

# The Benefits and Methodologies of Transaction Cost Analysis

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# Transaction Cost

An industry of mega projects and big numbers

But, one tiny number can have an enormous influence on policies and net revenue



# Transaction Cost

- Understanding Transaction Cost is critical to:

- Making certain policy decisions
- Pricing tolls and non-toll revenue items
- Measuring performance

- $$\text{Transaction Cost} = \frac{\text{Cost of Collection}}{\text{Number of Transactions}}$$
  - But value comes in breaking cost down by transaction type

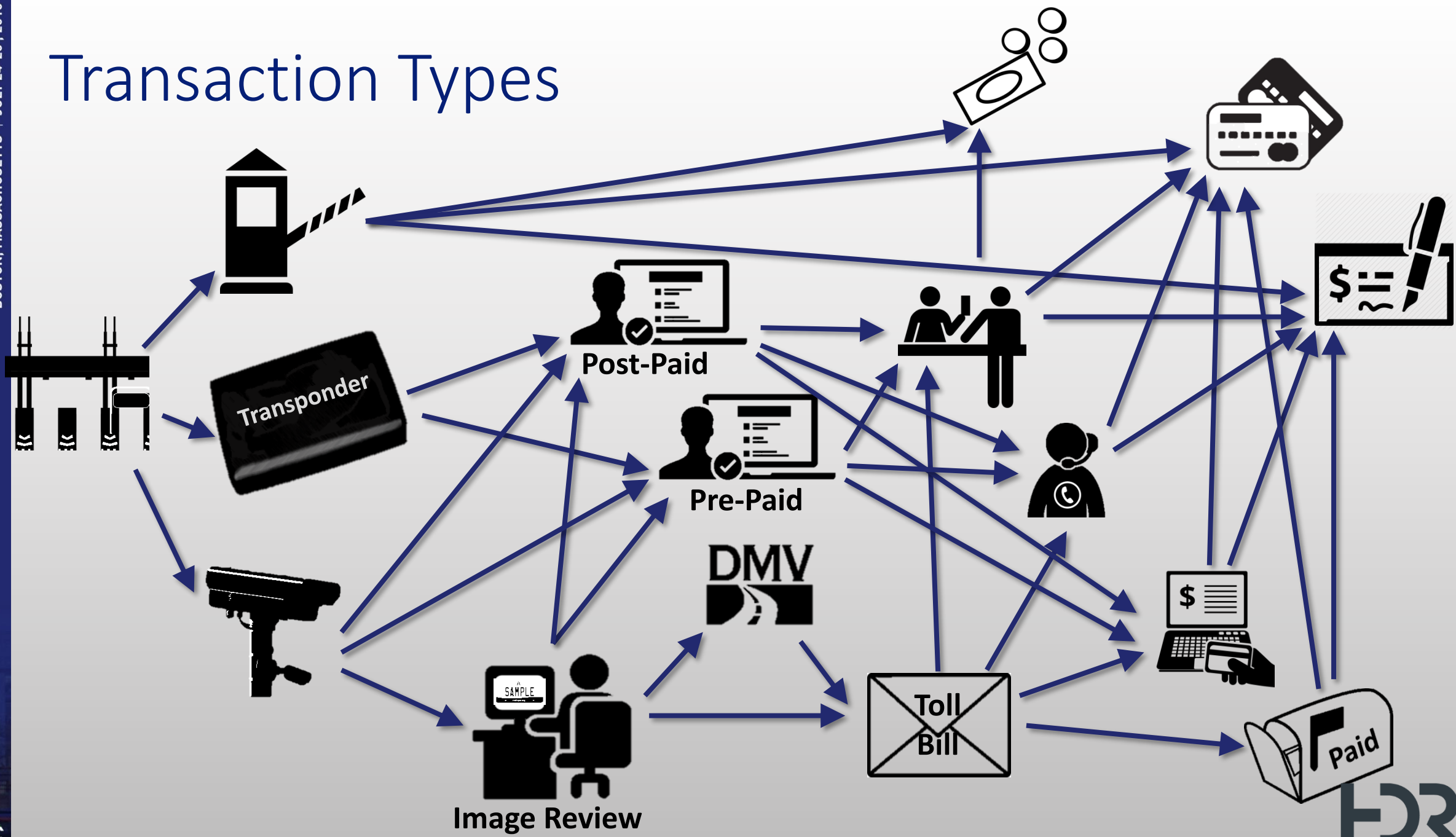
- Not a number that can be compared across agencies/operators

- Policies, laws, regulations vary and make this nearly impossible
- Different customer bases require different approaches in enforcement and products

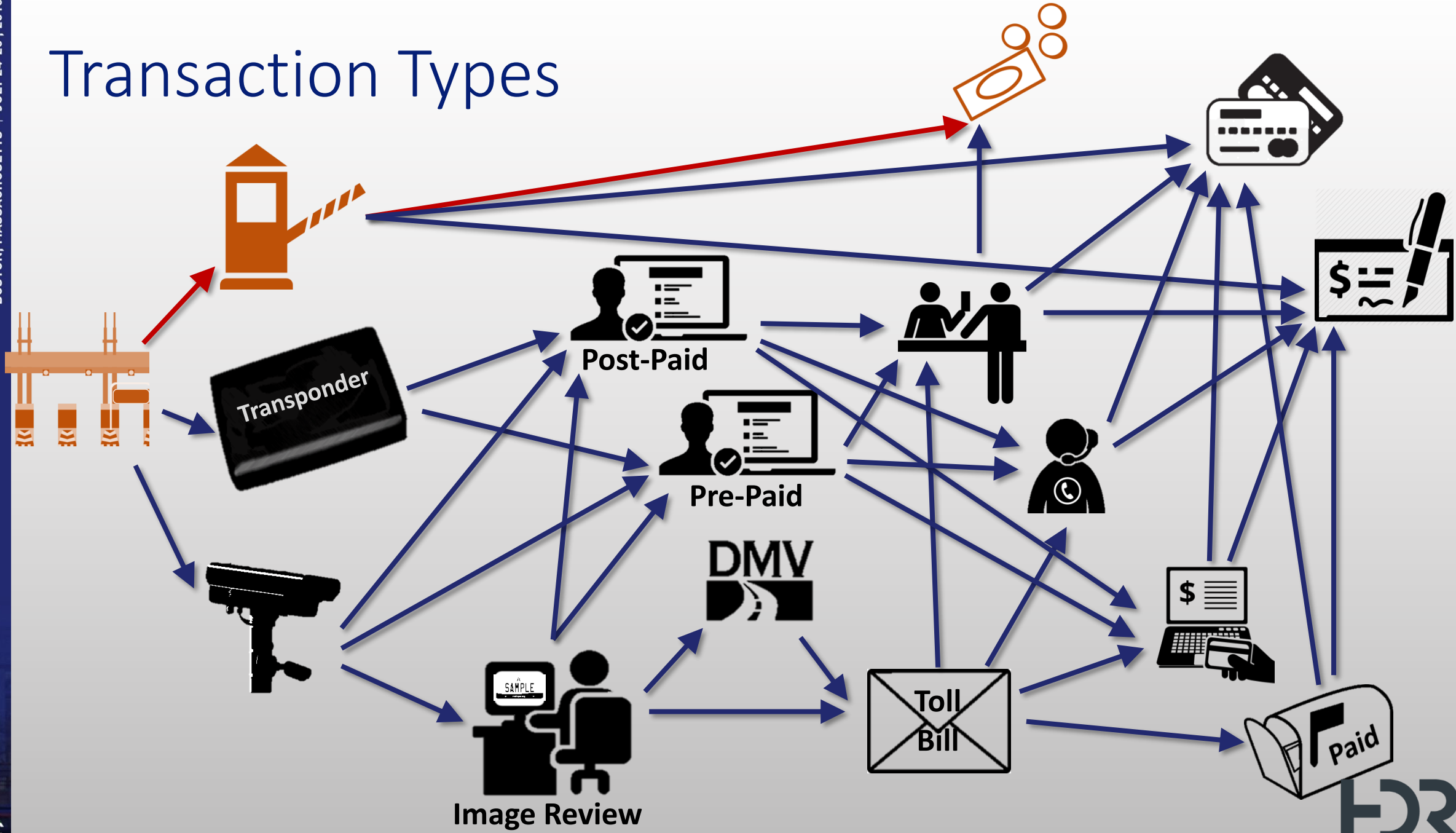




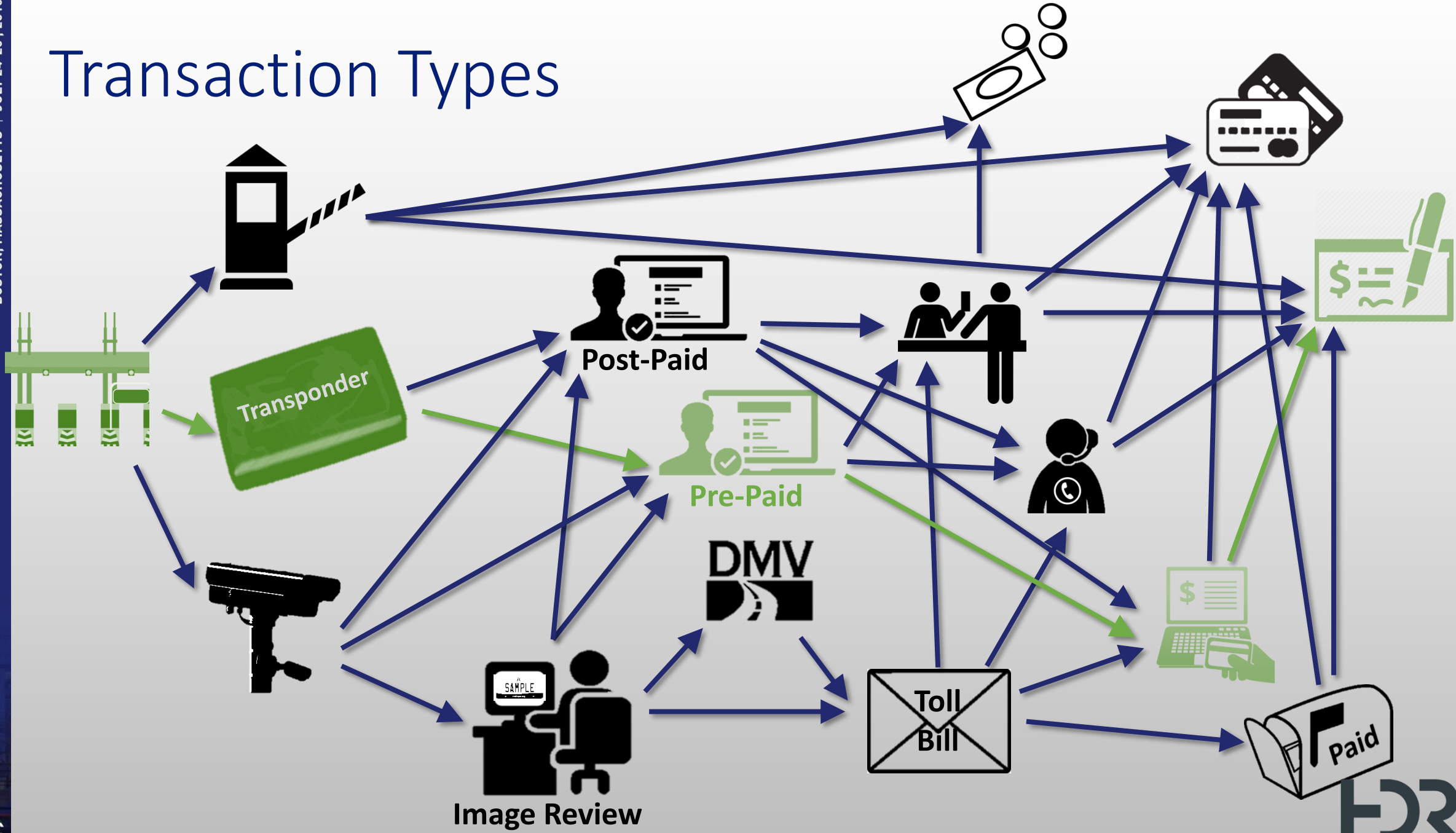
# Transaction Types



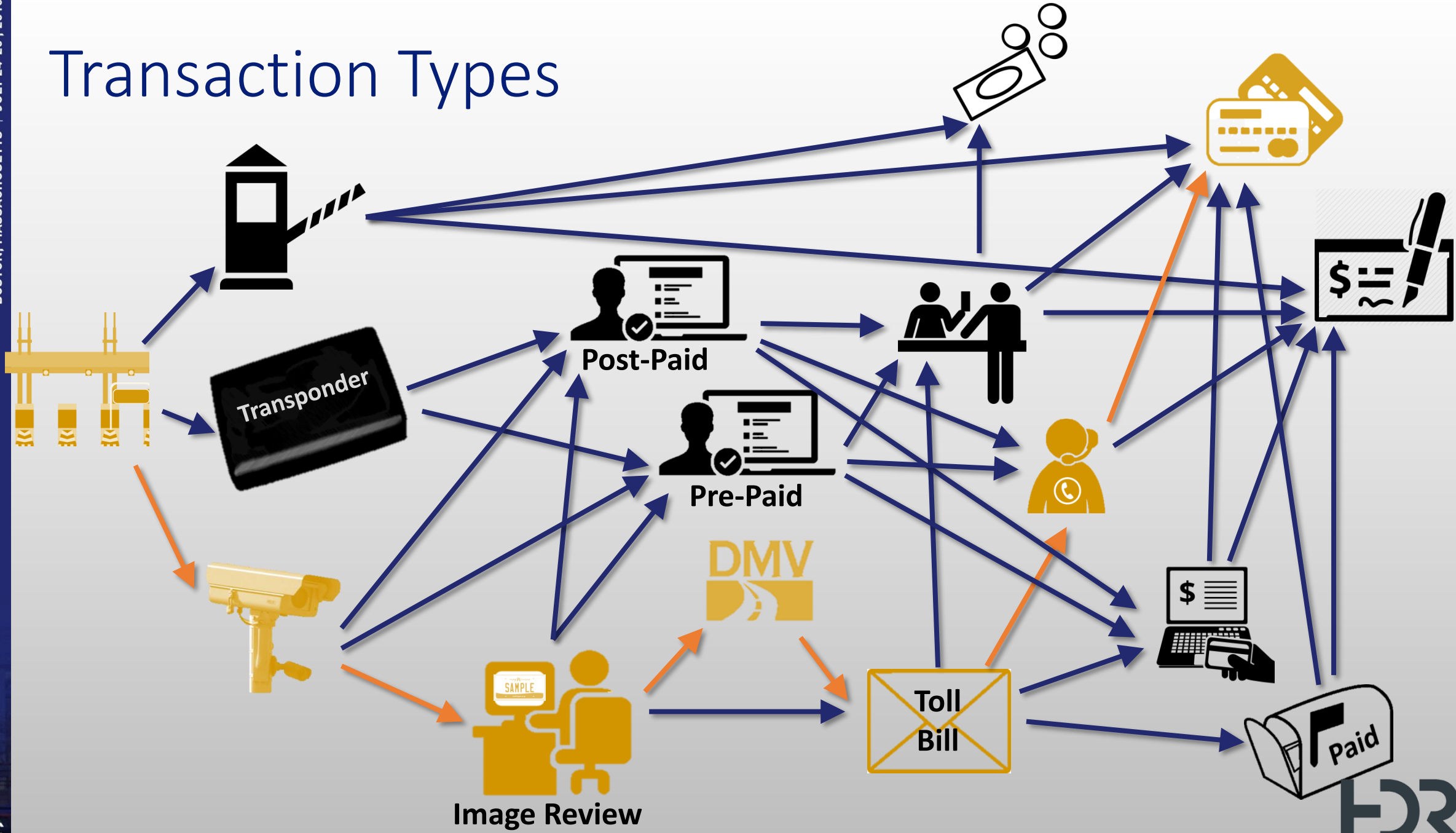
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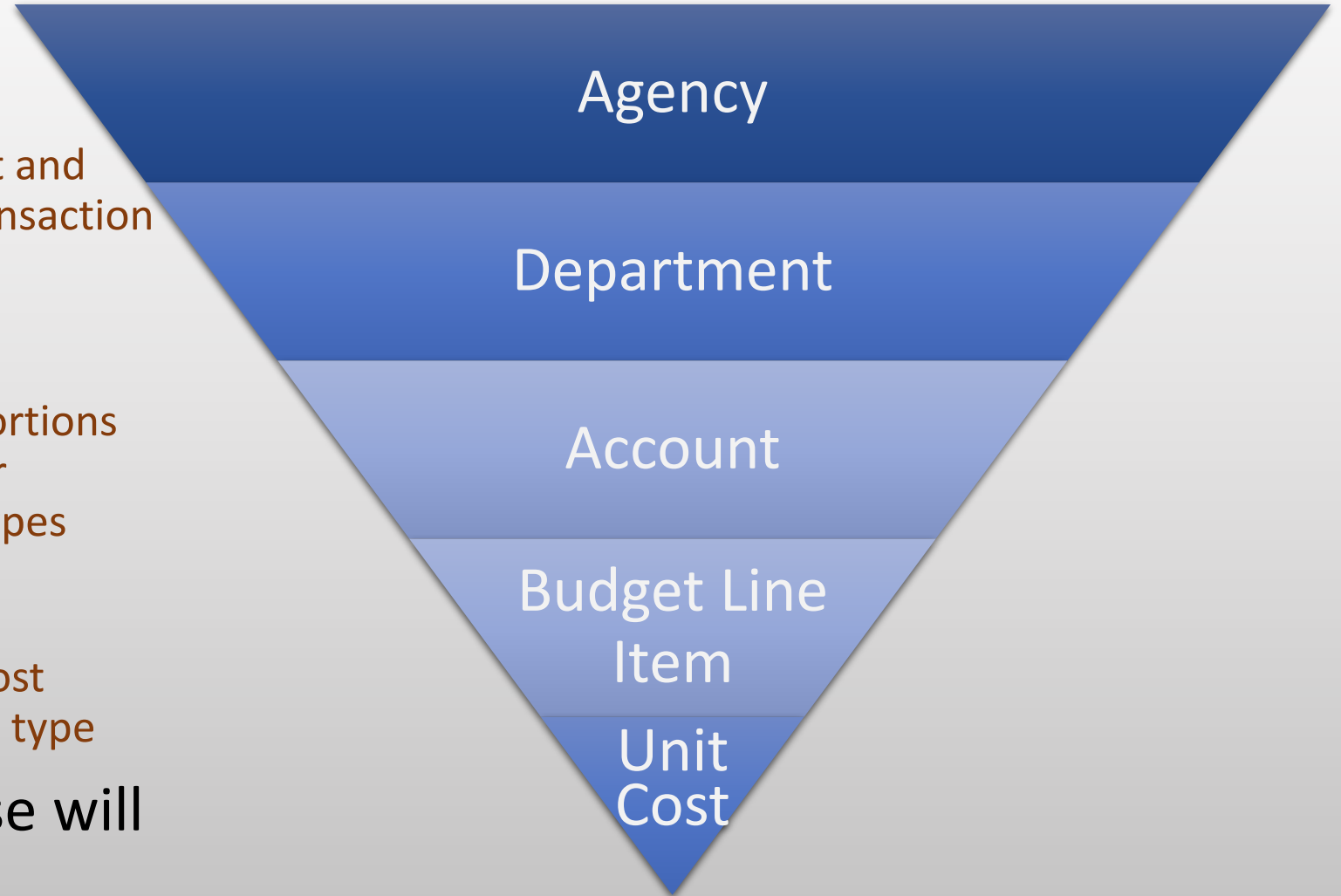
# Transaction Types





# Methodologies

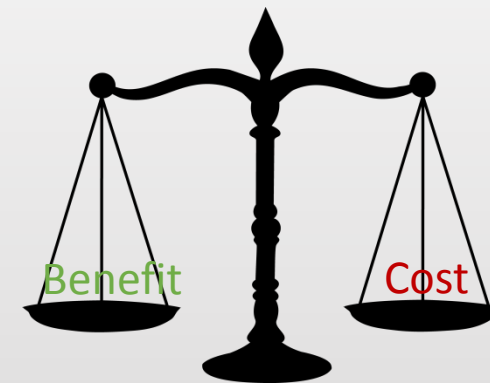
- **Bottom-Up**
  - Allocating every unit cost and line item to a specific transaction type
- **Top Down**
  - Subjectively allocating portions of agency, department or account to transaction types
- **Marginal Difference**
  - Identifying the specific cost difference by transaction type
- **Data, Time, & Purpose will define approach**



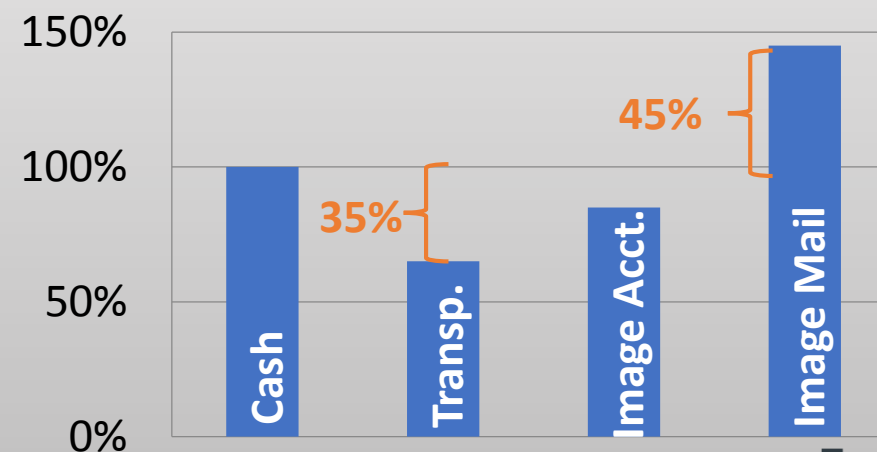


# Practical Applications

- Key Performance Indicator
  - Pulse of the back office operation
  - Diagnose cost changes
- What-if Scenario Analysis
  - AET or ORT Conversion
  - Vendor Contract Analysis
  - New initiatives or policy implications
- Pricing Products
  - Surcharges or discounts on toll types
  - Pricing account or maintenance fees
  - Pricing violator penalties



**Transaction Cost Breakdown**



# Guidelines and Lessons Learned

- Clearly define how the numbers will be used and their limitations
- Chose a methodology that is right for the agency and stick with it
- Document methodology, items included and excluded
- Understand limitations of data and subjectivity
- Include all costs, including lost revenue and enforcement
- Divide by the number of paid transactions

Thank You



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