Image Details File is not "IMGF"
42	The value of the Record Count attribute does not match the Detail record count.
IMGF, Record-Level Result Codes	
43	Any IMGF Attribute that does not follow the correct format and range
TFRF, Header-Level Result Codes	
61	The value of the "File Type" attribute is not "TFRF"
62	The value of the "Record count" attribute in header does not match the number of Detail records.
TFRF, Detail-Level Result Codes	
63	Any TFRF Attribute that does not follow the correct format and range
ITAG, Header-Level Result Codes	
71	The value of the "File Type" attribute is not "ITAG"
72	The value of the "Record count" attribute does not match the number of Detail records in the file.

Result Code	Result Code Description
ITAG, Detail-Level Result Codes	
73	Any ITAG Attribute that does not follow the correct format and range.
ITGU, Header-Level Result Code	
81	The value of the "File Type" attribute is not "ITGU"
82	The value of the "Record count attribute does not match the number of contained Detail records.
ITGU, Detail-Level Result Codes	
83	Any ITGU Attribute that does not follow the correct format and range
WTCH, Header-Level Result Codes	
91	The value of the "File Type" attribute is not "WTCH"
92	The value of the "Record count" attribute does not match the number of Detail records contained in the document.
WTCH, Detail-Level Result Codes	
93	Any WTCH Attribute that does not follow the correct format and range
ACKF, Header-Level Result Codes	
101	The value of the "File Type" attribute is not "ACKF".
102	The value of the "Original File Name" does not match a previously received File

Result Code	Result Code Description
103	The file-level result code of file that is being acknowledged is not a valid file-level result code.
ACKF, Detail-Level Result Codes	
104	Any ACKF Attribute that does not follow the correct format and range

10 Juridiction Codes

UNITED STATES:

AK Alaska

AL Alabama

AR Arkansas

AS American Samoa

AZ Arizona

CA California

CO Colorado

CT Connecticut

DC Washington, District Of Columbia

DE Delaware

FL Florida

FM Federated States Of Micronesia

GA Georgia

GU Guam

HI Hawaii

IA Iowa

ID Idaho

IL Illinois

IN Indiana

KS Kansas

KY Kentucky

LA Louisiana

MA Massachusetts

MD Maryland

ME Maine

MH Marshall Islands

MI Michigan

MN Minnesota

MO Missouri

MP Northern Mariana Islands

MS Mississippi

MT Montana

NC North Carolina

ND North Dakota

NE Nebraska

NH New Hampshire

NJ New Jersey

NM New Mexico

NV Nevada

NY New York

OH Ohio

OK Oklahoma

OR Oregon

PA Pennsylvania

PR Puerto Rico

PW Palau

RI Rhode Island

SC South Carolina

SD South Dakota

TN Tennessee

TX Texas

UT Utah

VA Virginia

VI Virgin Islands

VT Vermont

WA Washington

WI Wisconsin

WV West Virginia

WY Wyoming

GO Government

FE Federal

CANADA

AB Alberta

BC British Columbia

MB Manitoba

NB New Brunswick

NF Newfoundland

NS Nova Scotia

NT Northwest Territories

ON Ontario

PE Prince Edward Island

QC Quebec

SK Saskatchewan

YT Yukon

11 Detailed Description of Document Changes

No.	Version	Status	Date	Authors	Type of the change
00	00-01	Processed	2015-07-09	Steve Spenler	Document created
01	00-02	Processed	2015-07-13	Martin Maldonado	Review and Release
02	00-03	processed	2015-09-28	Mario Mena	Review
03	00-04	processed	2015-10-30	Martin Maldonado	Review and Release
04	00-05	Processed	2015-10-30	Mary Agnolin	Customer OTS Review Comments Addressed
05	00-06	Under Review	2016-02-09	Florian Prieler, Mario Mena	Changes based on MSB review

Table 1 Overview of changes

Reference to the status- and version administration:

Status:

processed   the document is being processed

released   the document has been checked and released by quality assurance; it can only be modified if the version number is updated.

Versions:

Take place in two stages. Accepted documents receive the next higher integral version number.

00-01, 00-02 etc.   not released versions, with the status "**processed**"
01   first released version with the status "**released**"
01-01, 01-02 etc.   Versions, which supplement the version 01-00 and "**processed**" are
02   second released version with the status "**released**"

END OF DOCUMENT

Section 8: Proposed Transaction Flow
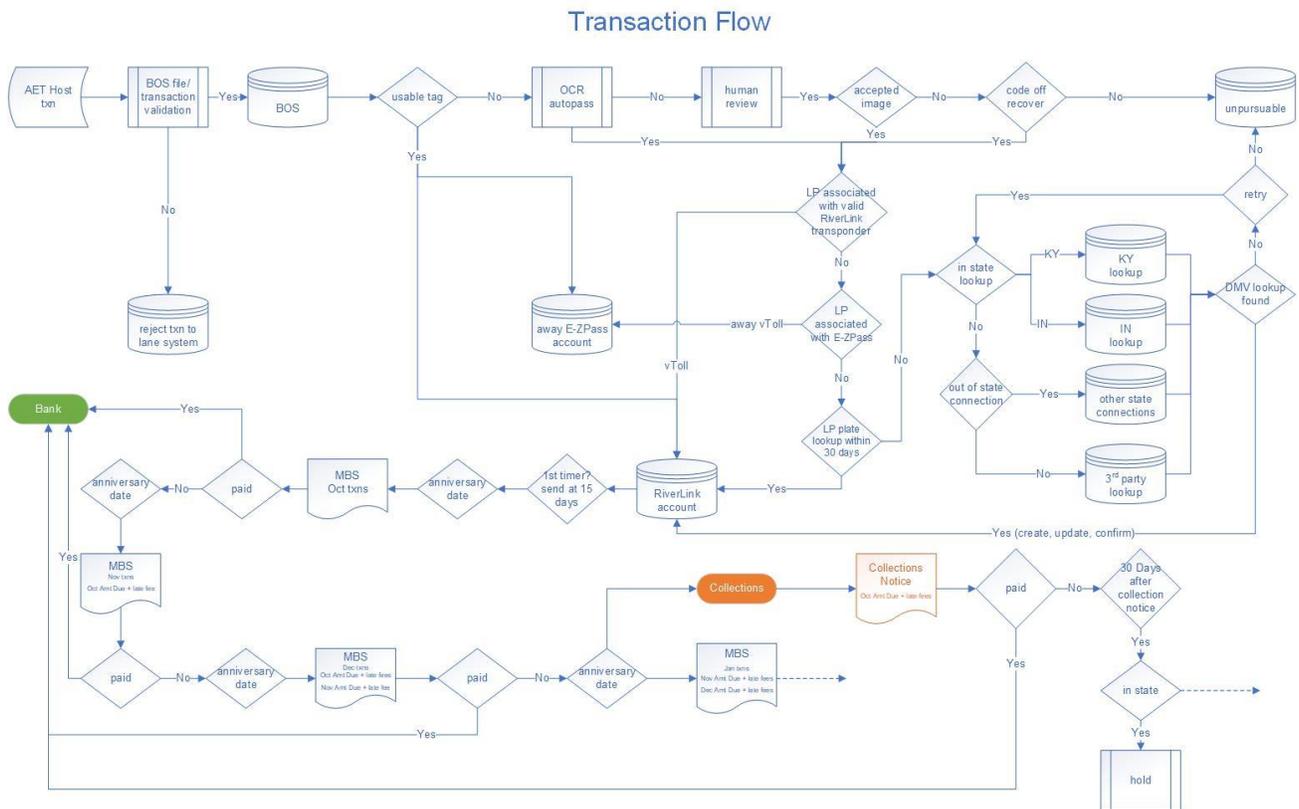
Transaction Flow

Section 9: Traffic Data

Traffic and Revenue Studies

https://www.in.gov/indot/files/Traffic-Revenue-Study-8-30-13.pdf

https://www.in.gov/indot/files/2016-06-26-Updated-T-and-R-Study.pdf

Business Rules

https://riverlink.com/wp-content/uploads/2018/01/2018-12-18-RiverLink-Business-Rules.pdf

Current Database Size: **4.5TB**

		Transponder Based Transactions		vToll				
Month Year	Rejected in Image Review (IR)	Local (w/ or w/o IR)	Home Interop	Local	Home Interop	Posted Video Transactions	Away Transactions	Total BOS
2018-01	64,484	1,022,844	293,806	124,758	66,960	468,217	24,598	**2,065,667**
2018-02	67,532	1,036,005	278,224	102,906	62,946	475,630	24,197	**2,047,440**
2018-03	92,985	1,207,082	380,691	130,048	92,648	668,624	31,544	**2,603,622**
2018-04	83,693	1,232,089	350,984	141,231	90,387	672,626	33,643	**2,604,653**
2018-05	84,582	1,300,052	362,526	154,503	96,240	690,117	39,627	**2,727,647**
2018-06	87,939	1,290,399	357,833	158,803	98,947	751,469	45,905	**2,791,295**
2018-07	91,384	1,286,766	357,677	158,218	103,312	787,790	49,371	**2,834,518**
2018-08	85,612	1,385,766	373,155	167,025	95,487	701,892	46,924	**2,855,861**
2018-09	87,286	1,284,074	332,564	154,018	86,256	689,269	44,107	**2,677,574**
2018-10	88,624	1,406,734	378,034	164,642	94,512	729,621	56,023	**2,918,190**
2018-11	88,622	1,288,770	353,164	155,597	86,206	639,231	51,871	**2,663,461**
2018-12	78,379	1,226,009	336,742	151,676	77,310	631,578	50,364	**2,552,058**
2019-01	67,195	1,201,671	329,335	144,722	70,115	480,831	43,390	**2,337,259**
2019-02	63,596	1,132,294	305,548	146,678	68,544	473,928	42,352	**2,232,940**
2019-03	80,887	1,293,079	410,330	173,744	100,536	681,538	52,762	**2,792,876**
2019-04	81,654	1,364,971	384,294	176,607	97,979	672,717	55,582	**2,833,804**
2019-05	84,172	1,395,698	393,175	178,873	106,203	721,326	62,444	**2,941,891**
2019-06	82,551	1,312,374	379,914	175,784	106,270	721,811	68,370	**2,847,074**
2019-07	86,610	1,358,700	399,848	187,978	114,724	780,088	72,439	**3,000,387**
2019-08	88,253	1,409,586	412,677	190,263	107,038	720,386	65,778	**2,993,981**
2019-09	82,403	1,338,242	373,136	180,207	95,150	687,193	60,327	**2,816,658**
2019-10	85,050	1,354,245	406,342	183,127	98,865	677,253	66,890	**2,871,772**
2019-11	75,244	1,200,873	358,710	158,973	81,897	572,816	56,369	**2,504,882**
2019-12	78,330	1,221,541	371,357	168,380	84,408	593,399	58,515	**2,575,930**

Transaction Processing by Month

Unique License Plates with No Transponder			
Year	Plate count	Total	Total Tag and No Tag Transactions
2018	3,353,902	12,733,104	32,350,879
2019	3,345,224	12,868,655	33,562,075

Unique License Plates with No Transponder				
Year	Month	Plate count	Total	Total Tag and No Tag Transactions
2018	1	334,708	793,681	2,141,276
2018	2	316,383	783,218	2,127,927
2018	3	470,470	1,084,318	2,709,495
2018	4	453,919	1,078,430	2,698,440
2018	5	456,227	1,122,378	2,826,155
2018	6	497,470	1,189,813	2,880,706
2018	7	519,682	1,233,461	2,921,714
2018	8	454,255	1,133,713	2,940,008
2018	9	432,585	1,094,643	2,753,159
2018	10	451,804	1,161,825	2,994,241
2018	11	413,203	1,048,972	2,743,996
2018	12	410,883	1,008,652	2,613,762
2019	1	315,908	817,838	2,387,292
2019	2	312,630	806,310	2,285,100
2019	3	474,235	1,122,996	2,876,886
2019	4	444,205	1,114,044	2,913,628
2019	5	466,422	1,181,771	3,019,471
2019	6	485,835	1,175,436	2,917,701
2019	7	526,818	1,268,774	3,080,184
2019	8	479,248	1,194,850	3,067,892
2019	9	440,336	1,120,052	2,879,608
2019	10	452,268	1,123,810	2,940,636
2019	11	389,769	952,075	2,558,507
2019	12	409,254	990,699	2,635,170

Year	DMV Hold Success			DMV Release Success		
	IN	KY	Total	IN	KY	Total
2018	60,147	63,712	**123,859**	27,160	20,739	**47,899**
2019	49,958	54,260	**104,218**	39,790	40,570	**80,360**

CSC Customer Account Status by Type as of August 2020			
Status	**Type**	**Category**	**Count**
Active	ETC Account	Commercial	6,044
Active	ETC Account	Exempt	107
Active	ETC Account	Government	87
Active	ETC Account	Personal	221,955
Active	ETC Account	Temporary	10,966
Active	E-ZPass® Agency	Agency	82
Active	Registered Video Account	Commercial - RVA	92
Active	Registered Video Account	Personal - RVA	1,742
Active	Unregistered Video Account	N/A	2,531,458
Locked	ETC Account	Commercial	870
Locked	ETC Account	Personal	32,588
Locked	Registered Video Account	Commercial - RVA	8
Locked	Registered Video Account	Personal - RVA	173
Pending Closed	ETC Account	Commercial	78
Pending Closed	ETC Account	Exempt	3
Pending Closed	ETC Account	Government	7
Pending Closed	ETC Account	Personal	943
Pending Closed	Registered Video Account	Commercial - RVA	15
Pending Closed	Registered Video Account	Personal - RVA	36
Pending Closed	Unregistered Video Account	N/A	416
Pending Closed - Write Off	ETC Account	Personal	19
Pending Closed - Write Off	Registered Video Account	Commercial - RVA	2
Pending Closed - Write Off	Registered Video Account	Personal - RVA	4
Pending Closed - Write Off	Unregistered Video Account	N/A	2,246
Active Account Total			**2,809,941**
Closed	ETC Account	Commercial	1,092
Closed	ETC Account	Exempt	2
Closed	ETC Account	Government	4
Closed	ETC Account	Personal	19,894
Closed	ETC Account	Temporary	242
Closed	Registered Video Account	Commercial - RVA	47
Closed	Registered Video Account	Personal - RVA	641
Closed	Unregistered Video Account	N/A	5,135,882
Closed - Pending Refund	ETC Account	Commercial	8
Closed - Pending Refund	ETC Account	Government	1
Closed - Pending Refund	ETC Account	Personal	224
Closed - Pending Refund	Registered Video Account	Commercial - RVA	1
Closed - Pending Refund	Registered Video Account	Personal - RVA	1
Closed - Pending Refund	Unregistered Video Account	N/A	9,678
Closed Account Total			**5,167,717**

Transponder Statuses as of August 2020		
	6C	**EZ-Pass**
Active	536,093	86,529
Invalid	18,029	642
Locked	7,371	1,138
Lost or Stolen	451	13
Requested	1,524	10,691
In Fulfillment	1,148	3398

Section 10: CSC Data

CSC 2019 Monthly Statistics

	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019
Accounts Opened												
Personal	4,719	3,965	4,227	3,887	4,508	4,493	4,511	4,746	4,148	4,018	3,371	3,152
Commercial	132	100	88	81	95	82	79	93	89	89	82	55
Government	-	-	-	-	1	-	1	1	-	1	-	-
Accounts Closed												
Personal	807	679	846	727	408	491	420	721	683	1,030	515	563
Commercial	59	67	38	34	19	18	15	38	42	33	45	31
Government	-	-	-	-	-	-	-	-	-	-	-	-
Total Active Accounts												
Personal	179,037	183,316	186,968	188,661	191,813	195,048	197,677	200,319	203,204	205,844	207,894	209,624
Commercial	5,463	5,534	5,607	5,616	5,664	5,721	5,748	5,780	5,829	5,877	5,898	5,889
Government	87	87	88	88	89	89	90	90	89	89	89	88
CSC - Phones-Calls												
Average Talk Time	6:50	6:40	6:40	6:21	6:24	5:59	5:56	6:04	6:04	5:55	6:04	5:46
Calls Answered	37,229	32,708	32,798	32,672	34,091	33387	36052	37945	35709	34915	27502	27377
Average Handle Time	9:48	9:38	9:57	8:34	8:46	7:59	8:10	8:21	8:28	8:15	8:40	8:23
WUCs - Payment Transactions												
Louisville	1,531	1,362	1,581	1,613	1,869	1,734	1,991	1,442	1,759	1,752	1,340	1,410
Jeffersonville	2,976	2,762	3,240	3,231	3,334	3,136	3,289	3,128	3,066	2,795	2,330	2,297
Total WUC Payment Transactions	4,507	4,124	4,821	4,844	5,203	4,870	5,280	4,570	4,825	4,547	3,670	3,707
DMV Lookup Request Sent												
IN	46,936	39,120	79,596	15,858	77,470	73,584	93,933	74,280	71,517	83,007	59,784	57,755
KY	42,637	33,037	54,404	12,594	63,226	56,293	69,173	63,960	61,907	62,340	48,164	50,699
Other States (LES)	60,661	45,191	85,944	22,160	115,132	103,207	142,160	118,694	94,510	99,231	81,484	78,890
DMV Lookup Responses Received												
IN	43,410	37,151	74,910	15,155	73,304	69,649	87,055	68,047	66,228	77,815	56,053	54,326
KY	34,564	28,483	45,507	10,832	53,197	49,373	61,244	55,837	53,211	53,227	42,841	40,899
Other State s(LES)	40,501	28,790	53,111	8,193	84,376	70,581	97,440	76,146	71,658	76,225	62,084	62,048
DMV Responses % (Requests Sent/Responses Received)												
IN	92%	95%	94%	96%	95%	95%	93%	92%	93%	94%	94%	94%
KY	81%	86%	84%	86%	84%	88%	89%	87%	86%	85%	89%	81%
Other States (LES)	67%	64%	62%	37%	73%	68%	69%	64%	76%	77%	76%	79%

CSC 2019 Monthly Statistics												
	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019
# 1st Invoices Sent												
IN	72,786	40,947	49,326	77,446	83,696	62,175	78,782	85,531	69,519	68,352	68,426	53,213
KY	62,154	38,860	42,883	49,672	69,586	53,791	64,026	70,229	63,095	62,591	54,588	47,412
Other States	64,684	36,353	40,450	58,363	79,663	60,931	69,639	77,932	49,191	81,496	55,427	53,107
# 2nd Invoices Sent												
IN	29,702	25,003	19,574	17,175	32,015	30,061	28,866	31,978	32,661	29,134	24,277	28,791
KY	30,733	25,642	21,038	18,840	27,725	30,566	29,118	32,343	31,690	30,623	27,090	28,828
Other States	28,009	21,871	17,849	14,309	23,037	27,266	26,097	27,783	29,346	24,082	28,276	25,014
# Violations Sent												
IN	19,471	16,416	15,277	14,330	13,957	10,157	15,460	22,917	16,075	18,651	18,189	15,132
KY	22,209	17,756	17,094	16,809	15,487	11,849	16,465	23,722	17,362	20,571	19,511	17,027
Other States	17,960	14,924	14,910	13,318	14,014	8,275	12,471	20,772	14,995	17,263	18,662	14,171
# Collection Notices Sent												
IN	16,092	13,448	13,974	11,477	14,336	10,181	10,438	13,742	15,928	16,064	13,136	16,468
KY	19,128	16,008	16,059	13,404	16,648	11,635	12,042	15,194	16,719	18,048	14,958	18,237
Other States	17,954	13,281	12,973	10,997	14,849	10,835	8,648	11,472	15,185	15,040	13,012	17,113
# Final Action Sent												
IN	12,106	11,049	12,004	8,377	12,816	8,789	10,585	10,551	8,035	8,534	10,050	12,167
KY	13,641	12,939	11,537	12,714	15,842	10,988	12,984	13,055	9,801	10,537	11,459	15,031
Other States	12,727	12,212	16,336	10,930	14,376	9,972	12,291	12,530	8,037	8,799	10,123	13,996

CSC 2018 Monthly Statistics												
	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018
Accounts Opened												
Personal	3,466	3,724	5886	5670	5,758	5,589	6,125	6,195	5,363	5,676	4,970	4,349
Commercial	119	101	151	150	106	108	108	90	90	127	93	77
Government	0	0	0	4	1	0	0	1	1	2	2	0
Accounts Closed												
Personal	12	59	14	14	10	29	733	687	521	487	467	429
Commercial	0	1	0	0	0	1	0	1	0	24	27	16
Government	0	0	0	0	0	0	0	0	0	0	0	0
Accounts Pending Closed												
Personal	37	39	58	48	40	2	33	30	35	28	27	27
Commercial	2	2	4	0	3	0	0	0	1	1	0	1
Government	0	0	0	0	0	0	0	0	0	0	0	0
Total Active Accounts												
Personal	131,739	131,304	140,679	145,644	151,683	155,454	158,309	162,302	166,369	170,536	174,002	176,755
Commercial	4,662	4,618	4,866	4,990	5,096	5,147	5,192	5,237	5,299	5,385	5,404	5,428
Government	90	89	89	93	91	91	91	90	91	92	90	90
CSC - Phones-Calls												
Average Talk Time	7:02	7:47	7:12	7:34	7:16	7:01	6:43	6:47	8:37	8:14	7:52	7:23
Calls Answered	32,242	32,491	37,089	34,693	37,094	38,320	35,893	37,547	29,933	39,552	35,375	31,588
Average Handle Time	8:06	7:51	8:28	9:58	10:12	9:42	9:34	9:53	11:31	10:14	9:43	9:17
WUCs - Payment Transactions												
Louisville	1,284	1,456	1,704	1,474	1,606	1,882	1,848	1,772	1,512	1,822	1,562	1,403
Jeffersonville	2,805	3,013	3,495	3,417	3,395	3,942	3,726	3,746	3,333	3,898	3,079	2,787
Total WUC Payment Transactions	4,089	4,469	5,199	4,891	5,001	5,824	5,574	5,518	4,845	5,720	4,641	4,190
DMV Lookup Request Sent												
IN	52,007	50,651	80,708	72,121	65,192	85,092	90,485	70,202	66,073	86,769	64,958	71,385

CSC 2018 Monthly Statistics												
	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018
KY	41,835	42,811	48,396	56,333	52,133	65,271	66,079	61,017	56,072	63,592	51,675	60,490
Other States (LES)	65,663	58,552	87,981	93,597	90,336	116,955	133,846	110,193	91,317	99,456	87,240	88,452
DMV Lookup Responses Received												
IN	48,720	46,896	76,168	68,370	61,163	79,949	85,702	65,493	61,886	81,541	58,812	66,959
KY	33,960	37,376	42,199	50,516	44,255	56,010	34,418	47,040	49,910	55,933	43,208	52,537
Other States (LES)	36,259	40,922	48,418	64,118	63,945	90,069	95,146	78,900	63,530	71,466	59,038	58,069
DMV Responses % (Requests Sent/Responses Received)												
IN	93.68%	92.59%	94.37%	94.80%	93.82%	93.96%	94.71%	93.29%	93.66%	93.97%	90.5%	93.80%
KY	81.18%	87.30%	87.20%	89.67%	84.89%	85.81%	52.09%	77.09%	89.01%	88%	83.6%	86.85%
Other States	55%	69.89%	55.03%	68.50%	70.79%	77.01%	71.09%	71.60%	69.57%	72%	67.67%	65.65%
# 1st Invoices Sent												
IN	25,879	19,280	33,518	73,669	62,693	81,318	74,004	86,111	61,132	62,248	83,160	53,693
KY	28,885	18,878	26,164	46,268	52,336	64,849	57,981	44,755	78,947	56,866	62,837	51,150
Other States	16,911	18,336	21,347	63,648	56,119	73,073	66,423	91,223	58,792	57,650	69,930	58,145
# 2nd Invoices Sent						219,240						
IN	5,143	8,208	6,503	19,959	26,557	32,125	25,717	32,102	31,982	23,154	32,950	29,049
KY	3,022	8,683	7,535	21,542	22,749	30,570	25,561	31,315	23,775	29,830	35,656	28,139
Other States	4,849	9,425	5,985	14,233	18,984	27,980	22,757	31,021	30,810	23,281	29,616	25,094
# Violations Sent												
IN	8,668	5,409	4,280	14,858	13,785	14,152	15,469	18,727	14,842	16,630	21,338	15,854
KY	9,227	5,796	3,064	18,474	15,803	15,919	15,217	19,281	16,385	17,535	19,258	20,481
Other States	6,838	2,524	2,478	16,866	12,268	10,381	11,663	16,559	13,560	16,688	21,396	17,431
# Collection Notices Sent												
IN	1,655	19,770	30,688	14,882	12,820	13,529	10,702	14,257	14,102	12,296	16,854	15,621
KY	2,213	20,080	32,920	11,143	13,896	16,771	12,568	14,758	14,667	14,041	18,309	15,358
Other States	10,747	38,140	18,017	11,413	16,258	11,896	8,463	11,193	12,445	11,572	16,766	15,585

CSC 2018 Monthly Statistics												
	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018
# Final Action Sent												
IN	13,861	20,530	1,945	2,519	7,012	13,819	11,377	10,902	8,247	8,414	12,033	11,046
KY	13,376	22,891	2,146	4,198	8,812	13,957	9,380	15,465	10,042	9,922	13,081	12,834
Other States	13,527	12,918	5,724	4,343	16,486	10,061	11,571	15,109	7,968	6,869	11,889	10,203

Walk Up Center (WUC) Monthly Totals.

WUC's - Payment Transactions (Payment Dashboard											
2019	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Louisville	1,531	1,362	1,581	1,613	1,869	1,734	1,991	1,442	1,759	1,752	1,340	1,410
Jeffersonville	2,976	2,762	3,240	3,231	3,334	3,136	3,289	3,128	3,066	2,795	2,330	2,297
Total WUC Payment Transactions	4,507	4,124	4,821	4,844	5,203	4,870	5,280	4,570	4,825	4,547	3,670	3,707

WUC's - Payment Transactions (Payment Dashboard)											
2018	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Louisville	1,284	1,456	1,704	1,474	1,606	1,882	1,848	1,772	1,512	1,822	1,562	1,403
Jeffersonville	2,805	3,013	3,495	3,417	3,395	3,942	3,726	3,746	3,333	3,898	3,079	2,787
Total WUC Payment Transactions	4,089	4,469	5,199	4,891	5,001	5,824	5,574	5,518	4,845	5,720	4,641	4,190

Received Correspondence		
Month-Year	**Paper Correspondence**	**Email Correspondence**
Jan-18	2,293	5,970
Feb-18	2,251	5,365
Mar-18	2,061	6,325
Apr-18	1,247	4,818
May-18	1,304	4,714
Jun-18	1,411	4,680
Jul-18	1,609	5,048
Aug-18	1,427	5,799
Sep-18	1,310	4,195
Oct-18	1,760	4,550
Nov-18	1,677	3,800
Dec-18	1,440	3,895
Jan-19	1,898	4,345
Feb-19	1,332	3,779
Mar-19	1,287	3,465
Apr-19	1,316	3,764
May-19	1,433	3,964
Jun-19	1,238	3,659
Jul-19	1,163	3,733
Aug-19	1,357	3,942
Sep-19	1,359	4,022
Oct-19	1,119	3,882
Nov-19	1,057	3,370
Dec-19	1,330	3,429
2018 Average	**1,649**	**4,930**
2019 Average	**1,324**	**3,780**

Monthly Average Customer Disputes and Administrative Hearing Requests		
	2018	**2019**
Customer Disputes	2,612	2,315
Administrative Hearing Requests	1	3

Section 11: Example Reports

Date	Hour	DTN Lincoln Bridge NB Class 0	DTN Lincoln Bridge NB Class 1	DTN Lincoln Bridge NB Class 2	DTN Lincoln Bridge NB Class 3	DTN Lincoln Bridge NB Total	DTO Lincoln Bridge NB EO Class 0	DTO Lincoln Bridge NB EO Class 1	DTO Lincoln Bridge NB EO Class 2	DTO Lincoln Bridge NB EO Class 3	DTO Lincoln Bridge NB EO Total	DTS Kennedy Bridge SB Class 0	DTS Kennedy Bridge SB Class 1	DTS Kennedy Bridge SB Class 2	DTS Kennedy Bridge SB Class 3	DTS Kennedy Bridge SB Total	ECN East End Crossing NB Class 0	ECN East End Crossing NB Class 1	ECN East End Crossing NB Class 2	ECN East End Crossing NB Class 3	ECN East End Crossing NB Total	ECS East End Crossing SB Class 0	ECS East End Crossing SB Class 1	ECS East End Crossing SB Class 2	ECS East End Crossing SB Class 3	ECS East End Crossing SB Total
1/1/2018	Total		16,566	521	1,154	18,241		1,557	23	6	1,586	2	16,073	608	1,166	17,849		4,813	85	232	5,130		4,011	54	218	4,283
1/1/2018	0		348	16	21	385		68	1		69		280	9	16	305		108	2	6	116		74	1	3	78
1/1/2018	1		335	7	19	361		81		1	82		290	9	16	315		121	1	6	128		90	1	2	93
1/1/2018	2		212	13	11	236		53			53		166	8	14	188		56		4	60		32		3	35
1/1/2018	3		175	11	8	194		31		1	32		138	7	18	163		45	1	3	49		23	2	3	28
1/1/2018	4		140	10	19	169		29			29		133	6	13	152		31		2	33		26	1	5	32
1/1/2018	5		130	9	15	154		19			19		163	9	15	187		27	2	1	30		47	1	4	52
1/1/2018	6		156	17	21	194		21	1	1	23		280	9	22	311		37	5	4	46		56	1	3	60
1/1/2018	7		240	17	20	277		20	2		22	1	269	20	33	323		66	2	6	74		57	3	7	67
1/1/2018	8		305	17	27	349		23			23		383	14	48	445		116	5	6	127		96	1	11	108
1/1/2018	9		447	23	46	516		26	1		27		668	30	61	759		139	6	7	152		159	1	14	174
1/1/2018	10		732	22	56	810		65	1		66		758	38	66	862		201	1	13	215		211	4	9	224
1/1/2018	11		1,006	22	55	1,083		81	2	1	84		1,074	37	84	1,195		282	4	17	303		283	4	12	299
1/1/2018	12		1,305	36	59	1,400		90	3		93		1,257	42	82	1,381		365	5	19	389		341	8	14	363
1/1/2018	13		1,410	40	80	1,530		106			106		1,172	29	58	1,259		424	6	19	449		341	4	15	360
1/1/2018	14		1,510	41	71	1,622		112	3		115	1	1,452	63	81	1,597		448	8	15	471		358	4	14	376
1/1/2018	15		1,558	34	76	1,668		124	1		125		1,346	38	62	1,446		452	8	18	478		303	3	17	323
1/1/2018	16		1,369	35	89	1,493		126	1		127		1,328	40	72	1,440		416	5	13	434		343	2	12	357
1/1/2018	17		1,282	26	83	1,391		124	1		125		1,193	35	91	1,319		413	8	22	443		315	3	10	328
1/1/2018	18		1,033	30	75	1,138		107	2	1	110		1,108	34	76	1,218		332	4	12	348		282	4	11	297
1/1/2018	19		828	32	84	944		78	2		80		830	32	55	917		279	3	10	292		199	2	7	208
1/1/2018	20		716	12	52	780		67	2		69		650	43	52	745		180	3	4	187		141	2	15	158
1/1/2018	21		537	15	70	622		42			42		493	18	45	556		138	2	5	145		105	1	11	117
1/1/2018	22		461	18	49	528		39		1	40		380	20	47	447		92	2	9	103		81	1	5	87
1/1/2018	23		331	18	48	397		25			25		262	18	39	319		45	2	11	58		48		11	59
1/2/2018	Total		22,240	1,794	3,045	27,079		3,015	127	25	3,167	3	23,660	1,960	3,074	28,697		7,603	353	852	8,808		7,434	336	796	8,566

Hourly Traffic by Class and Location

Date	Hour	DTN Lincoln Bridge NB					DTO Lincoln Bridge NB EO					DTS Kennedy Bridge SB					ECN East End Crossing NB					ECS East End Crossing SB				
		Class 0	Class 1	Class 2	Class 3	Total	Class 0	Class 1	Class 2	Class 3	Total	Class 0	Class 1	Class 2	Class 3	Total	Class 0	Class 1	Class 2	Class 3	Total	Class 0	Class 1	Class 2	Class 3	Total
1/2/2018	0		260	22	34	316		18		1	19		187	21	48	256		41	3	16	60		31		5	36
1/2/2018	1		185	14	37	236		6	2		8		112	14	30	156		19		7	26		14	4	9	27
1/2/2018	2		209	16	36	261		16			16		96	13	24	133		19	2	2	23		22	1	7	30
1/2/2018	3		180	18	63	261		14	2		16		140	12	42	194		22	4	11	37		22	2	8	32
1/2/2018	4		240	31	52	323		25	2		27		267	18	45	330		48	2	12	62		99	2	15	116
1/2/2018	5		345	54	81	480		27	2	1	30		680	36	48	764		116	5	14	135		404	5	21	430
1/2/2018	6		671	70	72	813		99	10		109		1,418	65	89	1,572		349	11	22	382		433	20	34	487
1/2/2018	7		946	67	93	1,106		196	8	1	205		2,216	110	112	2,438		577	20	22	619		855	17	30	902
1/2/2018	8		920	99	109	1,128		184	14	1	199		1,773	118	122	2,013		422	27	38	487		649	25	41	715
1/2/2018	9		914	122	140	1,176		133	15	2	150		1,199	133	144	1,476		335	15	45	395		408	14	43	465
1/2/2018	10		1,030	137	165	1,332		110	12	3	125		1,175	129	148	1,452		314	30	57	401		304	31	51	386
1/2/2018	11		1,148	130	152	1,430		143	7	1	151		1,389	130	166	1,685		300	18	42	360		344	24	48	416
1/2/2018	12		1,317	136	168	1,621		167	9		176	1	1,438	136	184	1,759		349	23	54	426		301	25	42	368
1/2/2018	13		1,369	114	188	1,671		159	9	1	169		1,485	156	186	1,827		381	27	61	469		291	23	54	368
1/2/2018	14		1,620	120	201	1,941		193	9	5	207		1,418	152	184	1,754		463	23	49	535		348	25	53	426
1/2/2018	15		1,858	121	179	2,158		252	7	1	260		1,409	148	171	1,728		579	32	69	680		408	21	43	472
1/2/2018	16		2,576	127	193	2,896		351	4	2	357		1,725	136	193	2,054		956	24	56	1,036		646	25	45	716
1/2/2018	17		2,358	114	183	2,655		339	3	1	343		1,538	83	164	1,785		887	30	46	963		859	27	38	924
1/2/2018	18		1,364	70	172	1,606		183	2	3	188		1,215	88	187	1,490		532	15	46	593		449	18	48	515
1/2/2018	19		822	60	164	1,046		140	2		142		945	82	193	1,220		297	9	46	352		201	8	33	242
1/2/2018	20		643	37	151	831		86			86		677	56	196	929		225	15	32	272		125	4	36	165
1/2/2018	21		485	50	141	676		61	1	1	63	1	534	46	138	719		188	9	37	234		102	5	25	132
1/2/2018	22		445	36	138	619		51	2	1	54		368	47	136	551		92	5	37	134		69	6	37	112
1/2/2018	23		335	29	133	497		62	5		67	1	256	31	124	412		92	4	31	127		50	4	30	84

Tag Sale Overview

Payment Overview December 2019

DMV/OOS Look ups

Lookup Request Dashboard

Lookup Request Status Summary

	DMV	LES
Lookup Requests Pending	0	0
Requests Sent	123,112	99,914
Responses Received	98,423	62,374
Lookup Complete - Account Created	96,574	62,293

Date Filter Mode
Custom Dates

Custom Date Filters Activated

Custom Date Filter Start *
December 01, 2019

Custom Date Filter End *
December 31, 2019

Lookup Type
All

Current Status
All

Plate State
All

Lookup Request Status
All

Lookup Request ID
All

Plate Number
All

Vehicle Class
All

Average Lookup Run Time *(in Days)*

Average Request Run-Time: 20.7 days

Day of Lookup Process Started Timestamp [December 2019]

Lookup Request Details

Lookup Request ID	Lookup Type	Lookup Process Started Timestamp	Plate State	Plate Number	Vehicle Class	Requests Sent	Last Request Sent Timestamp	Responses Received	Last Response Received Timestamp	Titanium Account Created Timestamp	Lookup Run-Time (days)
3568383	LES	12/1/2019 12:02:36 AM	MO		Class 1	1	12/1/2019 6:27:19 AM	1	12/9/2019 12:12:07 AM	12/9/2019 12:30:35 AM	8.0
3568384	LES	12/1/2019 12:02:36 AM	OK		Class 3	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:37:27 AM	3.0
3568385	LES	12/1/2019 12:02:36 AM	AL		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:38:50 AM	3.0
3568386	LES	12/1/2019 12:02:36 AM	TN		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:39:40 AM	3.0
3568387	LES	12/1/2019 12:02:36 AM	AL		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:40:59 AM	3.0
3568388	LES	12/1/2019 12:02:36 AM	TN		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:42:12 AM	3.0
3568389	LES	12/1/2019 12:02:36 AM	AL		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 1:30:53 AM	3.0
3568390	LES	12/1/2019 12:02:36 AM	NC		Class 1	1	12/1/2019 6:27:19 AM	1	12/12/2019 12:13:29 A...	12/12/2019 1:00:44 AM	11.0
3568391	LES	12/1/2019 12:02:36 AM	IL		Class 1	3	1/30/2020 6:27:12 AM	0	Null	Null	194.0
3568392	LES	12/1/2019 12:02:36 AM	IL		Class 1	3	1/30/2020 6:27:12 AM	0	Null	Null	194.0
3568393	LES	12/1/2019 12:02:36 AM	CO		Class 1	1	12/1/2019 6:27:19 AM	1	12/7/2019 12:13:20 AM	12/7/2019 12:31:00 AM	6.0
3568394	LES	12/1/2019 12:02:36 AM	GA		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:53:58 AM	3.0
3568395	LES	12/1/2019 12:02:36 AM	MS		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:54:03 AM	3.0
3568396	LES	12/1/2019 12:02:36 AM	OH		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 1:31:32 AM	3.0
3568397	LES	12/1/2019 12:02:36 AM	MI		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:57:53 AM	3.0
3568398	LES	12/1/2019 12:02:36 AM	MI		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:58:38 AM	3.0
3568399	LES	12/1/2019 12:02:36 AM	TN		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:58:52 AM	3.0
3568400	LES	12/1/2019 12:02:36 AM	MI		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:58:54 AM	3.0
3568401	LES	12/1/2019 12:02:36 AM	MI		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:58:54 AM	3.0
3568402	LES	12/1/2019 12:02:36 AM	MI		Class 3	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:59:40 AM	3.0
3568403	LES	12/1/2019 12:02:36 AM	MI		Class 2	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 12:59:41 AM	3.0
3568404	LES	12/1/2019 12:02:36 AM	MI		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 1:02:53 AM	3.0
3568405	LES	12/1/2019 12:02:36 AM	OH		Class 1	1	12/1/2019 6:27:19 AM	1	12/4/2019 12:13:23 AM	12/4/2019 1:03:49 AM	3.0

Report: **Lookup Request Dashboard**
Displaying: Dashboard shows DMV and LES Lookup Requests Lookup Type, Lookup Process Started Timestamp, Plate State, Plate Number, Last Request Sent Timestamp, Last Response Received Timestamp and Titanium Account Created Timestamp.
Date Range: **Custom Dates - 12/1/2019 12:02:36 AM through 12/31/2019 11:48:44 PM**

Filters:
Lookup Type: **All**
Current Status: **All**
Plate State: **All**
Lookup Request Status: **All**
Lookup Request ID: **All**
Plate Number: **All**
Vehicle Class: **All**

Details:
User Name: **Haugen, Lynnaia**
Data Refreshed: **8/11/2020 10:18:59 AM**
Report Owner: **Richard Franklin**
Report Modified: **09/13/2017 12:00 AM**

Image Processing Workflow

Image Processing Workflow Dashboard

All measures are based on **Image** counts.
A **Duplicate Image** is an image that has previously been sent from the Host to the BOS.

Summary

Month of Transaction Date	Sent To BOS	Received By BOS	Duplicate Images	Sent To Image Review	Image Review Complete
May 2020	7,222,894	7,218,942	446	2,423,818	1,553,187
June 2020	9,322,862	9,310,895	373	3,195,504	2,158,108
July 2020	9,958,471	9,951,767	1,278	3,497,105	2,417,672
August 2020	3,061,619	3,061,421	198	1,072,265	566,184

Details For All

Select Transaction Dates in the Summary to filter details.

Review Code Reason	Images
Posted without Image Review	18,190,040
Image Not Reviewed	4,657,919
Readable Plate	3,332,849
Unreadable Plate	2,187,465
No Plate	1,005,734
Plate Obscured	63,850
Unclear/Ambiguous Characters	46,401
Temporary Plate	34,400
Image Not Downloaded	18,484
Camera Alignment Issue	14,490
Unidentifiable Jurisdiction	4,282
Duplicate Image	2,232
Image Not In BOS	2,020
Damaged Plate	1,363
Non-US Plate	1,031
Multiple Vehicles in Image	1,028
Image Too Dark	946
Camera Issue	486
Image Not Clear	301
Plate Glare	269
Unreadable Image	211
Hatched/Distorted Image	34
Image Too Light	11
Grand Total	**29,565,846**

Report: **Image Processing Workflow Dashboard**
Displaying: **The number of Images sent to Back Office System from AEHost and image counts for each stage of image processing.**
Date Range: **All Available Dates - 5/1/2020 through 8/11/2020**

Details:
User Name: **Haugen, Lynnaia**
Data Refreshed: **8/11/2020 6:21:47 AM**
Report Owner: **Richard Franklin**
Report Modified: **8/4/2017 8:41:53 AM**

DMV Holds

DMV Hold Request Dashboard

DMV Hold Summary

Month of EventDate	EventType		
Jan 01, 2019	Eligible For DMV Hold		30,073
	DMV Hold Request Sent		16,882
	DMV Hold Release Request Sent		8,408
Feb 01, 2019	Eligible For DMV Hold		27,127
	DMV Hold Request Sent		14,948
	DMV Hold Release Request Sent		8,792
Mar 01, 2019	Eligible For DMV Hold		28,889
	DMV Hold Request Sent		11,137
	DMV Hold Release Request Sent		9,539

DMV Hold Details

Account ID	Aging Cycle ID	DMV Hold Eligible Date	Hold Request ID	Plate State	Plate Number	Request Status Description	Status Begin Timestamp	Current Status
10100642	54931175	Mar 11, 2019	205814	KY		Received Hold Response as Failure	3/13/2019 7:30:50 PM	Yes
10102207	54607370	Mar 31, 2019	212070	KY		Received Release Response as Success	6/6/2019 6:55:28 PM	Yes
10103240	51969974	Feb 15, 2019	193445	KY		Received Hold Response as Success	2/18/2019 7:30:50 PM	Yes
10103400	54467175	Jan 17, 2019	79139	KY		Received Hold Response as Success	6/1/2018 7:30:52 PM	Yes
10103439	54484610	Jan 24, 2019	184087	KY		DMV Hold Request Sent	1/28/2019 7:26:31 PM	Yes
10103604	54373023	Jan 06, 2019	84952	KY		Received Release Response as Success	8/30/2019 2:10:28 PM	Yes
10103744	54383084	Jan 07, 2019	176080	KY		Received Hold Response as Failure	1/9/2019 7:30:49 PM	Yes
10103948	54634742	Feb 01, 2019	64782	IN		Received Release Response as Success	5/21/2019 2:18:04 PM	Yes
10104371	54554894	Jan 27, 2019	184684	IN		Received Hold Response as Success	1/28/2019 7:21:54 PM	Yes
10104630	54630297	Jan 31, 2019	53442	IN		Received Hold Response as Success	5/22/2018 6:22:35 PM	Yes
	54869790	Mar 05, 2019	53442	IN		Received Hold Response as Success	5/22/2018 6:22:35 PM	Yes
10105429	53212712	Jan 10, 2019	178330	KY		Received Hold Response as Failure	1/11/2019 7:30:48 PM	Yes
10106610	54363637	Jan 05, 2019	242257	KY		Received Release Response as Success	7/10/2019 10:15:28 AM	Yes
	54660418	Feb 05, 2019	242257	KY		Received Release Response as Success	7/10/2019 10:15:28 AM	Yes
	54966618	Mar 20, 2019	242257	KY		Received Release Response as Success	7/10/2019 10:15:28 AM	Yes
10106900	54748893	Feb 18, 2019	194300	KY		Received Hold Response as Failure	2/19/2019 7:30:49 PM	Yes
10106994	54441660	Jan 16, 2019	181206	KY		Received Hold Response as Failure	1/17/2019 7:30:49 PM	Yes
10107134	53077294	Mar 24, 2019	30275	KY		Received Release Response as Success	9/5/2019 12:40:28 PM	Yes
10108036	54239073	Feb 09, 2019	189188	KY		Received Release Response as Success	7/3/2019 3:20:28 PM	Yes
10108383	54274343	Jan 22, 2019	51810	KY		Received Release Response as Success	3/26/2020 2:45:29 PM	Yes
	54859863	Mar 04, 2019	51810	KY		Received Release Response as Success	3/26/2020 2:45:29 PM	Yes
10108470	54748896	Feb 18, 2019	194026	KY		Received Hold Response as Failure	2/19/2019 7:30:49 PM	Yes
10109564	54495620	Jan 20, 2019	243907	IN		Received Hold Response as Failure	6/27/2019 4:56:22 PM	Yes

Report: **DMV Hold and Release Dashboard**
Displaying: **DMV Reqests by Account ID, Eligible Date, Plate State and Number, Request Status Description, and Status Timestamp**
Date Range: **Custom Dates - Jan 01, 2019 through Mar 31, 2019**

Filters:
Request Status Description: **All**
Current Status: **Yes**
Plate State: **IN & KY**
Plate Number: **All**

Details:
User Name: **Haugen, Lynnaia**
Data Refreshed: **8/10/2020 10:06:56 AM**
Report Owner: **Richard Franklin**
Report Modified: **3/6/2017 2:06:13 PM**

CAFR

1. Toll Revenue and Revenue Transactions by Bridge and Class (FY 2019)			
Location	**Class**	**Count**	**Revenue**
Downtown	1	19,337,169	$ 49,703,897.41
Downtown	2	1,412,221	$ 7,486,011.71
Downtown	3	2,664,331	$ 27,912,859.94
East End	1	6,394,298	$ 14,658,750.41
East End	2	339,490	$ 1,840,397.69
East End	3	883,474	$ 9,203,209.93
		$ 31,030,983.00	**$ 110,805,127.09**

2. Toll Revenue and Revenue Counts by Account Type (FY 2019)		
Account Type	**Count**	**Revenue**
ETC	22,177,336	$ 70,732,626.64
Unregistered Video Account	8,839,034	$ 40,023,047.81
Registered Video Account	14,613	$ 49,452.64
		$ 110,805,127.09

3. Breakdown of Tolls, Fees, Tag Sales (FY 2019)	
Transaction Type	**Revenue**
Fee	$ 32,423,059.84
Tag Sale	$ 277,350.87
Toll	$ 110,805,127.09
	$ 143,505,537.80

4. IAG Agency Count, Revenue and Percentages (FY 2019)					
Agency_Name	Acct_Agency_Abbrev	Txn_Cnt	Revenue	% Toll	% Revenue
E-ZPass New York	NYSTA, PANYNJ, MTAB&T, PBA	2,569,944	$ 18,686,971.40	47.35%	55.01%
IPASS Illinois State Toll Highway Authority	ILTOLL	1,943,144	$ 9,730,957.62	35.80%	28.64%
E-ZPass Maryland	MdTA	197,445	$ 1,854,034.48	3.64%	5.46%
E-ZPass Pennsylvania Turnpike	PTC	122,515	$ 753,232.46	2.26%	2.22%
E-ZPass New Jersey	GSP, NJTP, ACE, DRPA	96,441	$ 664,888.53	1.78%	1.96%
E-ZPass ITRCC	ITRCC	169,295	$ 565,776.57	3.12%	1.67%
E-ZPass Ohio Turnpike	OTIC	88,761	$ 516,549.64	1.64%	1.52%
E-ZPass West Virginia	WVPEDTA	58,809	$ 484,866.66	1.08%	1.43%
E-ZPass MassDOT	MassDOT	90,967	$ 279,715.59	1.68%	0.82%
E-ZPass Virginia	VDOT	54,872	$ 252,160.29	1.01%	0.74%
E-ZPass DelDOT	DelDOT	11,250	$ 73,538.24	0.21%	0.22%
NC Quick Pass	NCTA	9,092	$ 47,950.31	0.17%	0.14%
E-ZPass New Hampshire DOT	NHDOT	5,686	$ 21,594.22	0.10%	0.06%
E-ZPass Maine Turnpike Authority	MeTA	3,541	$ 16,689.20	0.07%	0.05%
E-ZPass Central Florida Expressway Authority	CFX	4,649	$ 16,028.81	0.09%	0.05%
E-ZPass RITBA	RITBA	1,570	$ 5,938.05	0.03%	0.02%
		5,427,981	**$ 33,970,892.07**	**100%**	**100%**

5. Payments by Location Type (FY 2019)	
Payment Method	Payments
Agency	$ 29,968,814.60
Auto Replenishment	$ 25,722,514.65
Web Payments	$ 21,977,829.00
Call Center Mail	$ 8,805,848.32
Phone (call center)	$ 5,851,450.07
Walk Up Center	$ 2,692,669.59
Phone (customer)	$ 2,657,203.32
Prepaid Gift Cards	$ 113,965.45
Mobile Van	$ 58,192.50
	$ 97,848,487.50

6. Top 25 Debtors (FY 2019)					
Acct_ID	Acct_Name	Acct_State	Postal_Code		Tot_Amt_Due
10649096		IN	47172	$	17,012
11282877		IN	47172	$	14,238
10126809		KY	40214	$	12,108
10201637		IN	47130	$	11,553
10709072		KY	40330	$	11,364
10103195		KY	40504	$	11,146
12670670		KY	40229	$	10,343
12174781		IN	47130	$	9,129
10155698		KY	40068	$	9,085
13533999		IN	47130	$	9,051
11919695		KY	40216	$	8,788
10325170		OH	45801	$	8,768
10122589		IN	47106	$	8,654
10221346		KY	40242	$	8,629
10211359		IN	47130	$	8,276
10160523		IN	47129	$	8,176
11318944		KY	42748	$	8,087
14206540		KY	40214	$	8,067
10840978		IN	47130	$	7,801
10620295		IN	47129	$	7,637
10322533		IN	47130	$	7,491
11912180		IN	47130	$	7,473
11400574		IN	47172	$	7,400
10147602		KY	40109	$	7,364
10299858		IN	47130	$	7,292

Section 12: Retention Policies

The longer retention policy will be adhered to.

Indiana

https://www.in.gov/iara/3266.htm

Kentucky

https://kdla.ky.gov/records/recretentionschedules/Pages/default.aspx