# Tolling Back-Office Overview
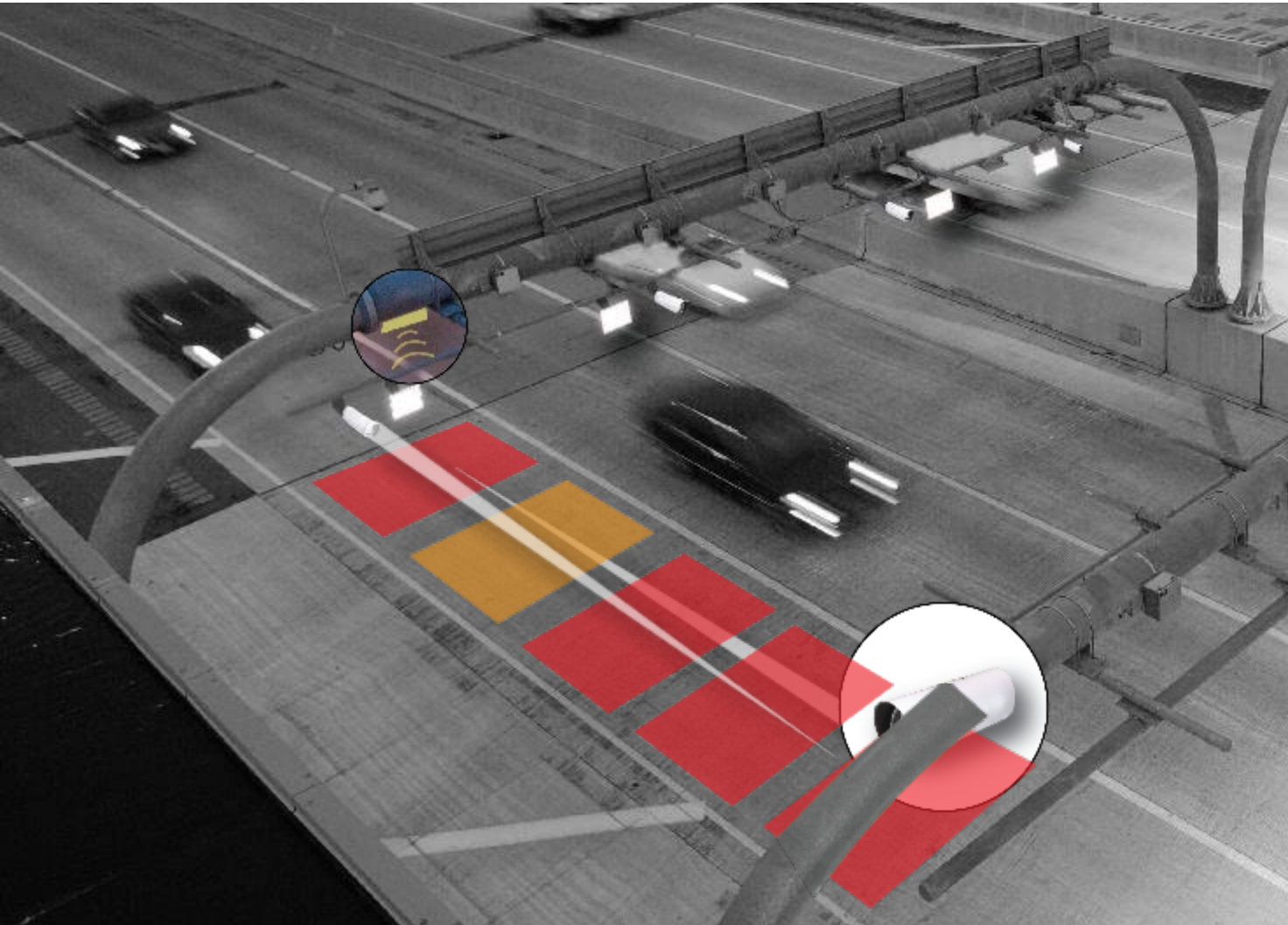
Michael Catolico, Chief of Business Systems

*March 2023*
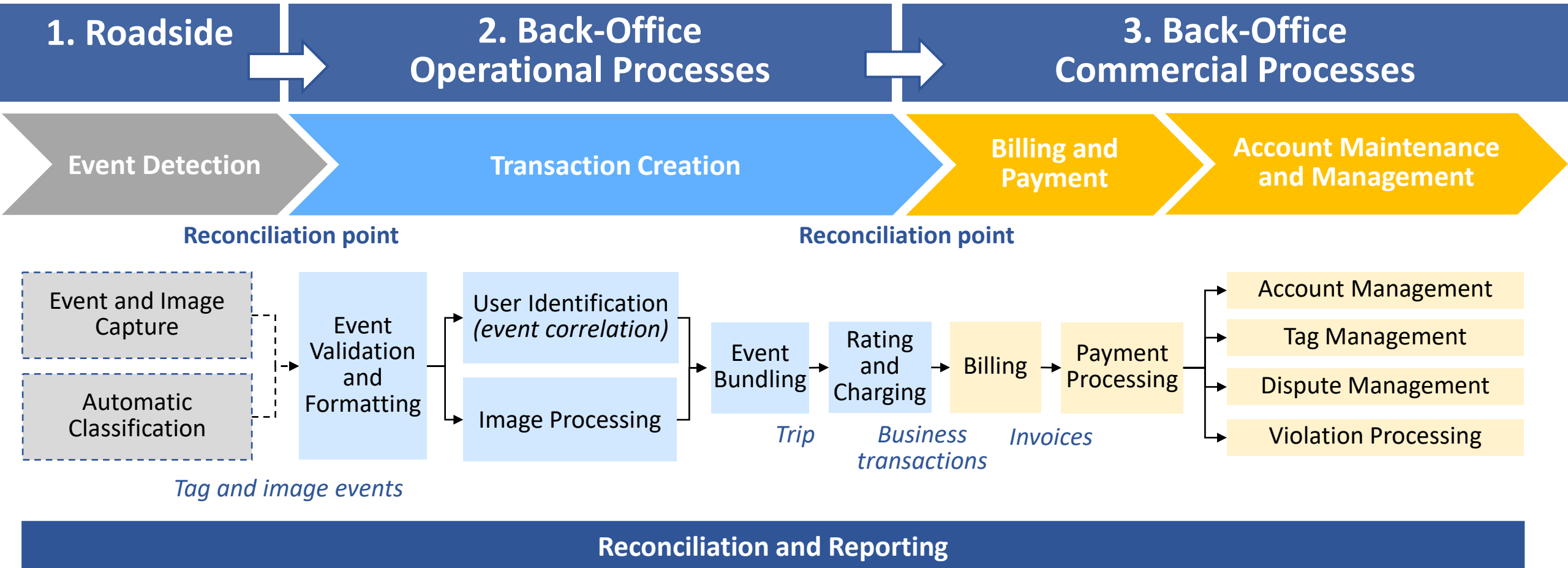
# I-PASS Lane Technology
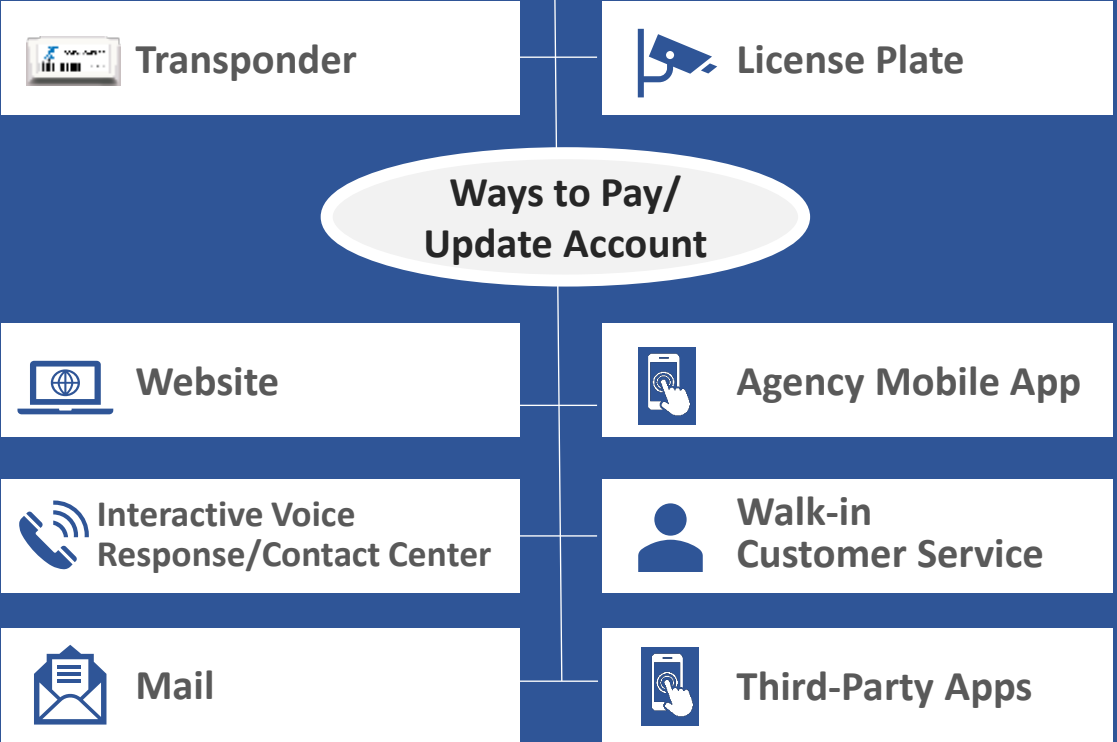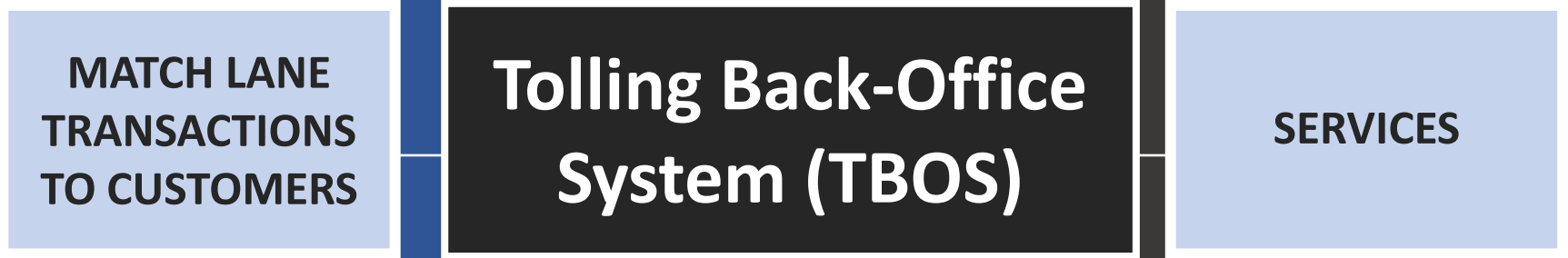*Vehicle Detection and Classification*



1. Vehicle detected
2. Camera captures front license plate
3. Antenna detects I-PASS transponder and transmits information to database
4. Number of axles detected
5. Tracks vehicle passage
6. Camera captures rear license plate and indicates vehicle exit
7. Data is packaged as a transaction

# Tolling Back-Office System (TBOS)

| 1. Roadside | 2. Back-Office Operational Processes | 3. Back-Office Commercial Processes |
|---|---|---|

| Event Detection | Transaction Creation | Billing and Payment | Account Maintenance and Management |
|---|---|---|---|

**Reconciliation point**      **Reconciliation point**



Event and Image Capture

Automatic Classification

*Tag and image events*

Event Validation and Formatting

User Identification *(event correlation)*

Image Processing

Event Bundling

*Trip*

Rating and Charging

*Business transactions*

Billing

*Invoices*

Payment Processing

Account Management

Tag Management

Dispute Management

Violation Processing

**Reconciliation and Reporting**

*Scope of the Accenture Tolling Solution*

3

# TBOS Enables Customer Service and Enhances User Experience

**MATCH LANE TRANSACTIONS TO CUSTOMERS**

**Tolling Back-Office System (TBOS)**

**SERVICES**

| | |
|---|---|
| Transponder | License Plate |

*Ways to Pay/ Update Account*

| | |
|---|---|
| Website | Agency Mobile App |
| Interactive Voice Response/Contact Center | Walk-in Customer Service |
| Mail | Third-Party Apps |

| | |
|---|---|
| Purchasing and Fulfillment | Credit Card Processing |
| Interoperability | Invoicing |
| Printing/Mailing | Retail Sales and Distribution |
| Violation and collections | E-commerce |
| Image Review/ License Plate Look-Up | Reporting and Business Intelligence |

4

# TBOS Drives Innovation

## Modernizing the Business Model

- Pay By Plate service
- Invoicing
- Amnesty
- Expanded I-PASS Assist
- Integrate new payment channels

## Aligning Operational/Technical Solutions

- Increase self service to reduce costs and staff resource needs
  - Quadrupled invoice issuance with no impact to customer service
  - Innovative customer connection: QR code, pop-up alerts and push notifications
  - Illinois Tollway Mobile App
  - Retail payments (pending) and third-party apps
- Improve decisions using data mining and analytics

THANK YOU