|  | ***Customer*** | ***Operator*** | ***Owner and/or Government*** |
| --- | --- | --- | --- |
| ***Safety*** | Eliminate plaza infrastructure within roadway.  Eliminate lane selection decision process, lane changing maneuvers, and stopping.  Eliminate acceleration and merging maneuvers. | Significantly reduce personnel - vehicle conflicts (no crossing lanes to access booths, less directing vehicles to pull over / turnaround.  Significantly reduce personnel – customer conflicts (non-payment, robbery).  Eliminate cash transport in open roadway area. | Significantly reduce customer claims for damage by toll equipment. |
| ***Travel Time*** | Eliminate delay and congestion due to toll plaza. | Not applicable. | May exacerbate congestion at downstream capacity constraints. |
| ***Environment*** | Reduce vehicle emissions in relation to elimination of toll plaza stops. | Small increase in vehicle emissions for possible rolling enforcement vs. standing enforcement. | Reduce energy used for toll plaza equipment, lighting, heating, and air conditioning. |
| ***National / Local Security*** | Increased capability for automatic notification of vehicles on “watch lists”. | | |
| ***Land Use & Infrastructure*** | Not applicable. | Significantly less equipment maintenance:   * Less equipment overall; * Required equipment subject to less vehicle, weather, & personnel damage. | Roadway requires redesign for continuous operation.  Land may be available for re-development.  Disposal required for existing equipment, cabling, booths, pavement, etc. |
| ***Customer Types*** | No violators – Just customers with different payment strategies! | | |
| ***Customer Relations*** | Loss of toll collector contact for local information.  Payment difficulties for “un-banked” customers. | Loss of most in-person customer contact.  Increased knowledge of customers due to LPR in place of cash.  Monthly contact with most customers via statement / invoice allows for increased information dissemination. | Expanded opportunities for marketing due to increased customer information. |
| ***Customer Privacy*** | Elimination of anonymous cash payment. | Quality rear & front vehicle / plate images required.  Possible increase in desire for anonymous tag accounts. | Significant requirement for secure & private customer data management practices. |
| ***Toll Payment*** | No opportunity to stop for direct payment.  Typical payment options include:  - Pre-registered, pre-paid transponder account;  - Pre-registered, post-billed transponder account;  - Post-registered, post-billed image (video) account.  Other payment options may include:  - Pre-registered, pre-paid image account;  - Pre-registered, pre-paid, single trip image charge;  - Post-registered, post-paid, single trip image charge. | | |
| ***Toll Rates & Fees*** | Image transactions typically charged more than transponder transactions via the toll rate and/or additional fees. | Processes and systems to enable various toll rates and fees. | Potential for public challenges to image transaction toll rates and fees.  Toll rates do not need to consider coin efficiency – rates can be specific to $0.01. This may facilitate regular increases. |
| ***Special / Unusual Transactions*** | Any transactions presently dependent on in-person contact must be eliminated or a new customer process determined. | | |
| ***Vehicle Classification*** | Not applicable. | Elimination of toll collector visual classification – AVC much more critical for commercial vehicles. | Potential increase in lost revenue or customer complaints due to misclassification. |
| ***Personnel*** | Not Applicable. | Eliminate toll collectors and other lane specific jobs.  Increase customer service and image process jobs. | Restructuring organization.  Personnel retraining.  Personnel layoffs. |
| ***Cash Handling*** | Eliminate search for toll specific funds while in vehicle. | Significantly reduce physical currency handling (some is still required for walk-in customer service facilities). | Reduced cost. |
| ***Cash Flow / Financial Processes*** | Not Applicable. | Deferral of substantial toll revenue from direct cash payment to post-billed invoices. These must be recorded and tracked as aged receivables. Customer payment must be mapped to accounts.  Increase in revenue from image surcharges and penalties.  Increase in lost revenue due to untraceable customers and customers unwilling to pay. | |
| ***Enforcement / Collection*** | Those with unpaid toll invoices may be subject to collection agencies and/or vehicle registration denial. | Eliminate on-site per transaction enforcement.  Possible on-site enforcement (vehicle apprehension) of watch-list vehicles. | Possible change of toll transaction based penalties to invoice based interest charges.  Legislation change to allow customers to use the facility without having paid the toll (invoice to be sent later) is typically required.  Legislation to enable use of collection agencies and/or vehicle registration denial for unpaid toll invoices is typically required.  Legislation to enable on-site vehicle apprehension (if desired). |
| ***Cooperation with Other Agencies and/or Governments*** | Not applicable. | Increased desire for agency cooperation (interoperability) related to image customers. | Increased desire for provincial / state cooperation related to motor vehicle registration access and vehicle registration denial reciprocity. |