White Paper

Tolling and Customer Service Workgroup

A Roadmap for Engagement with Third-party Account Issuers

Abstract

Engaging third-party providers for toll charging and customer service can be challenging as Operators consider the impact to their brand, back office implications, and customer service handling. This white paper explores when to engage, why to engage, and suggestions for how to engage third-party providers, with a focus on considerations for Legal, Technical, and Customer Service requirements.

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Glossary of Terms

Where possible, terms and definitions follow the same definitions in Toll Miner.

Toll Operator	An entity that manages the functions of a tolled facility, parking lot, etc.
Third-Party Provider	A provider of technology and/or services outside of the Toll Operator or governing agency. May also be referred to as the Provider.
User	The User of the toll system. Also, the User of the third-party or Toll Operator's payment and account management solution. Also referred to as the consumer or customer.
Commercial Fleet	A fleet of vehicles managed by a third-party, typically involves a rental car fleet or commercial trucks
Consumer Fleet	A fleet of consumer, privately owned, not commercial vehicles managed by a third-party
Interface Control Document (ICD)	The document that describes the interface(s) to a system. The systems in this instance, include the Back Office System, and the third-party system. The ICD describes the technical means required for connecting the two systems.
Back Office	Database system that enables registration and maintenance of customer accounts; facilitates funds transfer between participating Authorities. See also Customer Service Center (CSC).
Customer Service Center	A facility used to service customers.

Engaging Third-party Providers for Tolling and Customer Service

The International Bridge, Tunnel & Turnpike Association (IBTTA) is the worldwide association for the owners and Operators of toll facilities and the businesses that serve them. Founded in 1932, IBTTA has members in 26 countries on six continents. Through advocacy, thought leadership and education, members are implementing state-of-the-art, innovative user-based transportation financing solutions to address the critical infrastructure challenges of the 21st Century.

To that end, the Emerging Technologies Committee - Tolling and Customer Service Workgroup, has developed this White Paper to provide a roadmap for engaging third-party providers that offer solutions for account issuance, management, payments, and customer service.

Introduction

Tolling has been an important transportation solution to building and maintaining infrastructure in the United States since the late 1700s when the Philadelphia and Lancaster Turnpike was established in Pennsylvania. Since then, Toll Operators have very successfully created systems and methods for toll collection, the distribution of transponders, and customer service center operations. Additionally, they have invested heavily in branding, building relationships and goodwill within the communities they serve, as well as with customers, and other stakeholders.

Tolling continues to be one of the most valuable options for creating and maintaining much needed roads and infrastructure. Once in operation, the revenue generated by tolled facilities goes toward maintaining the roads and repaying the bonds used to finance roadways. However, excess revenue can also be leveraged by Operators to fund other transportation corridors, alternative modes of transportation, and other valuable projects such as shared-use paths for the surrounding community.

As such, one of the most critical aspects of toll facility operation is undoubtedly the actual collection of toll revenue. Generally, the focus of Toll Operators is:

- Increasing collection rates of the toll from all types of customers

- Limiting collection risk from violators or post pay users

- Continuing to be seen as a positive solution in the press, to users, constituents, and stakeholders

Moreover, Toll Operators are continuously looking for innovative approaches and technologies, to accomplish all of the above, in a cost efficient and seamless manner for users. Toll Operators seek to minimize the cost of collections, improve operations, and to increase throughput and safety. So, why would a Toll Operator consider using a third-party to issue accounts and manage customer relations for those accounts?

Over the last decade or so, third-party account issuance has been reserved for commercial fleet accounts and temporary or rental vehicles. For Toll Operators, this particular group of Users was costly, and challenging to capture and manage. Commercial, trucking, and rental car fleet account management companies became a desirable option. As tolled facilities and consumer technologies have evolved, the opportunity to leverage third-party providers, who provide consumer solutions, has become a valuable option to capture revenue and decrease operational costs.

Goals and Intent of the White Paper

The goals of the white paper are focused on the following:

Goal 1. Evaluation Evaluate current third-party arrangements, evolving technologies and changing customer needs. Provide considerations and suggestions for why a Toll Operator would engage a third-party provider

Goal 2. Legal To provide guidance on engaging a third-party from a legal standpoint. Considerations include required legal language for User agreements between the third-party provider and the User. Additional considerations provided for the legal /contractual relationship between the third-party and the Toll Operator.

Goal 3. Technical Evaluate the technical requirements for connecting a third-party solution to an Operator's system including the evaluation of real-time versus batch interfaces, processing order, and other technical considerations.

Goal 4. Customer Service To explore customer service requirements between the Toll Operator and the third-party, in partnership. Customer service requirements outline the support tools needed for Users to pay for the road and manage their account, including inquiring about transactions or discrepancies.

The outlined goals are designed to provide the Toll Operator with assurances, that:

- The Toll Operator's goals and interests are being facilitated and protected

- Users are treated fair and equitably, in partnership with the Toll Operator and the third-party

The paper also provides considerations for Toll Operators to support third-parties and work cooperatively together, rather than independently. This includes giving third-parties access to, or making available, the information they require to adequately service and support the User.

In order to achieve these goals, the paper is broken down into the following sections:

- Considerations for When/Why to Engage a Third-Party

- Legal Requirements and Considerations

- Technical Considerations

- Customer Service Considerations

At the conclusion of the paper, recommendations for next steps are provided to further explore how the industry could continue to engage and leverage third-party providers and solutions.

In order to demonstrate why a Toll Operator might want to connect to a third-party provider, it is important to understand the history and evolution of third-parties and their role in the toll industry, both past and present. The following sections describe the historical and existing third-party relationships and how the relationships and technologies have evolved.

The History and Evolution of Commercial Fleets

Commercial Fleet Providers have long been a part of tolling. They were initially established to address specific challenges in the industry, namely rental cars and commercial trucks. Within the last few years however, the opportunity to service these groups of users has become easier to address and manage through advancements in technology, mobile phone innovations and the resulting changes in consumer behavior. In addition, the industry has seen commercial fleets evolve into consumer facing fleets. Many traditional commercial providers are beginning to incorporate a consumer facing component, leveraging their existing fleet connections.

Existing commercial fleet agreements are typically not appropriate for consumer facing fleet providers. Existing agreements do not incorporate the legal, customer service, and operational requirements and assurances needed to service consumers, and protect the Toll Operator.

The Evolution of Providers

In addition to the evolution occurring inside our industry, there are other factors that will most certainly affect the tolling landscape as it relates to service providers, Operators, and most importantly, consumers. [1],[2]Auto OEMs and manufacturers are making vehicles "smarter" and are looking for ways to monetize User data, offer additional in-vehicle services and features, and potentially collect tolls. [3]Ride-share app providers such as Uber and Lyft, are looking for ways to participate in tolling and congestion pricing, even going so far as to commission their own studies. Companies like Car to Go, Turo, Mobiliti, and other short-term lease and rental companies are changing the way consumers use and pay for transportation. These transportation providers are challenged in the existing toll environment to enable Users to pay for their tolls rather than the owner of the vehicle or fleet. These are just a few examples of new players that could be, and are currently, entering the market.

With established, robust, back office systems, and the enormous growth in electronic and mobile payments, there are many opportunities to partner to keep ahead of the quickly changing landscape.

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[1]https://www.mckinsey.com/~/media/McKinsey/Industries/Automotive%20and%20Assembly/Our%20Insights/Monetizing%20car%20data/Monetizing-car-data.ashx
[2] https://tridenstechnology.com/the-connected-car-race-speeds-on/
[3] https://mynorthwest.com/1453581/uber-congestion-tolling-push-seattle/?

Why Third-Party Providers?

Today, there are a number of reasons why third-party providers are becoming more prevalent. Toll Operators have well established systems and solutions for collecting, processing, and posting tolls, as well as issuing accounts, distributing transponders, and providing support to Users. However, there are many cases where a third-party can more readily support an agency that is going through an operational or programmatic change, for the benefit of the Toll Operator and its Users, alike.

There are benefits and challenges to engaging a third-party. Most benefits are based on specific events or changes to a toll agency's course of business and operations, as well as evolutions in technology and customer behaviors. Benefits are also based on groups of Users that are more challenging to capture or support. As the Cost of processing and collecting on certain transactions increases, there is becoming more opportunity for specialized Third-Parties to take over management (and in some cases risk) of those transactions, saving the Toll Operator time and money.

There are also challenges to engaging third-parties. Usually these challenges include messaging and customer confusion, as well as potential changes to an existing back office system.

Below are high level bullets related to benefits and challenges of engaging a third-party.

Benefits of using a Third-Party Partner

- Processing costs of Electronic Toll Collection or All-Electronic Toll (AET) transactions

- Offload Commercial Fleet Management

- Managing Infrequent Users, Cash-based, Underserved Users

- Lowering overall Operational costs

- Ability to utilize/implement new technology faster

Challenges

- Customer confusion around the third-party and the Toll Operator.

- Public Relations issues stemming from third-party issues or bad press.

- Technical challenges integrating or connecting a third-party solution to the back office system.

- The ability for a Toll Operator to make changes to their operations or back office systems. This can include technical and/or contractual challenges.

Throughout the paper are questions, answers, detailed information and use cases, to help evaluate the need, desire, and considerations for engaging a third-party provider.

Questions and Considerations for Engaging a Third-Party Provider

Q. Who is the User that a third-party is able to reach that is potentially challenging for the Operator?

A.1. *Example: Cash-based or underserved/un-banked User.*

Cash-based and under-served Users are typically Users that fall outside the traditional back office offerings for account establishment and management. Without an established payment method that can be auto-replenished, cash-based and underserved Users do not fit within this account model. Additionally, Users who lease a vehicle for a short timeframe. These examples include companies like Tura, Mobilti, and Silvercar.

A.2. *Example: Pay-by-Mail, post-pay applications, violations, or other type of post pay methods that involve collections.*

Perhaps the Toll Operator has a solution in place to handle these types of users however, it is a costly or in-efficient solution. While post pay programs service a particular group of Users, the burden of print and mail and collections are costly not only for the Operator but for the User. While these methods can provide a means for payment, they often charge those that are most challenged to pay, a premium for using the road. This is inefficient for all involved.

A.3. *Examples: Transient and infrequent Users. A visiting User that does not live in the area. A User that travels the road less than 4 times a year, or perhaps, 1 time per month, and, does not wish to maintain a tag account.*

Going All-Electronic can pose challenges for capturing the in-frequent or transient User. It is not easy, and in some cases not feasible for a transient User to establish a traditional account. For the infrequent User, they oftentimes do not see the value in establishing a traditional toll account when they use the road so infrequently, despite electronic discounts.

Q. In addition to establishing the account, why should I allow a third-party to handle customer service related to this account when I have a fully staffed, well established customer service and operations center? What is different about the User that requires a different approach to customer service?

A.1. *Example: Cash-based and underserved users often require more frequent communication than a monthly statement. They also require immediate access to their balance as well as the ability to fund the account and have those funds available, immediately.*

Third-party accounts are typically different from the traditional offering and as such, require different methods for managing the account.   Often, the third-party issuer can provide

account management tools, different types of communication mediums, and incentives to the User to keep their account current or manage their account in a way that fits their needs.

Technologies Facilitating Third-Party Involvement

Below are descriptions of technologies that are facilitating third-party involvement.

Mobile Phones & Smart Phones

[4]The use of cell phones, smart phones, and app-based services has become an integral part of consumers' everyday life. Cell phone usage has reached across all demographics, socio-economic backgrounds, and age. As such, mobile phones create an ideal opportunity to reach untagged Users.

Electronic and Open Road Tolling

All-Electronic Tolling continues to expand across the country. Toll Operators are looking for ways to safely, efficiently, and cost effectively move vehicles. Cash-based and underserved users require solutions to continue to participate in using toll roads when cash is removed from the road. Additionally, ride share Users, short-term lease vehicles, and consumer to consumer rental applications have emerged which presents the complication of the registered vehicle owner being charged for tolls that the User of the vehicle or service should be responsible for.

Cars Are Getting Smarter
Auto OEMs & Manufacturers, Autonomous and Connected Vehicles

Tolling has become of great interest to auto manufacturers. The development of in-vehicle applications and other types of features related to safety, information/entertainment, and payments is extending into the vehicle's infotainment system. Previously known as the vehicle's navigation system, these in-vehicle infotainment systems have evolved into devices that offer, not only directions and maps, but connect to phones for calls, handsfree text messaging, food apps, gas rewards, and more. Auto manufacturers are now looking to provide tolling as part of this suite of applications.

Autonomous and connected vehicles pose new and interesting challenges as well. The User may not necessarily be the Owner of the vehicle, and in-vehicle technologies and external infrastructure required to facilitate these types of vehicles will likely play a huge role in how Users are charged.

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[4] https://www.salesforce.com/blog/2018/02/consumer-smartphone-use.html

Existing Commercial Fleet Agreements

Pros

Existing/legacy commercial fleet accounts provide an opportunity for third-parties to handle a historically, very challenging group of Users as ETC and AET emerged, in a cost effective, streamlined manner.

Cons

As technology has evolved, there are multiple ways to manage these Users and multiple types of third-party solutions that can be implemented to provide Users a choice for how they would like to pay for their tolls. [5]Additionally, without the opportunity for competition, existing commercial fleet management companies are free to charge Users whatever they deem appropriate which, in some cases, can be many times higher than the toll charge.

Existing Legal and Contractual Arrangements

Existing legal and contractual arrangements are likely not sufficient to support the existing evolution of technology, and additional solution providers that have entered the market. In most cases existing contractual arrangements likely do not address the broad market that has emerged including:– Toll Operators and third-parties should work together to leverage the increase in mobile phone ownership, Electronic Toll and All-Electronic system conversions, and changing vehicle ownership. Engaging third-party providers will likely require adjustments to existing agreements and/or the development of new ones. Additionally, Toll Operators should begin to explore procurement processes that will facilitate the engagement of new technologies and the evolving User ownership and usage.

Dispute Handling

Most legacy legal and contractual arrangements for fleet providers do not address dispute handling as it occurs from User to third-party to Toll Operator. Previously, a major reason for engaging a third-party provider was to handle or reduce the number of disputes the Toll Operator was receiving from a particular group of Users. Typically, the contractual arrangement only covered legal disputes between the third-party and the Operator. As systems evolve and we rely more on innovative technologies, dispute handling can become more challenging. There are benefits to the evolution of both toll systems including video tolling, and consumer facing technologies such as the evolving capabilities of smart phones.

Dispute handling should be defined in the contractual arrangement and should include language to support not only the Toll Operator, but clearly define for the third-party how disputes should be initiated and resolved with the User.

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[5] https://onemileatatime.com/rental-car-toll-rules/

Consumer Facing Fleets

Pros

Consumer facing fleets provide competition and choice for the User. Consumer facing fleet providers can often help consumers establish and maintain an electronic toll collection account in a manner consistent with their usage, financial needs, or other need that is not currently addressed under the existing Toll Operator customer program.

Cons

Fleets in general, and especially consumer facing fleets, require more support from the Toll Operator for dispute resolution. Toll Operators have largely expected fleet providers to solve all problems related to the vehicles they represent. Unfortunately, disputes are costly for all involved and can be a public relations issue. There is often a perceived risk on the part of the Toll Operator that the third-party may not handle the customer service needs of the User, however, third parties need support and a process for handling customer needs that involve the Toll Operator and its system.

Legal and Contractual Considerations

Existing/legacy fleet contracts do not provide for a third-party to represent a consumer to inquire about transactions. Legacy fleet contracts tend to be focused on commercial fleets and as such are structured to provide information only to commercial fleet management companies. Standard fleet contracts for consumer facing solutions should be developed with the consumer in mind as the end-User versus the fleet account manager or third-party provider. In addition, the agreement should provide for a partnership approach to servicing Users and should not include a prescriptive approach. At the end of the day, the User is a customer of both the Toll Operator as well as the third-party provider.

Implementation of Common Privacy Approach

Privacy laws and agreements will vary by Operator and provider. The approach used must:

- Have reasonably similar privacy agreements between parties

- Use necessary tools to make the User aware of the privacy agreement

- Implement business rules requiring all participants to adhere to the privacy requirements.

Dispute Handling

Suggestions for dispute handling within the contract include:

- Provide a single point of contact for communication. This can be a dedicated email

address or a person(s) assigned to handle disputes.

- Develop a sound process including the information required for a dispute, response times, etc. All should be documented in the legal agreement including assigned responsibilities.

Terms of Service

Third-parties should have a Terms of Service (TOS) agreement between their organization and their Users. Often, Toll Operators require that the TOS include specific language between the third-party and the User, in order to legally protect the Toll Operator from any impropriety or malfeasance on behalf of the third-party. Some Toll Operators require specifc language that calls out their agency. Rather than change the TOS each time the third-party connects to a new Operator, it would be helpful to analyze existing TOS and evaluate whether or not there is language sufficient enough to indemnify and protect the Toll Operator. This approach provides consistency with the User especially with solutions that are interoperable across multiple Toll Operators.

The TOS should also have the required legal language that allows the third-party the right to represent the User and inquire, dispute, and generally interact with the Toll Operator on behalf of the User.

Suggested Legal Requirements

Third-Party to Consumer Requirements

Terms of Service (TOS)

Toll Operators, at a minimum, should require language in a third-party's TOS that includes the following:

- Clearly identifies for the consumer who to contact when there is a dispute or problem with the account

- Clearly identifies that using the third-party toll account does not absolve them of any Toll Operator or state rules, laws, or regulations.

- Clearly defines that by using the third-party the User is authorizing the Toll Operator to exchange information with the third-party as it relates to a customer's account, as well as allowing the third-party to act on the consumer's behalf to inquire and resolve toll transaction issues.

Toll Operator to Third-Party

Base contractual legal language that provides the Toll Operator the ability to share transaction information with the third-party vendor, and for the third-party vendor to share account information with the Toll Operator for consumers participating in a third-party account management program.

Base contractual language that provides Toll Operators the indemnifications and legal language they require to absolve them concerning issues arising between the third-party provider and the User. Language should be generic in nature and broad enough to cover most if not all Operators.

Technical Considerations

This section will break down the pros and cons of existing technologies. Evaluations include:

- Real-Time versus Batch ICDs and considerations or best practices for engaging third parties using each type of interface.

- Processing order and ways to honor the User's choice for account management.

Real-time vs Batch Interfaces

Realtime processing consists of a webservice interface (or similar) between two systems that have a set protocol for sending inquiries or data and receiving back responses or acknowledgements. The advantage of a real-time interface is that both systems can communicate between each other in a near real-time manner, therefore, eliminating any delays in posting of transactions. A primary disadvantage of this type of interface is if the system is down or the communications link is offline, the two systems are unable to communicate until service is reestablished, and thus information about the account is not updated. In addition, real-time systems typically require higher bandwidth networks and higher operating and maintenance costs.

Batch processing is the packaging of data in electronic file format (CSV, XML, etc) and sending this data to another system for processing. After receipt, the receiving system sends back an acknowledgement of receipt and after processing, the receiving system normally sends back a reconciliation file. The advantages of Batch processing are that the systems can send and receive files even when the primary system is offline. Once back online the system can process the files without any interruption to the Batch service. The disadvantage of this type of interface is that it may take several days to post transactional data and receive confirmation. Thus, account information is not, in general, up to date since recent transactions and payments are not included.

Processing Order

Processing orders should be structured to honor the consumer's choice for account management. Historically, in most cases, Toll Operators process tags first and foremost. After tags, the processing order can vary from Operator to Operator. This can be problematic if a User wants to assign a license plate based or iToll account to a rental or temporary vehicle, especially if a toll tag is already on the vehicle. If a User also has a tag account that they would like assigned to the vehicle, the same issue occurs.

Technical Service-Level Agreements (SLAs)

This section discusses suggested minimum SLAs required for third-party providers.

Service-Level Agreements (SLAs)

Service-level agreements (SLAs) should be required for the third-party to ensure that Users do not experience significant down times related to a third-party solution, or that any technical issues are dealt with in a timely manner.

While the exact SLAs will be developed over the course of introduction of a third-party CSC, there are some primary SLAs that can be applied generically with a focus on system availability for a third-party provider.

It is important that transactions are processed and posted in a timely manner in order for the true account status to be updated to other systems. This will further drive toward a Guaranteed Toll model (more on this below). Once a system updates the external parties of an account status, the reporting system will have guaranteed that any tolls that are sent will be accepted and posted to the account as long as the account is reported in good standing.

Processing order becomes increasingly important as the transactions for a given customer will have to post to the correct account. For example, as in the case of rental cars or short term lease vehicles (Car-To-Go), there could be multiple Users in one day. A Real-time interface becomes more important as these technologies and User behaviors change.

Another significant area to consider is Customer Service, the question of "who" owns the customer specifically during a complaint or dispute situation is important as the customers should not be passed around from party to party. To keep the customer's interests as the focal point, each party will be required to have an escalation tree and appropriate contact details so that a customer can quickly be evaluated and directed to the appropriate party for questions and/or resolution.

Guaranteed Tolls

While most third-parties guarantee the toll, this becomes a risk for third-parties in the absence of a real-time interface. In the case of a misclassed or invalid toll posted to a third-party User's account, without sufficient details from the Toll Operator (a picture of the vehicle, or transactional information), the third-party that guarantees the toll is at risk for not collecting from the User and must absorb the cost which can be significant)

Exceptions may occur: For example, tolls over "X" days old may not be guaranteed; or tolls lacking backup, no image for an image toll, or no transactional information when there is a dispute over classification, could be rejected.

Processing Order

Processing order is a major factor in today's tolling environment and will become increasingly more important as autonomous, shared-use, and short-term rentals become more prevalent.

Transaction processing order ultimately affects the customer and should reflect the customer's choice for payment.

In some cases, vehicles or the responsible-party, may be on two or more third-party fleet accounts. The determination of which account should receive a given transaction, should be based on 1) The interest of the User, 2) The interest of the Toll Operator, for example using real-time account status to determine financial responsibility; This approach promotes competition and honors the User's choice for account management and toll payment. Implementing a real-time interface for registration and account status updates, combined with posting transactions to the account based on real-time reporting ensures that the User has a choice. Competition for the User includes customer service options and lower cost tolls and account management. Real-time updates and honoring the User's choice decreases customer service issues and ultimately, lowers costs for the Toll Operator

Customer Service

Customer service considerations include system outages and technical issues that affect all customers. System messaging and monitoring that includes notifications to third-parties is a helpful tool as third-parties providing customer service to account holders can help message Users and alert them of system issues. This helps with public relations and should be considered when engaging a third-party.

Suggested Technical Requirements

The following are suggested technical considerations.

Hub / Portal Functionality

Ideally, third parties would connect through a single interface to provide services to all Operators. Likewise, Operators should have a single source to access third-party solutions. This functionality would be provided by a portal or hub, which would aggregate all third-party services via common interfaces.

For example, the third-party business rules, would be transparent to each Operator because all accounts come through a common interface using standard business rules. Likewise, with services like ALPR, which may be provided by multiple third-parties, using a common interface. Each Operator would be able to select and change ALPR providers without the need to change interfaces.

Real-Time Interface

Ideally, the goal would be for all interfaces to function in real-time or near real-time. However; at this time many systems do not support real-time interfaces. Where that is the case, legacy batch interfaces will continue to be used until it is possible to upgrade the system to real-time.

Support for Legacy Hub interfaces

In some cases, the system may be interfaced directly to legacy interoperability hubs or indirectly to hubs via a Toll Operator. While legacy hub interfaces may not be ideal, this may be required in order to provide access to some Toll Operators. Issuers should be made aware of any latency incurred as a result of hub "hops". Two "hop" interfaces may introduce delays up to 24 hours per hop, making it more difficult if not impossible to determine when account statuses have been updated at a Toll Operator. Acknowledgement of account status, with a time-stamp, should be pushed back to the original third-party provider.

Customer Service Considerations

Consumer Expectations

Users want to travel the Operator's facilities and experience a seamless way to pay. Toll Operators want Users to pay for using the facility and experience a safe, expedient trip. Their goals are usually aligned.

However, the evolution of tolling practices and technology has brought about many challenges for various groups of Users, to establish and maintain an account.

For some Users, the removal of cash collection from the roadside, also removes the ability to conveniently pay for the road. These Users are most commonly:

- Untagged/Infrequent Users

- Cash-based & Underserved Users

- Rental Vehicles

Third-party providers can offer a User an opportunity to establish and maintain a toll account when they are challenged by participating within the constructs of the Toll Operator's existing back office, customer service program(s), and/or business rules.

When engaging a third-party, typically, Toll Operators often have specific concerns about the relationship between the third-party and the User including:

- Customer Service – how will my customers be treated?

- User Terms and Conditions or Terms of Service – are the correct TOS in place that provide the third-party the ability to work with the Toll Operator on the User's behalf.

- Customer Service SLAs

- Marketing and Customer Messaging

It is important to note that often these items cannot mirror a traditional back office/operations offering, but rather take on the requirements and needs of the solution the third-party is offering to the type of customer they are serving. For example, app providers may provide all their support through the app and not require a call center. Therefore, when possible, minimum requirements should be established without providing a prescriptive approach to customer service requirements.

Below is a breakdown of these critical elements and suggestions for base or minimum requirements.

Customer Service

Toll Operators often have concerns about the support needed to manage an account. At a minimum, Operators who implement third-party systems are often concerned that, while the third-party may handle customer service, what are the potential implications to their programs including:

Q. Will users understand who they need to contact if there is an issue with their account? (third-party versus Operator)

Q. Will the customer clearly, understand that the third-party is handling customer service for the account?

A. Messaging is critical to the User. The User should understand that the Toll Operator is providing the toll road service, while the third-party, as the account issuer, is responsible for any issues or questions related to their account. A good example of the delineation of Service, Account Issuer, and Customer is the retail model. Messaging should focus on the responsibilities of each party.

- The **Toll Operator's responsibility** is to provide a quality product/service.

- The **User's responsibility** is to pay for the product/service using an acceptable form of payment.

- The **Account Issuer's (third-party)** responsibility is to ensure that payments are remitted to the Toll Operator on behalf of the User, as well as to provide support to the User for any account issues.

Q. What does account management look like?

A. Account management should, at a minimum, provide the User with tools to establish, update, and change the account information. The level and type of account management is dependent on the type of User the third-party is servicing. However, account establishment and management should include all necessary information required to:

- Identify the User

- Identify the vehicle being used

- Any other information critical to driving the road

Q. How do fees play a factor in third-party account management?

A. Fees can be a complex component as there are many factors to consider. As with a retail model, the more ways to pay provides the User more choices to manage their accounts. To that end, the element of competition becomes a distinct factor and the market will drive pricing and customer service. Just as some credit cards offer different interest rates, annual fees, special rewards and promotions, and some do not. Users get to choose if the benefits and fees are appropriate to their needs thus, driving competition.

In the case where there is more than one provider of the same type of service, Users can choose the best type of account management that fits their needs and wants. If a provider is offering a service with associated high fees, the User has the option to determine if that service is acceptable and the fees justified.

For example, grocery and food delivery has become extremely popular. Users can order food, and have it delivered for a fee. Arguably the cheapest way to get said food is to go to the store or restaurant and purchase the food yourself. However, delivery is more convenient in some cases. The ability to simply make a purchase online and have it delivered is, to some, worth the associated fees and cost.

Consider banking services as yet another example. Banks all offer the same base services related to account management. When choosing a bank, Users tend to look past the base services and focus on additional offerings as well as associated fees. Does the bank offer an app for account management? Do they provide paper or electronic statements? Do they provide additional services? There are usually bells and whistles that are attractive to that particular User, which factors into their choice.

Another factor for consideration is legal. For some Toll Operators, fees are regulated at a maximum. For example, some Operators do not allow more than a $2 fee to be imposed for services outside of the cost of the toll. In such cases, the third-party model must fit within the financial confines of the legislated requirements or the governing body that oversees tolling. This should be a consideration for Toll Operators when engaging a third-party.

Finally, much attention should be paid to third-parties where there is a lack of competition. While the third-party may provide a solution to a group of Users who are challenging for a Toll Operator to capture, for example the rental car industry, services associated with high fees and a lack of competition can be difficult for Toll Operators to manage under public scrutiny.

Q. How are disputes handled?

A. Third-parties can be valuable in vetting and handling disputes for Users. In the case of a third-party representing a User, the third-party should have the ability to submit a dispute and help work to resolve the dispute. As in the retail model, if a User experiences a charge that they deem inappropriate, the User will call their credit card issuer or bank. The bank will submit a request for proof of purchase in order to resolve the dispute.

In the case of tolling disputes, there should be a process for the third-party to request proof of the transaction in question such as an image of the vehicle or other supporting transaction information.

In addition to advocating for and managing the User, third-parties can also provide a valuable first line of customer service and "buffer" for Toll Operators. The third-party should be able to perform initial research of the User's account to determine such things as: the vehicle's license plate registered correctly to the account, correct axel count, confirm the account was properly funded at the time of the transaction in dispute. This initial evaluation of a dispute saves the Toll Operator resources and time by ensuring that a dispute is deemed reasonably valid prior to involving the Toll Operator. The third-party should also collect the proper information prior to involving the Toll Operator such as a copy of the violation, bill, or notice from the Toll Operator. The third-party should also collect all the pertinent account information such as tag ID, license plate number, and any other required vehicle information.

Suggested Standard Terms of Service

Customer service also encompasses clearly defined contractual obligations between the account holder (User) and the account issuer (third-party). The following sections provide considerations for standard Terms of Service elements that should be included in a consumer facing agreement.

Each third-party should have a Terms of Service (TOS), Terms and Conditions, or some sort of contractual relationship with the User. The agreement should define requirements, roles and responsibilities of all parties involved, particulars related to the management of the account, and the goods or services provided. Suggested inclusions in TOS agreement are:

- Definitions – as terms vary, it is helpful to define the components of the product and/or service. There are many terms to define, examples include:

    o Video Tolls. A Video Toll ("V-Toll")

    o Dispute

    o Violation

    o Transponder, Toll Tag, Sticker Tag

There are many other terms to define, these are just examples.

- Privacy and personal information handling – the agreement should include a section that clearly identifies how a User's information is handled as well as disclosures if a User's information will be shared or sold to additional parties for purposes outside of the intended service. For example: use for general marketing,

the marketing and sale of addition services, or other.

- Responsibility to the Toll Operator – language that lets the User know that each Toll Operator has various rules and laws for using their system. Signing up for a third-party service does not in any way absolve the User from their responsibility to operate within the conditions and requirements of the Toll Operator. For example, if a User has previous violations or outstanding debts that have been unpaid/uncollected, using the services of the third-party does not absolve the User from their previous debts. In addition, some Toll Operators do not allow a User to drive their road until all debts are paid. The language should remind users of their obligation to understand the rules and requirements of driving the respective roads, as well as the conditions in which the Toll Operator will consider them a valid User.

   This also could apply to fleets as Users continue to use the road through a fleet provider. Toll Operators and third-parties should work together to resolve outstanding debts incurred by a User in order to prevent the User from changing accounts merely to avoid fees and fines by one or more providers.

   Suggested legal language is included in the Legal section of this paper.

Customer Service SLAs

Customer service is an important aspect of each third-party offering. The type of customer service offered is often directly related to the type of solution it supports. While it's important to allow third-parties the flexibility to architect their own customer service solution, Toll Operators require some assurances that:

- Users are not taken advantage of or charged unnecessary or exorbitant fees.

- Users will have the necessary tools to manage their account.

- Users are being charged within the guidelines and legal statutes of the Toll Operator and governing body.

- The third-party's offering will not generate bad publicity

Account Establishment

In order for the third-party to provide account service, key information needs to be captured and made available to the Toll Operator. Third-party Service Providers should establish a method or process to on-board a User that obtains the required, pertinent information. This information may vary depending on the solution (tag versus license plate, etc.). Suggested components of information include:

- Tag ID

- License Plate

- A way to identify the account holder - account number or other

- A way to contact the account holder

    o Email

    o Phone

    o Mobile Phone

    o Address

Customer Service Support

Customer service support is defined in this section as the tools required for a User to reach the third-party when they are establishing an account, have questions, or have a dispute. The customer service tools will vary from third-party to third-party however, should be substantial enough that the customer understands that they should contact the third-party provider for any issues rather than the Toll Operator. Tools will likely vary with one, two or any combination of methods listed below.

Minimum channel requirements should include any combination of the below:

- IVR

- Customer Service Call Center

- Phone Application

- Website for Account Management

- Text Message Support

- Email Support

- Walk-In Customer Service Center

Dispute Handling

When addressing a dispute, the Toll Operator and third-party provider must work together to determine if the dispute is valid or not. As previously mentioned, when a User disputes a

transaction, third-party providers can be an excellent first line of defense. In the case of an issued violation, pay-by-mail bill, or mistaken transaction, the third-party provider should be able to determine if the dispute is reasonably valid and should be submitted to the Toll Operator. A few factors in the initial determination of a valid dispute include:

- Was the User's account funded at the time?

- Was the correct vehicle information associated with the account?

- License Plate

- Make/Model of the Vehicle

- Number of vehicle axels or vehicle class

- Does the violation or pay-by-mail notice match the User's account information?

All of these elements should be reviewed and confirmed prior to contacting the issuing Operator or the third-party's home Operator. Once the account elements of the dispute have been confirmed, the dispute process should be pursued.

User's expect the same level of customer support from a Toll Operator as other customers who have direct accounts with the Operator. The User expects that the dispute will be investigated in a timely manner, and that the transactional details and images are provided as proof that the User was charged correctly or incorrectly. In order to achieve this, the Toll Operator and the third-party must work together. Suggestions for dispute handling are described in detail below.

Initiating A Dispute

It is critical to clearly define within the Toll Operator and Third-Party agreement a process for dispute handling. The following should be included as part of the process.

Contact

The third-party provider should clearly understand who their initial contact is to initiate the dispute. Should the third-party reach out to the Toll Operator in question or to their Host Operator in order to initiate the dispute? This can differ depending on interoperable agreements and the rules or policies for governing disputes

- There should be a designated person or contact email assigned to the third-party, specifically for disputes.

Submission & Response Time

There should be a defined process associated with the submission of the dispute as it relates to the required information, To and From, the Toll Operator and third-party provider. Timing is an important element in the process as the User will want a quick response and speedy resolution to any issues. Response times should be defined for the following:

- How long after a transaction is posted can the User issue a dispute? This is likely dependent on how long the Operator keeps transactional information, e.g. Images, transaction data including axel count, date, time, and location of the transaction, etc.

- If a User is issued a violation or pay-by-mail notice and the notice ages into collections, can the User still dispute the transaction through the third-party and the Operator, or will they have to address the notice with a collections firm since the dispute was not made in a timely manner? These are important to define for the third-party and for the third-party to communicate to its Users.

- How long does the Toll Operator have to investigate and address the dispute? It is important to set expectations with the User for a timely response. This could be dependent on the type of the dispute and should be defined.

Required Information: Third-Party Provider

Clearly defining the information required from a third-party provider in support of the dispute is important as the Toll Operator will need evidence that the dispute is considered valid. Suggested required information includes:

- A copy of the violation or pay-by-mail notice if the dispute involves an invalid notice

- A copy of the User's account information including:

- License Plate

- Tag ID

- Proof that the account was in good standing/funded at the time of the transaction(s) in question.

- Any other information the Toll Operator deems appropriate in order to conduct their investigation into the dispute.

- A brief narrative or description of the reason for the dispute.

Required Information: Toll Operator

Toll Operators should provide the same type of information that they would provide to an existing User who has an account directly with the Toll Operator. Depending on the dispute a Toll Operator should be able to provide the following information:

- Image of the vehicle and transaction – this information is undisputed proof that the vehicle in-question is or is not the correct vehicle. The license plate should be clearly visible and match that of the User's. The image of the vehicle will also provide valuable axle count information.

- If the image does not match the tag registered, the transaction should be further investigated to determine if the tag was moved to an unregistered vehicle.

- Transaction information – date, time, location of the transaction, vehicle classification.

See a sample overview of suggested information to initiate and resolve a dispute.

Third-Party Initiates Dispute

From: Disputes@ThirdParty.com
Date: Monday, September 30, 2019 at 2:10 PM
To: Support@TollOperatorUSA.com
Subject: Violation Dispute

Hello,

The below User received a violation notice (copy attached). According to our records, the User's account was funded and in good standing when the violation notice was issued. Please research the dispute and provide the results of your findings.

Tag ID: USA123 456 789

Vehicle License Plate: ABC 999

Account Balance (date of transaction dispute): $50.00 *(attach pdf of account overview with funds noted)*

Regards,

Third-Party Supervisor
888-888-8888

Toll Operator Dispute Response

From: Support@TollOperatorUSA.com
Date: Monday, September 30, 2019 at 2:14 PM
To: Disputes@ThirdParty.com

Subject: Re: Violation Dispute

Good afternoon,
The User received a violation notice in error. The vehicle image does not match the User's vehicle.
OR
The violation is valid as the Tag ID associated with the vehicle in question does not match the license plate given.

Regards,
Toll Operator Supervisor

Dispute processes will likely evolve as technology evolves and processes become more efficient, and perhaps, even automated.

Marketing and Customer Messaging

Marketing and customer messaging are important and sometimes complicated elements based on the User, Toll Operator, and third-party provider relationship dynamics. The basic relationships between the three can be complicated as they are not one-to-one relationships.
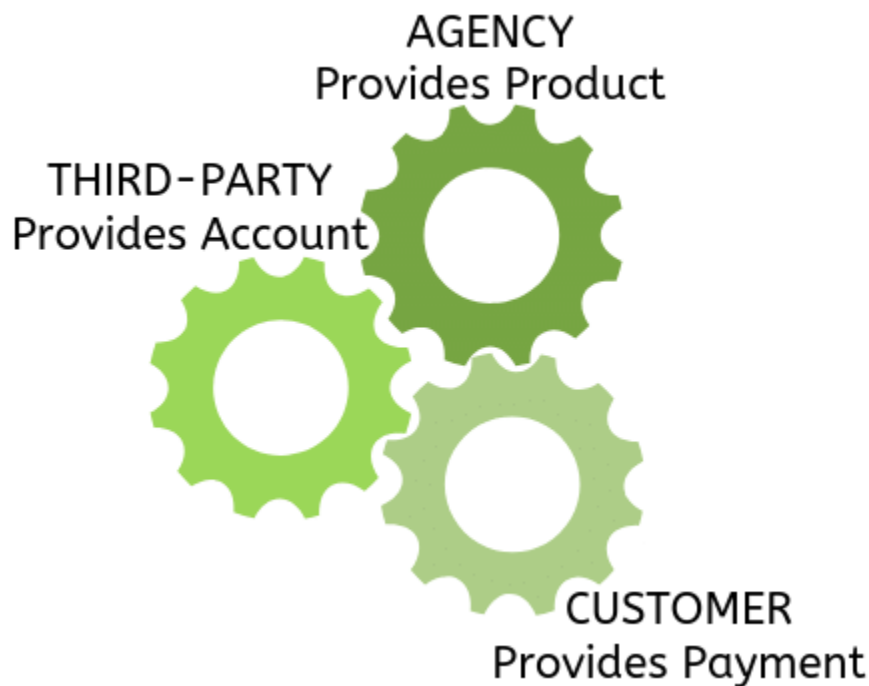
Customer messaging should take on the appropriate roles and responsibilities of the User, third-party, and Toll Operator as described below.

- The User is responsible for keeping their account in good-standing with the third-party.

- The User is responsible for paying for the usage of the Toll Operator's road.

- The third-party is responsible for providing account information to the Toll Operator. The third-party is also responsible for providing the User tools to manage their account.

- The Toll Operator is responsible for providing a sound product (the toll road). A Toll Operator is also responsible for proving dispute tools and transactional information to third-party providers to support the end User.

Suggestions for creating successful messaging to consumers are described below.

New Solution Launch: Press, Media, and Marketing Considerations

Leveraging media and press for the launch of a new solution can provide a big boost to a Toll Operator's reputation and to the third-party's ability to gain new customers. As the third-party is usually a completely separate operating entity, the Toll Operator and third-party should create a sandbox environment of agreed upon messaging, logo use, and other elements that are important to each respective party. See below, examples of a sandbox environment:

- Approved logo usage – this can be as broad as a branding guide or as specific as how the logo is used in conjunction with the third-party offering, including placement on their website or in marketing ads

- Defined audiences – clearly define who the third-party product is targeted to, in order to define the proper and not competing or conflicting messaging. Messaging suggestions include:

- Toll Operator's reason for engaging the third-party

- List the differences between the Toll Operator's offering and the third-party's offering so the User can make an informed choice for account management

- Talk about how to engage or contact the third-party provider so the Toll Operator is not overwhelmed by Users looking to sign up for or ask questions about, the third-party solution

- Define any required approvals for marketing or creative

Presenting a partnership approach can be incredibly beneficial not only for the Toll Operator and the third-party, but the User as well.

System Maintenance, Outages, Toll Operator Issue Considerations

As with Toll Operator managed User accounts, third-parties should also be considered when communicating to Users about toll system issues. Third-parties often experience increased customer service calls and interactions with their Users when there is an issue with the Toll Operator's operations or system. This can be a road closure, system maintenance downtime, system outage, delays in transaction posting, or other issues. Clearly communicating this to third-party providers in a timely manner can create an opportunity for the third-party to proactively address Users in order to avoid any negative press or customer issues.

Providing appropriate and approved system issue messaging for the third-party to release or share with their Users can be extremely helpful. As with most Toll Operators, third-parties also participate in social media and can help reach a large number of Users for communication purposes which is a valuable tool as well.

Suggested Next Steps for Customer Service

- Create a clearly defined, standard process for dispute handling

- Create standard SLAs for customer service handling

- Create a suggested Sandbox for messaging and marketing

Summary & Suggested Next Steps

In summary, engaging third-parties can be extremely valuable to Operators. The key to success is based on clearly defining roles, developing the proper contracts and legal. Agreements, the implementation of a solution that is technically sound, and creating a program where the User engages for the benefit of capturing payments. While this paper focuses on various types of third-party providers that we are currently seeing in the industry (app based, third-party tag issuers, license plate based), the need to continue to expand on this topic becomes more relevant as Connected and Autonomous/Connected Autonomous Shared and Electric (CAV/CASE) vehicles emerge.

IBTTA Board – Suggested Next Steps

Below are suggestions for continuing the work related to Operators who choose to implement third-party solutions.

Legal/Contractual Next Steps

- Develop Standardized Agreements for Commercial Fleet Accounts

    o Commercial fleet accounts operate differently than consumers. As such, the agreement should reflect the needs and requirements of these particular Users, the organizations they represent and the types of vehicles that use the roads.

- Develop Standardized Agreements for Consumer Fleet Accounts

    o Consumer facing accounts should ensure that all parties involved are protected, have a fair and equitable approach, as well as defined User support roles.

- Base contractual legal language that provides the Toll Operator the ability to share transaction information with the third-party vendor, and for the third-party vendor to share account information with the Toll Operator for consumers participating in a third-party account management program.

- Base contractual language that provides Toll Operators the indemnifications and legal language they require to absolve them concerning issues arising between the third-party provider and the User. Language should be generic in nature and broad enough to cover most if not all Operators.

- Develop Recommended Procurement Processes for Third-Party Providers

- While procurements for fleet providers have typically not been required, at a minimum, fleet providers or third-party providers should meet minimum standards and requirements. This may not require a full-blown procurement however, a standardized "application" that requires all relevant information could be valuable.

- Procurement

  - An important aspect of this process is to explore the procurement process. Third-party offerings are often not appropriate for a competitive process against other third-party providers. Their systems and solutions differ and therefore, an open procurement with benchmarks, such as those listed in this document, should be the measure.

  - Standardized interfaces will vastly help facilitate the procurement process as a standardized interface will provide a baseline for adhering to business rules, audit, and reconciliation requirements.

Technical Next Steps

- Develop a Standardized ICD for Commercial and Consumer Fleet Accounts

  - Suggest the development of a Standardized ICD(s) in conjunction with the interoperability committee members.

- Develop the ICD using standard, transparent Business Rules for Adoption

- Baseline business rules should be included in the ICD.

- Create minimum, required SLAs for Third-Parties

- Standardized SLAs related to third-party solutions: e.g. downtime and technical issues

Customer Service Next Steps

- Develop Minimum Required SLAs for Third-Parties

- While customer service varies by solution, standardized SLAs related to response time and capability to service and support the User for account management, issues, or disputes should be developed.

- Develop standard guidelines, considerations, and best practices or use cases for

media & messaging to Consumers

- This is important as the industry continues to embrace third-parties. Standard guidelines for messaging protects the Operator, facilitates support for third-party solutions, and lends credibility to the overall third-party program. In addition, there are opportunities to capture positive PR and reinforce the Operator's commitment to its customers. There are emerging use cases and lessons learned that the industry should begin to record and refine.

- Service-level agreements (SLAs) should be required for the third-party Customer Service Centers as this gives assurance to each party that transactions will be sent and posted to accounts in a timely manner, and that account information be current in accordance with the agreed to SLAs.