Session 13: Public Works - Start of Service Process

To Be Process Symbol Legend

Customer symbol: indicates an internal or external customer coming to initiate or receive services.

Existing process step box symbol: indicates a step in the business process.

New process step box symbol: indicates a new step in a business process.

Existing process step box symbol: indicates an existing step in a business process that will be eliminated in the future state.

Decision tree symbol: indicates Y/N options or decision in a business process.

Directional arrow: indicates the direction of a process on steps going forward, a dashed line indicates a feedback loop. A Blue arrow indicates an step using workflow automation.

Hardcopy documents: A black doc indicates a system produced document or documents that start out as hardcopy. An "F" in the symbol indicates a fax. A red-lined doc indicates an existing document that will be eliminated in the future state.

A multiple document symbol indicates a packet/package of documents.

Electronic documents/content/files: indicates a system produced document or documents that start out as hardcopy that are scanned and stored electronically. (This could also include future digital photos, digital video, or digital recordings.)

Electronic Form: "E" indicates an electronic form. An "X": in the document symbol indicates a requirement for an E-Signature.

Envelope symbol: indicates mail, internal or external correspondence. An "E": in the envelope indicates email and if blue, indicates auto-notifications or emails.

Existing database symbol: indicates existing software/database, using an commercial off-the-shelf/custom developed application. A red symbol denotes an existing software to be eliminated/replaced.

New database symbol: indicates new software/database, commercial off-the-shelf/custom developed application. The type of system is noted inside or adjacent to the symbol

Vertical file, box, binder and CD-ROM symbols: indicates existing hardcopy file storage, onsite/offsite document archives, or electronic file storage.

Car symbol: indicates the movement of information by car.

Anchor symbol: indicates instance(s) where an external department or organization adversely impedes the effective execution of a business process.

As-Is Narrative Legend

1, 4, 7

Problems

Problem Statements: problems in the existing process, identifying any obstacle to the effective and efficient execution of a task or service delivery.

Impacts

Impact Statement: quantitative or qualitative impact to the effective and efficient execution of an internal business process or service delivery to the customer.

Solutions

Solution Statement: possible policy, process, and/or technology solutions.

Benefits

Benefits Statement: quantitative/qualitative benefits to the internal/external group, enterprise or customers.

Future State Solutions Legend

Management / Policy

These solutions entail new management policies and practices that are required as a result of introducing new information technology solutions and/or business process changes. Common examples include policy statements, organizational change, Change Management, Service Level Agreements, etc.

Process / Operational

These solutions entail the introduction of new business process steps—or the elimination of existing business process steps, for Business Process Improvement, or as a result of introducing new Information Technology solutions identified in the Rapid Workflow workshops. Business Process / Operational solutions also include business process improvement opportunities identified as part of the Rapid Workflow business process analysis workshops that do not have any direct relationship to Information Technology.

Information Technology

These solutions entail a variety of solutions, including the:

- Introduction of new Information Technologies
- Replacement of existing systems with new technologies
- Enhancement of existing Information Technologies / Systems to compliment new management policies.
- Enhancement of existing Information Technologies as identified in the Rapid Workflow workshops as Business Process Improvement opportunities
- Integration of proposed technologies with existing technologies
Session 13: Public Works - Start of Service As-Is Process

General: 2,10,11,13

1 Start of Service

Customer Request Service

Lagan Case Created

Finance Setup

14

311, CSSIII
- Obtain customer information:
  - Name
  - Person on the Account
  - Address
  - Service location
  - Contact information
- Customers included commercial/residential.
- Commercial customers require site inspection.
- Assign to a route.
- Residential 9 units of less, Ecology Center/recycling waste.

OS II, OS III, City Divisions/Departments
- Account is set up in FUND.

1,5,14

Public Works Delivers Container

Zero Waste Staff
- Route Book coversheet is manually updated daily.
- Route Book is updated monthly.
- Physical delivery of container.
- Sometimes this includes removing a container.

1,8,9

Do the Work

Zero Waste Staff
- Crews service container based on the service schedule: weekly, twice/week, up to 7 days/week.

1,5,8,9

Stop of Service

Customer Request Stop of Service

Lagan Case Created

Residential/Commercial

311, CSSIII
- Obtain customer information:
  - Name
  - Person on the Account
  - Address
  - Contact information
  - Identify containers to be removed.

Commercial

16

Container Maintenance Welders, Solid Waste Workers, Solid Waste Supervisor, Operations Manager
- Add information to cartbin list.
- Print out the report.
- Remove containers.
- Update the Lagan Case and reallocate it to Revenue Collection.

16,17,18,22

Close the Account

Revenue Collection Staff
- Account is closed.
- Close the Lagan case.

17,23

Notes:
Residential Recycling is provided by the Ecology Center (EC). EC is responsible for providing the customer with a cart, scheduling the collection day, and assigning to the appropriate collection route.

General: 19,20,21,24

Lagan Case Created for Site Inspection

16

Solid Waste Supervisor, Sr. Solid Waste Supervisor, Operations Manager, Field Rep
- Do the inspection.
- Update the Lagan Case.
- Reallocate to 311.

OK to Stop Service

Yes

Contact Customer

No

Zero Waste Site Inspection

311 CSS III, Supervisor
- Create the Lagan Case.
- Add vital information to the description, route and level of service.
- Lagan Case is allocated to Zero Waste.

311, CSSIII, 311 Supervisor, Solid Waste Operations Manager, Sr. Solid Waste Supervisor
- Explain the findings of Zero Waste.
- Close out the case.

16,22

Customers included commercial.
- Request is made by:
  - Phone
  - Email
  - Letter
  - Online Submission: Lagan case form
## Session 13: Public Works - Start of Service As-Is Process

<table>
<thead>
<tr>
<th>Problems:</th>
<th>Impacts:</th>
<th>Solutions:</th>
<th>Benefits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of Service</td>
<td>1. Inefficient service delivery. 2. Insufficient Operational Data 3. Customer care overpay or underpay. 4. Requires bill adjustments. 5. Generates customer questions. 6. Same as #1 and #2. 7. Missed pickup. 8. Same as #7. 9. Could impact billing. 10. Same as #1, #2, and #9. 11. Same as #7. 12. Missing tasks. 13. Same as #1 and #11. 14. Customers are billed an inaccurate rate. 15. Makes it difficult to analyze revenue collections. 16. Impacts budgeting.</td>
<td>1. Refuse Billing Application. Implement a system from WO to billing, specifically for refuse. Features/Functions: • Identify service location vs. billing location. • Automatically provide a bill with sufficient detail. • Support mobile devices. • Communication as #1, via social media tools. • Automated workflow, E-forms. • Web enabled application. • Customer access to their accounts. • Data validation. • Ensure all the right questions are asked of customer up front. • Provide Stop of Service Information. • Ensure that information gets into the right system. • Auto Payments. • Online portal for the Public to submit requests. • Online payments. • Mobile App. • Ability to provide temporary stops. • Support multiple languages. • Provide customer history. • Accurately identifies the service location.</td>
<td>1. Improved business processes. 2. Better reports with useful information for decision making. 3. Improved service processes. 4. Same as #1. 5. Reduced calls to the Customer Service Center. 6. Satisfied customers. 7. Reduce staff time for multiple departments. 8. Billing calls/questions could go directly to Finance, eliminating the middle person. 9. Improved route optimization. 10. Same as #1 and #9. 11. More efficient operations. 12. Improve customer service and billing. 13. Same as #1. 14. Improve the budget procedure. 15. Improve the cash flow/revenues.</td>
</tr>
<tr>
<td>1. Lack of integration between Lagan, RouteSmart and FUNDS. 2. Use of land-based application to bill for refuse service, e.g., the County billing by parcel. The County’s system can show an account as commercial, but is could be residential. 3. There is no account receivable reconciliation report that end users can run.</td>
<td>Stop Service 16. Same as #1. 17. Affects removal. 18. The containers do not get removed from the location. 19. Impacts the final bill the customer receives. 20. It can impact the new account. 21. In residential, may inherit the problems from the previous customer. 22. Same as #1. 23. Inefficient. 24. Staff time. 25. Redundancy. 26. Same as #19. 27. Duplicate data entry. 28. Impacts collection crews because it does not get removed from the route books and crews may be sent for no reason.</td>
<td>2. Revise and update existing operational policies, business process improvement. 3. Implement Routing Software. 4. Provide role-based training.</td>
<td>2. More efficient work processes. 3. Improved billing. 4. Same as #16. 5. Same as #16 and #17. 6. More accurate route books. 7. Happier employees. 8. Better use of collection crew resources. 9. Same as #16. 10. More accurate route books. 11. Better use of collection crew resources. 12. Happier customer. 13. Reduced follow-up calls. 14. More efficient. 15. Improved customer services.</td>
</tr>
</tbody>
</table>

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**Session 13: Public Works - Start of Service To-Be Process**

**Start of Service**

- **Customer Request Service**
  - **Customers**
    - Requests are made by:
      - Phone
      - Email
      - Letter
  - **Online Submission: Lagan case form CRM, which would make it easy for customers to have a user-friendly experience (default menus, pick lists, etc.)**
  - **ZeroOps**
  - **Public**
    - Can submit a work request into ZeroOps directly

- **Create Customer Account**
  - **Staff TBD**
    - Obtain customer information:
      - Name
      - Person on the Account
      - Address
      - Service location
      - Contact information
      - Customers included commercial/residential
  - Commercial customers require site inspection.
  - Assign to a route.
  - ZeroWaste will push information to ZeroRoute.
  - Residential recycling data will be pushed to Ecology Center.

- **Lagan CRM Case Created**

- **Finance Setup**

- **Public Works Deliveries Container**

- **Begin Service Delivery**

**Stop of Service**

- **Customer Request Stop of Service**
  - **Customers**
    - Requests are made by:
      - Phone
      - Email
      - Letter
  - **Online Submission: Lagan case form CRM, which would make it easy for customers to have a user-friendly experience (default menus, pick lists, etc.)**
  - **ZeroOps**
  - **Public**
    - Can submit a work request into ZeroOps directly

- **Update Customer Account (Resid / Commercial)**

- **Lagan Case Created**

- **Zero Waste Remove Containers**

**Notes:**
- Residential Recycling is provided by the Ecology Center (EC). EC is responsible for providing the customer with a cart, scheduling the collection day, and assigning to the appropriate collection route.
Session 13: Public Works - Start of Service To-Be Process

Start of Service

1. Customers Request Service
   - Requests are made by:
     - Phone
     - Email
     - Letter
     - Online Submission: CRM, which would make it easy for customers to have a user friendly experience (default menus, pick lists, etc.) feed Zero Ops
     - Public could submit a work request into ZeroOps directly.

2. Create Customer Account
   - Staff TBD
   - Obtain customer information:
     - Name
     - Person on the Account
     - Address
     - Service location
     - Contact information
     - Customers included commercial/residential.
     - Commercial customers require site inspection.
     - Assign to a route.
     - Residential 9 units or less, Ecology Center/recycling waste.
     - ZeroOps will push information to ZeroRoute.
     - Residential recycling data will be pushed to Ecology Center.

3. Public Works Delivers Container
   - Zero Waste Staff:
     - Route E-Book are updated daily.
     - Physical delivery of container.
     - Sometimes this includes removing a container.

4. Zero Waste Staff
   - Crews service container based on the service schedule:
     - weekly, twice/week, up to 7 days/week.
     - Update to Lagan and reallocation to Finance will be eliminated because this information was previous entered in ZeroOps.

Stop of Service

5. Stop of Service
   - Residential/Commercial
   - Staff TBD
   - The request in Zero Ops will update the customer account, and push out the work request for the crew to remove the containers.
   - The information will be pushed to Zero Route
   - Site inspection for commercial accounts, if necessary.
   - Residential recycling data will be pushed to Ecology Center.

6. Zero Waste Remove Containers
   - Container Maintenance Welders, Solid Waste Workers, Solid Waste Supervisor, Operations Manager
   - SSRS will be discontinued
   - The crew will be notified of the stop of service electronically
   - Remove containers
   - Update in Zero Truck and push that information to Zero Ops.

Software:
- Zero Ops: Customer Service Billing
- Zero Route: routing optimization software
- Zero Truck: Onboard system in the truck.

Notes:
- Residential Recycling is provided by the Ecology Center (EC). EC is responsible for providing the customer with a cart, scheduling the collection day, and assigning to the appropriate collection route.

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Session 13: Public Works - Start of Service To-Be Process

Information Technology Solutions

Refuse Billing Application. (R Bill)
Implement a system, from WO to billing, specifically for refuse.

Features/Functions
- Identify service location vs. billing location: address/mailing address.
- Automatically provide a bill with sufficient detail.
- Support mobile devices.
- Communication with the public via social media tools.
- Automated workflow.
- E-forms.
- Web enabled application.
- Customer access to their accounts.
- Data validation
- Ensure all the right questions are asked of customer up front.
- Provide Stop of Service information
- Ensure that information gets into the right system.
- Auto Payments
- Online portal for the Public to submit requests
- Online payments
- Mobile App
- Ability to provide temporary stops
- Support multiple languages
- Provide customer history
- Bottom up functionality, not top down

Interfaces
- Refuse Billing – CRM: customer service information, service address, service activity
- Ecology Center application: residential recycling
- Scale System
- Refuse Billing – GIS: service, billing, pick up location
- Refuse Billing – GPS: customer service information, service activity
- Refuse Billing – erma: TBD
- Refuse Billing - County System: to get owner information, parcel based
- Work Order System: Service information

Reports
- By Service location.
- Commercial customer service level and type.
- State report.
- Recycling report.
- Diversions.
- Billing schedules.
- Accounts Receivable reports.
- Ad Hoc reports.
- Route reporting
- By work order type, department, queue (allocation), requestor, and work order handler
- Can multi-sort (sort by multiple columns)

Other Solutions
- 2. Revise and update existing operational policies, business process improvement.
- 3. Implement Routing software.
- 4. Provide role based training.

Business Process / Operational Solutions

O 1. Step 1 Customer Request Service: Implement new Zero Ops and CRM software. Produce electronic CRM Requests and Zero Ops Requests. Eliminate Online Submissions. Online Submission: CRM, which would make it easy for customers to have a user friendly experience (default menus, pick lists, etc.) feed Zero Ops. Public could submit a work request into ZeroOps directly.


O 3. Step 3 Lagan CRM Case Created: This step is eliminated.

O 4. Step 4 Finance Setup: This step is eliminated.


O 6. Step 6 Begin Service Delivery: Implement new Zero Route and Zero Truck software. Eliminate old RouteSmart and Fund$ CX software. Updates to Lagan and Finance will be eliminated because this information was previous entered in ZeroOps.


O 8. Step 8 Customer Request Stop of Service: Implement new CRM and Zero Ops software. Produce electronic CRM requests and Zero Ops requests. Eliminate Online Submissions. CRM, which would make it easy for customers to have a user friendly experience (default menus, pick lists, etc.) feed Zero Ops. Public could submit a work request into ZeroOps directly.

O 9. Step 10 Lagan Case Created for the Site Inspection: This step will be eliminated.

O 10. Step 11 Zero Waste Inspection: This step will be eliminated.

O 11. Step 12 OK to Stop Service: This step will be eliminated.

O 12. Step 13 Contact Customer: This step will be eliminated.

O 13. Step 14 Update Customer Account (Residential/Commercial): Implement new Zero Ops and Ecology Center software. The request in Zero Ops will update the customer account, and push out the work request for the crew to remove the containers. The information will be pushed to Zero Route. Site inspection for commercial accounts, if necessary. Residential recycling data will be pushed to Ecology Center.

O 14. Step 15 Lagan Case Created: This step will be eliminated.

O 15. Step 16 Zero Waste Remove Containers: Implement new Zero Route and Zero Truck software. Remove existing Lagan and SSRS software. Eliminate hardcopy Cart/Bin List and produce Zero Truck Cart/ Bin E-List. SSRS will be discontinued. The crew will be notified of the stop of service electronically. Update Zero Truck and push that information to Zero Ops.


Management / Policy Solutions

M 1. There is a question as to whether the City needs to bill through the County. Need to review the agreement between the City and the County.

M 2. Roles and responsibilities for some activities need to be further defined, in general.
Session 20: Refuse Billing Process

To Be Process Symbol Legend

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- Car symbol: indicates the movement of information by car.
- Anchor symbol: indicates instance(s) where an external department or organization adversely impedes the effective execution of a business process.

As-Is Narrative Legend

1,4,7

Red Problem Number Keys: visual cues placed next to process steps where problem occurs in the existing business process. The same number can be used more than once for the same problem in several steps in the process.

Problems

Problem Statements: problems in the existing process, identifying any obstacle to the effective and efficient execution of a task or service delivery.

Impacts

Impact Statement: quantitative or qualitative impact to the effective and efficient execution of an internal business process or service delivery to the customer.

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Solution Statement: possible policy, process, and/or technology solutions.

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Information Technology

These solutions entail a variety of solutions, including the:
- Introduction of new Information Technologies
- Replacement of existing systems with new technologies
- Enhancement of existing Information Technologies/Systems to compliment new management policies.
- Enhancement of existing Information Technologies as identified in the Rapid Workflow™ workshops as Business Process Improvement opportunities.
- Integration of proposed technologies with existing technologies

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Session 20: Refuse Billing As-Is Process

Residential: Annual

7 Prepare the Annual Charges
   Accounting Office Specialist III, Supervisor
   • Do service changes
   • All misc. charges are entered into the customer account
   • Run the preliminary register per account for review

Update the Account
   Accounting Office Specialist III, Supervisor
   • Update the service address to a parcel in August

Convert Account to Parcel
   Supervisor
   • Convert the service address to a parcel in August

4 Tax Assessment
   Revenue Collection Manager, Assistant Management Analyst
   • Run the legend in August
   • Create and load into the County Portal
   • Print hardcopy preliminary registers and place in binders
   Note: This is an activity that is part of the annual Special Assessment process

1,3 County Tax Assessment
   County Auditor
   • They take the City information and place on the tax bill
   • Remove things that may be exempt
   Note: This is an activity that is part of the annual Special Assessment process

1,3 Exception
   CX Refuse FUND
   • Do service changes
   • All misc. charges are entered into the customer account
   • Run the preliminary register per account for review

6 Recognize Revenue
   Accounting, Treasury
   • Receive an ACH wire transfer
   • Deposit directly into the Revenue Account

Residential/Commercial: Quarterly

1,3,5,6 Prepare the Quarterly Charges
   Accounting Office Specialist III, Supervisor
   • Do service changes
   • All misc. charges are entered into the customer account
   • Run the preliminary register per account for review

Update the Account
   Accounting Office Specialist III, Supervisor
   • Update all of the final charges

Send the Bills
   Supervisor
   • Send the text file to a third party vendor for printing and mailing

Send Delinquent Notices
   Customer Service Specialist II, Customer Service Specialist III, AOS II, 3rd Party Vendor, Customer
   • Receive payments at lockbox
   • Payments are made in person or by phone, mailed in, or paid on line
   • Receive Cash Receipt file from third party (Bankrup)

Account Reconciliation
   Accounting, Account reconciliation
   • Field Rep, AOS III, AOSS
   • Prepare delinquent accounts
   • Put in an Excel file
   • Adjust the charges from the customer account

Interdepartmental

1,3 Tax File
   Supervisor
   • Send the text file to the department
   • Vendor prepares hardcopy bills

Charge Dept., Revenue
   Supervisor
   • Charge the department through an Adjust Journal

Create Cash Receipts
   Supervisor
   • Create a cash receipt

Post Payment
   Supervisor
   • Post payment
   • Update the accounts

General: 2,4,8

General: 2,5

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Session 20: Refuse Billing As-Is Process

### Problems

<table>
<thead>
<tr>
<th>Residential: Annual</th>
<th>Interdepartmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bills do not show the service level.</td>
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</tr>
<tr>
<td>2. On the annual, can’t make an adjustment in the middle of the year.</td>
<td>2. Not recognizing revenue at the time billing.</td>
</tr>
<tr>
<td>3. Can’t accept credits.</td>
<td>3. Not recognizing revenue at the time billing.</td>
</tr>
<tr>
<td>4. Lack of transparency with the conversion.</td>
<td>4. Departments do not provide correct expense account code.</td>
</tr>
<tr>
<td>5. Customers can’t view their accounts online.</td>
<td>5. Departments do not provide correct expense account code.</td>
</tr>
<tr>
<td>6. There is no reconciliation (No solution).</td>
<td>6. Staff do not know what is happening.</td>
</tr>
<tr>
<td>7. Not recognizing revenue at the time billing.</td>
<td>7. Generates calls to 311.</td>
</tr>
</tbody>
</table>

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<td>3. Not recognizing revenue at the time billing.</td>
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<td>4. Customers can’t set up autopay.</td>
<td>4. Customers can’t set up autopay.</td>
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<tr>
<td>5. If no money is due, customers can’t see their account online.</td>
<td>5. Staff do not know what is happening.</td>
</tr>
<tr>
<td>6. Do not provide e-billing, only paper invoices.</td>
<td>6. Potential loss of revenue.</td>
</tr>
<tr>
<td>7. Difficult to produce delinquency notices.</td>
<td>7. - Billing is incorrect.</td>
</tr>
<tr>
<td>8. Commercial: Land management system restricts location ID to a 1 to 1 ratio.</td>
<td>- Staff do not know what is happening.</td>
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### Impacts

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<td>- Customer confusion and phone calls.</td>
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<tr>
<td>- Could lose revenue if the City has been under billing.</td>
</tr>
<tr>
<td>2. - Delay in making adjustments.</td>
</tr>
<tr>
<td>3. - Have to convert them to quarterly billing.</td>
</tr>
<tr>
<td>4. - More staff time spent.</td>
</tr>
<tr>
<td>- Staff do not know what is happening.</td>
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<td>5. - Customer service, customer calls to the City</td>
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<tr>
<td>6. - Potential loss of revenue.</td>
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<td>7. - Accounting has to make an Adjustment Entry</td>
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<td>- Staff time.</td>
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<td>5. - Customer confusion.</td>
</tr>
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<td>- Generates calls to 311</td>
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<tr>
<td>6. - Inconvenient to customers</td>
</tr>
<tr>
<td>7. - Reduced cash flow, timing issues</td>
</tr>
<tr>
<td>8. - Customer confusion</td>
</tr>
<tr>
<td>- Lack of delinquency notices</td>
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</tr>
<tr>
<td>2. - Delay in making adjustments.</td>
</tr>
<tr>
<td>3. - Cost to the City, paying for a vendor</td>
</tr>
<tr>
<td>4. - Increased staff time.</td>
</tr>
<tr>
<td>- Unable to get the money.</td>
</tr>
<tr>
<td>- Staff phone calls to collect funds</td>
</tr>
<tr>
<td>- Can result in AJs.</td>
</tr>
</tbody>
</table>

### Solutions

#### Refuse Billing System:

##### Features & Functions

- Customer driven / user friendly functionality
- Bills show the service for all service line by line
- Terminology on the bill should make sense to the customer, no acronyms
- Show the dates of service changes
- Provide E-Billing
- Provide ability to adjust annual billing by converting it to a quarterly
- Provide ability to view accounts online and full account history
- Recognize revenue at the time billing.
- Provide ability to set up autopay (linked to e-billing)
- Provide ability to produce delinquency notices easily with some flexibility.
- Ability to bill one address with multiple bills.
- Data validation (with erma)
- Provide fewer charge codes for what is being billed, monthly, quantity and number of pick-ups would calculate the fees.
- Ability to support various rates and charges, changed every year: RATE CODES

##### Reports

- Delinquency report
- Aging report
- Revenue report
- Reports by daily, weekly, monthly, quarterly, on demand
- Ad hoc reports

##### Interfaces

- erma
- Routing
- CRM (Lagan)
- Work Order System

### Benefits

<table>
<thead>
<tr>
<th>Residential: Annual</th>
<th>Residential/Commercial: Quarterly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. - Less customer confusion</td>
<td>1. - Less customer confusion</td>
</tr>
<tr>
<td>2. - Improved customer services.</td>
<td>2. - Improved customer services.</td>
</tr>
<tr>
<td>3. - Same as #2.</td>
<td>3. - Same as #1.</td>
</tr>
<tr>
<td>4. - Same as #1.</td>
<td>5. - Improved customer services.</td>
</tr>
<tr>
<td>6. - Improved city cash flow.</td>
<td>6. - Improved city cash flow.</td>
</tr>
<tr>
<td>- Improved analysis.</td>
<td>- Improved analysis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interdepartmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Less customer confusion</td>
</tr>
<tr>
<td>2. - Improved city cash flow.</td>
</tr>
<tr>
<td>3. - Improved analysis.</td>
</tr>
<tr>
<td>4. - Staff time savings.</td>
</tr>
</tbody>
</table>
Session 20: Refuse Billing To-Be Process

**Residential: Annual**

- **Prepare the Annual Charges**
  - Accounting Office Specialist III, Supervisor
  - Do service changes.
  - All miscellaneous charges are entered into the Billing customer account, and it will send appropriate information to erma (i.e., changes to service, can sizes, etc.)
  - Run the preliminary register per account for review.
  - Once a year, email customers courtesy billing notification with account/service details.

- **Update the Account**
  - Accounting Office Specialist III, Supervisor
  - Update the account.

- **Convert Account to Parcel**
  - Supervisor
  - Convert the service address to a parcel in August.

- **Tax Assessment**
  - Revenue Collection Manager, Associate Management Analyst, and Assistant Management Analyst
  - Run the legend in August.
  - Create and load into the County Portal.
  - Print hardcopy preliminary registers and place in binders.
  - Note: This is an activity that is part of the annual Special Assessment process.

- **County Tax Assessment**
  - County Auditor
  - They take the City information and place on the tax bill.
  - Remove things that may be exempt.
  - Note: This is an activity that is part of the annual Special Assessment process.

- **Recognize Revenue**
  - Accounting and Treasury
  - Receive an ACH wire transfer.
  - Deposit directly into the Revenue Account.

**Residential/Commercial: Quarterly**

- **Prepare the Quarterly Charges**
  - Accounting Office Specialist III and Supervisor
  - Do service changes.
  - All miscellaneous charges are entered into the customer account.
  - Run the preliminary register per account for review.

- **Update the Account**
  - Accounting Office Specialist III and Supervisor
  - Update the account.

- **Send the Bills**
  - Supervisor
  - Send the text file from Billing to a third party vendor for printing and mailing.

- **Receive Payments**
  - Customer Service Specialist II, Customer Service Specialist III, AOS II, 3rd Party Vendor, and Customer
  - Receive payments at lockbox.
  - Payments are made in person, by phone, mailed in, or paid online.
  - Receive Cash Receipt file from third party (Bankrup).

- **Send Delinquent Notices**
  - Field Rep
  - Run a delinquency report.
  - DMS Billing system will produce letters.
  - Print and mail the delinquent notices.

- **Account Reconciliation**
  - Accounting
  - Account reconciliation will be done in Billing system.

- **Prepare Delinquent Account for Liens**
  - Field Rep, AOS III, and AOSII
  - Prepare delinquent accounts automatically by the Billing system, based on some criteria.
  - Put in an Excel file.
  - Adjust the charges from the customer account.
Session 20: Refuse Billing To-Be Process

Interdepartmental

Prepare the Quarterly Charges 14
Accounting Office Specialist III and Supervisor
- Do service changes.
- All miscellaneous charges are entered into the customer account.
- Run the preliminary register per account for review.

Update the Account 15
Accounting Office Specialist III and Supervisor
- Update all of the final charges.

Send the Bills 16
Supervisor
- Send the text file to the department.
- Vendor prepares hardcopy bills.

Charge Department Revenue 17
Supervisor
- Charge the department through an Adjust Journal.
- Billing will provide account data to erma (interface).

Create Cash Receipts 18
Supervisor
- Create a cash receipt.

Post Payment 19
Supervisor
- Post payment.
- Update the accounts.

NOTE: Will the 3rd party still be needed if this is automated?
Session 20: Refuse Billing To-Be Process

Residential: Annual

1. Prepare the Annual Charges, Accounting Office Specialist III, Supervisor
   - Do service changes.
   - All miscellaneous charges are entered into the Billing customer account, and it will send appropriate information to erma (e.g., changes to service, service sizes, etc.)
   - Run the preliminary register per account for review.
   - Once a year, email customers courtesy billing notification with account/service details.

2. Update the Account to Parcel, Accounting Office Specialist III, Supervisor
   - Update all of the final charges.

3. Convert Account to Parcel, Supervisor
   - Convert the service address to a parcel in August.

4. Tax Assessment, Revenue Collection Manager, Associate Management Analyst, and Assistant Management Analyst
   - Run the legend in August.
   - Create and load into the County Portal.
   - Print hardcopy preliminary registrers and place in binders.
   - Note: This is an activity that is part of the annual Special Assessment process.

5. County Tax Assessment, County Auditor
   - They take the City information and place on the tax bill.
   - Remove things that may be exempt.
   - Note: This is an activity that is part of the annual Special Assessment process.

6. Recognize Revenue, Accounting and Treasury
   - Receive Cash Receipt file from third party vendor.
   - Receive an ACH wire transfer.
   - Deposit directly into the Revenue Account.

Residential/Commercial: Quarterly

4. Prepare the Quarterly Charges, Accounting Office Specialist III and Supervisor
   - Do service changes.
   - All miscellaneous charges are entered into the customer account.
   - Run the preliminary register per account for review.

5. Update the Account, Accounting Office Specialist III and Supervisor
   - Update all of the final charges.

6. Send the Bills, Supervisor
   - Send the text file from Billing to a third party vendor for printing and mailing.

   - Receive payments at lockbox.
   - Payments are made in person, by phone, mailed in, or paid online.
   - Receive Cash Receipt file from third party (Bankup).

8. Send Delinquent Notices, Field Rep
   - Run a delinquency report.
   - Billing system will produce letters.
   - Print and mail the delinquent notices.

9. Account Recomplilation, Accounting
   - Account reconciliation will be done in Billing.

10. Prepare Delinquent Account for Liens, Field Rep, AOS III, and AOS
    - Prepare delinquent accounts automatically by the Billing system, based on some criteria.
    - Put in an Excel file.
    - Adjust the charges from the customer account.
Session 20: Refuse Billing To-Be Process

Interdepartmental

14. Prepare the Quarterly Charges
   - Accounting Office Specialist III and Supervisor
   - Do service changes.
   - All miscellaneous charges are entered into the customer account.
   - Run the preliminary register per account for review.

15. Update the Account
   - Accounting Office Specialist III and Supervisor
   - Send the text file to the department.
   - Vendor prepares hardcopy bills.

16. Send the Bills
   - Supervisor
   - Charge the department through an Adjust Journal.
   - Billing will provide account data to erma (interface).

17. Charge Department Revenue
   - Supervisor
   - Create a cash receipt.
   - Billing will provide account data to erma systems?

18. Create Cash Receipts
   - Supervisor
   - Post payment.
   - Update the accounts.

19. Post Payment
   - Supervisor

NOTE: Will the 3rd party still be need if this is automated?
**Session 20: Refuse Billing To-Be Process**

**Information Technology Solutions**

**Features and Functions**
- Billing Invoice
- Customer Accounts
- Customer DB
- Equipment Tracking
- Inventory Management
- Routing
- Scheduling
- Waste Disposal
- Work Order Management
- One point for data entry
- Data validation
- Review and allocated crews automatically
- Mobile application
- GPS features
- GIS features
- Routing Capabilities
- Sign Off on Work Orders
- Generate E-Work Order, when needed
- Distribute Work Orders automatically to the appropriate field crews based on the work activities
- Provide real time status of the Work Order
- Work Order data will be available to all groups that need it
- E-Forms: smart forms that adjust to the specific activity in the field, detailed information
- Provide the history of Customer Account
- Provide a central, common repository of information and Work Order related data
- Provide user friendly reporting and analytics
- Provide ability to edit and close out a Work Order in the field
- Ability to track Work Orders
- Support spatial data interactively
- Support video
- Support storing electronic photographs
- Workflow Automation:
  - Electronic routing
  - Approvals
  - Escalation
  - Auto-notifications
  - Status checking
- Follow-ups
- Reminders
- E-signatures
- Provide ability to show staff their tasks for the day
- Integrated ‘Route Books.’
- Provide scheduling capabilities
- On-site Inventory Management
- Ability to track like or related Work Orders
- Provide a contemporary GUI, including pull downs, pick list, radio buttons
- Provide ability to pull up maps and edit them, i.e. add items to the map
- Online app supporting multiple languages
- Speech to text dictation
- Online portal, with terminology descriptions

**Interfaces**
- Refuse Billing – Routing Software
- Refuse Billing – CRM: customer service information, service address and service activity
- Refuse Billing – GIS: service, billing and pick up location
- Refuse Billing – GPS: customer service information and service activity
- Refuse Billing – erma: TBD
- Refuse Billing – County System: to get owner information, parcel based
- Work Order System: Service Information

**Reports**
- By Service location
- Commercial customer service level and type
- State report
- Recycling report
- Diversion
- Billing schedules
- Accounts Receivable reports
- Ad Hoc reports
- Route reporting
- By work order type, department, queue (allocation), requestor, and work order handler.
- Can multi-sort (sort by multiple columns)

**Other Solutions**
- Revise and update existing operational policies and business process improvement
- Implement Routing software
- Provide role-based training
Session 20: Refuse Billing To-Be Process

Operational Solutions

The following notes reflect changes to the existing business process, as illustrated in the As-Is Process Model.

Residential: Annual

O 1. Step 1 Prepare the Annual Charges: Replace FUND$ CX and erma with new Refuse Billing software. In the future state process, all miscellaneous charges are entered into the Billing customer account, and it will send appropriate information to erma (i.e., changes to service, can sizes, etc.) Once a year, email customers courtesy billing notification with account/service details.

O 2. Step 2 Update the Account: Replace FUND$ CX with new Refuse Billing software.

O 3. Step 3 Convert Account to Parcel: Remove existing FUND$ CX software.


Residential/Commercial: Quarterly

O 5. Step 4 Prepare the Quarterly Charges: Replace FUND$ CX with new Refuse Billing software.


O 7. Step 6 Send the Bills: Implement new Billing systems. Send the text file from Billing to a third party vendor for printing and mailing.


O 10. Step 9 Account Recompilation: Replace FUND$ CX with new Refuse Billing software. Account reconciliation will be done in Billing system.


O 12. Step 14 Prepare the Quarterly Charges: Replace FUND$ CX with new Refuse Billing software.


O 15. Step 17 Charge Department Revenue: Replace FUND$ CX and FUND$ CR with new erma software and the new Refuse Billing software. Billing will provide account data to erma (interface).


Interdepartmental

O 12. Step 14 Prepare the Quarterly Charges: Replace FUND$ CX with new Refuse Billing software.


O 15. Step 17 Charge Department Revenue: Replace FUND$ CX and FUND$ CR with new erma software and the new Refuse Billing software. Billing will provide account data to erma (interface).


Policies

M 1. The implementation of Refuse Billing will require recognizing the those staff will also use erma, use two systems.

M 2. Will the internal billing 3rd party still be needed if this is automated by Billing module and erma?

M 3. Implement annual residential courtesy notice on rates and service levels.

M 4. The system of record is the new Refuse Billing Systems.
Session 11: Zero Waste Work Orders To-Be Business Process

To Be Process Symbol Legend

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>Customer: indicates an internal or external customer coming to initiate or receive services.</td>
</tr>
<tr>
<td>Square</td>
<td>Existing process step box symbol: indicates a step in the business process.</td>
</tr>
<tr>
<td>Square</td>
<td>New process step box symbol: indicates a new step in a business process.</td>
</tr>
<tr>
<td>Square</td>
<td>Existing process step box symbol: indicates an existing step in a business process that will be eliminated in the future state.</td>
</tr>
<tr>
<td>Triangle</td>
<td>Decision tree symbol: indicates Y/N options or decision in a business process.</td>
</tr>
<tr>
<td>Arrow</td>
<td>Directional arrow: indicates the direction of a process on steps going forward, a dashed line indicates a feedback loop. A Blue arrow indicates an step using workflow automation.</td>
</tr>
<tr>
<td>Envelope</td>
<td>Hardcopy documents: A black doc indicates a system produced document or documents that start out as hardcopy. An &quot;F&quot; in the symbol indicates a fax. A red-lined doc indicates an existing document that will be eliminated in the future state.</td>
</tr>
<tr>
<td>Envelope</td>
<td>A multiple document symbol indicates a packet/package of documents.</td>
</tr>
<tr>
<td>Circle</td>
<td>Electronic documents/content/files: indicates a system produced document or documents that start out as hardcopy that are scanned and stored electronically. (This could also include future digital photos, digital video, or digital recordings.)</td>
</tr>
<tr>
<td>Circle</td>
<td>Electronic Form: &quot;E&quot; indicates an electronic form. An &quot;X&quot;: in the document symbol indicates a requirement for an E-Signature.</td>
</tr>
<tr>
<td>Letter E</td>
<td>Envelope symbol: indicates mail, internal or external correspondence. An &quot;E&quot;: in the envelope indicates email and it blue, indicates auto-notifications or emails.</td>
</tr>
<tr>
<td>Square Database</td>
<td>Existing database symbol: indicates existing software/database, using a commercial off-the-shelf/custom developed application. A red symbol denotes an existing software to be eliminated/replaced.</td>
</tr>
<tr>
<td>Square Database</td>
<td>New database symbol: indicates new software/database, commercial off-the-shelf/custom developed application. The type of system is noted inside or adjacent to the symbol.</td>
</tr>
<tr>
<td>Vertical File</td>
<td>Vertical file, box, binder and CD-ROM symbols: indicates existing hardcopy file storage, onsite/offsite document archives, or electronic file storage.</td>
</tr>
<tr>
<td>Car</td>
<td>Car symbol: indicates the movement of information by car.</td>
</tr>
<tr>
<td>Anchor</td>
<td>Anchor symbol: indicates instance(s) where an external department or organization adversely impedes the effective execution of a business process.</td>
</tr>
</tbody>
</table>

As-Is Narrative Legend

<table>
<thead>
<tr>
<th>Problem</th>
<th>1,4,7,8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem</td>
<td>Red Problem Number Keys: visual cues placed next to process steps where problem occurs in the existing business process. The same number can be used more than once for the same problem in several steps in the process.</td>
</tr>
<tr>
<td>Problem</td>
<td>Problem Statements: problems in the existing process, identifying any obstacle to the effective and efficient execution of a task or service delivery.</td>
</tr>
<tr>
<td>Impact</td>
<td>Impact Statement: quantitative or qualitative impact to the effective and efficient execution of an internal business process or service delivery to the customer.</td>
</tr>
<tr>
<td>Solution</td>
<td>Solution Statement: possible policy, process, and/or technology solutions.</td>
</tr>
<tr>
<td>Benefit</td>
<td>Benefits Statement: quantitative/qualitative benefits to the internal/external group, enterprise or customers.</td>
</tr>
</tbody>
</table>

Future State Solutions Legend

| Management | These solutions entail new management policies and practices that are required as a result of introducing new information technology solutions and/or business process changes. Common examples include policy statements, organizational change, Change Management, Service Level Agreements, etc. |
| Process | These solutions entail the introduction of new business process steps -- or the elimination of existing business process steps, for Business Process Improvement, or as a result of introducing new Information Technology solutions identified in the Rapid Workflow™ workshops. Business Process/Operational solutions also include business process improvement opportunities identified as part of the Rapid Workflow™ business process analysis workshops that do not have any direct relationship to Information Technology. |
| Information | These solutions entail a variety of solutions, including the: |
| Information | • Introduction of new Information Technologies |
| Information | • Replacement of existing systems with new technologies |
| Information | • Enhancement of existing Information Technologies/Systems to compliment new management policies. |
| Information | • Enhancement of existing Information Technologies as identified in the Rapid Workflow™ workshops as Business Process Improvement opportunities. |
| Information | • Integration of proposed technologies with existing technologies |

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Session 11: Zero Waste Work Orders To-Be Business Process

1,5,11

A
Crew Initiated Request → Repair Type
- Zero Waste Crew
  - Identify that a cart or a bin needs repairing.

B
Repair Type → Truck Report
- Zero Waste Crew, OS II, Supv., Ops Manager
  - Crew write a truck report
  - Assign to repair crew.

C
Owner/City → Container Repair
- Owner
  - Repair bin or a cart.

D
Owner/City → Contact Owner
- Ops Manager, Customer
  - Contact the owner by phone so they can repair the bin.
  - Customer may choose to get a City bin, which will require them to call 311.

E
Service Changes → Truck Report
- Zero Waste Crew, OS III, Supv., Ops Manager
  - Crew identify crew and service days/container changes

F
Truck Report → 311 Enter into Lagan and FUND$ → Process Service Change
- 311
  - Enter truck report into FUND$ & Create a Lagan Case

G
Process Service Change → 311 Create Lagan Case
- 311
  - Create another Lagan Case

General:
2,3,4,6,7,9,10,13,14,15,18,19,23,24,25
## Session 11: Zero Waste Work Orders To-Be Business Process

### Problems

1. The information may be missing or incorrect in the Lagan case.
2. Lack of integration between Lagan Funds and RouteSmart.
3. Lagan is not a Work Order system.
4. Paperwork gets lost.
5. Problems are not always reported from the field.
6. This is a top down computer software, not a customer based software.
7. FUNDS is not user friendly.
8. There is a lag time for the routes to be updated.
9. Existing systems do not accommodate real time update, or provide access to information.
10. Duplicate data entry.
11. Truck reports are written by hand and then typed up.
12. Existing accounts in FUNDS have not been audited, and some are not updated.
13. Lagan reports do not reflect needed information.
14. The current process and/or system do not converge, there is allot of duplication.
15. It is difficult to pull data, analysis is difficult.
16. There could be multiple of the same ticket types.
17. It's challenging to connect two separate actions for container types: bins, carts, and dumpsters.
18. Do not have a systematic process for maintenance.
19. This is a manual intensive process.
20. Various service changes do not get reflected in the billing received by residential customers.
21. The Online Service Center does not force required information to be collected.
22. Do not have access to information from the field.
23. There is no workflow automation for this process.
24. Customers are not familiar with the City terminology, i.e., when they say bin it means cart.
25. Staff does not fully know how to utilize Lagan and FUNDS.
26. Zero Waste do not use GPS and GIS. (The Funds system is set up using a Parcel method.)

### Solutions

#### Implement Work Order / Billing Applications

**Features & Functions**

- One point for data entry.
- Data validation
- Review and allocated crews automatically
- Mobile application
- GPS features
- GIS features
- Routing Capabilities
- Sign Off on WOs
- Generate E-Work Order, when needed.
- Distribute Work Orders automatically to the appropriate field crews based on the work activities.
- Provide real time status of the Work Order.
- Work Order data will be available to all groups that need it.
- E-Forms: smart forms that adjust o the specific activity in the field, detailed information.
- Provide the history Customer Account
- Provide a central, common repository of information and Work Order relied data.
- Provide user friendly reporting and analytics.
- Provide ability to edit and close out a Work Order in the field.
- Ability to track Work Orders.
- Support spatial data, interactively.
- Support video.
- Support storing electronic photographs
- Workflow Automation
  - Electronic routing
  - Approvals
  - Escalation
  - Auto-notifications
  - Status checking
  - Follow-ups
  - Reminders
  - E-signatures
- Provide ability to show staff their tasks for the day.

#### Benefits

1. Improved efficient process.
   Fewer complaints.

## Reports

- Report by Service Type
- Report on Work Orders.
- Completed Work Orders
- Open Work Orders
- Completed Work Orders, by location
- Open Work Orders, by location
- Onsite Inventory reports
- Customer History Reporting
- Tonnage Report
- Contamination Reports
- Customer Reports
- Data analytics
- Dashboard

## Interfaces

- GIS
- GPS
- Erma (Finance/Billing)
- CRM
- PC Scale (scale house software at Transfer station)
- Route Management software
- City website
Session 11: Zero Waste Work Orders To-Be Business Process

1. Receive Requests
2. Missed / Special Pick Up
3. Create a Lagan Case
4. Transfer Station Review/Dispatch Short Term Service
5. Do the Work
6. Sign Off on Work Order
7. Print Out Report
8. Yes
9. Finance, Revenue Collection
10. Update Route Books
11. No
12. Rev Collection Supv., OS II Supv., IT APA
13. Print out route books.

- 311 Create Lagan Case, Send to transfer station.
- Dispatch to crew.
- Work Orders will be elected and sent to the appropriate crew.
- Roll Off Container, Bins, and Carts.
- Zero Waste Crews, Service the container.
- Zero Waste Crews, OS III, Ops Manager Electronically Sign-off on the work.
- The Work Order information will be pushed from Zero Truck to Zero Ops and CRM is returned to 311 or Revenue Collection.

- Container Size, Stolen/Stray Cart, Broken Cart/Bin
- Bulky Pickup
- Crew Initiated Request
- Zero Work Order will come into play if someone requests a container for an event (not for crew initiated request or missed pick-up).
- Zero Routing will be used for missed pick-up, etc.

- Eligible
- No Action Taken
- No
- Yes
- 311 Create Lagan Case, Enter notes into FUND$. 
- Print out report.
- Crew takes the report.
- Zero Waste Supv.
- If items are not out, they will write a truck report and leave it.
- If they get there and there is material that is not allowed, they will leave it.
- Remove the items placed out by the customer.
- Take photos if there is discrepancy.

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**Session 11: Zero Waste Work Orders To-Be Business Process**

**Notes:**

1. There is a narrow level of work that needs Work Orders in Zero Waste.
2. Zero Waste will require Routing, Mobile in Truck, and Customer Operation software.
3. The ‘Zero WO’ software is a module of the Customer Operations, ‘Zero Ops’ software in this process map.
4. The ‘Zero Truck’ software includes customer information and billing.
5. Staff roles and responsibilities will be assessed based on the software purchased and implemented.

**Management / Policy**

M 1. Billing through Tax Assessment (primarily residential). If a true refuse billing is implemented then City bills direct for refuse service. It will not be necessary to bill through Tax Assessment.

M 2. If 1 above is done, the customer will receive actual service information, i.e., days, sizes, materials.
**Session 11: Zero Waste Work Orders To-Be Business Process**

**Management / Policy**

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Session 11: Zero Waste Work Orders To-Be Business Process

Business Process / Operational Solutions

The following notes reflect changes to the existing business process, as illustrated in the As-Is Process Model.

- **Step 1 Receive Requests**: Adopt Zero Truck, Zero Route, and Zero WO applications. Zero WO will come into play if someone requests a container for an event (not for crew initiated requests or missed pick-ups). Zero Routing will be used for missed pick-ups, etc.
- **Step 2 Create CRM Case/VO**: Zero Ops and CRM will replace Lagan and Fund$ CX. An Interface will be required between the CRM and Zero Ops application (to push/pull information).
- **Step 7 Transfer Station Review/Dispatch**: Adopt Zero Truck, Zero Ops, and CRM applications. Discontinue Transfer Station Review. Work Orders will be electronically sent to the appropriate crews. Roll Off Container, Bins, and Carts.
- **Step 8 Do the Work**: Adopt Zero Truck and Zero Ops applications.
- **Step 9 Sign Off on Work Order**: Adopt Zero Truck, Zero Ops and CRM applications. E-Signatures will be used. WO information will be pushed from Zero Truck to Zero Ops and CRM.
- **Step 10 Special Pick-Up**: Delete.
- **Step 11 311 Close Out**: Delete.
- **Step 12 Finance Revenue Collection**: Delete this step.
- **Step 13 Update Route Book**: Delete.
- **Step 3 Update Route Book**: This step will proceed to step 6.
- **Step 14 Create a Lagan Case**: Delete.
- **Step 15 Print Out Report**: Delete.
- **Step 16 Do the Work**: Delete.
- **Step 17 Update Lagan**: Delete.

- **Step 18 Service Change**: Delete.
- **Step 19 Zero Waste Close the Case**: Delete.
- **Step 4 Bulky Pickup**: This step will proceed to step 6.
- **Step 20 Eligible**: Delete.
- **Step 21 No Action Taken**: Delete.
- **Step 22 Create Lagan Case**: Delete.
- **Step 23 Print out Report**: Delete.
- **Step 24 Do the Work**: Delete.
- **Step 25 Exceed Volume**: Delete.
- **Step 26 Zero Waste Close Case**: Delete.
- **Step 28 Repair Type**: Adopt Zero Truck/Zero Ops applications. If it’s a Bin, a decision needs to be made (Owner/City) if it’s an owner’s bin, it will go to a supervisor for contacting the customer. If it’s a city bin, the crew will go directly out to make the repair.
- **Step 29 Truck Report**: Delete.
- **Step 30 Container Repair**: Adopt Zero Truck/Zero Ops applications.
- **Step 31 Contact Owner**: Adopt CRM/Zero Ops applications.
- **Step 33 Service Changes**: Adopt Zero Ops application. Zero Waste Management needs customer approval; with additional research. This will trigger a physical inspection with mobile device.
- **Step 34 Truck Report**: Delete.
- **Step 35 311 Enter into Lagan and Fund$**: Delete.
- **Step 36 Process Service Change**: Adopt Zero Ops application to update the case. Eliminate the use of Lagan.
- **Step 37 311 Create Lagan Case**: Delete.

Information Technology Solutions

Implement Work Order Applications

**Features & Functions**
- Billing invoice
- Customer Accounts
- Customer Database
- Equipment Tracking
- Inventory Management
- Truck Routing
- Waste Disposal
- Work Order Management

**One point for data entry.**

- Data validation
- Review and allocated crews automatically
- Mobile application
- GPS features
- GIS features
- Routing Capabilities
- Sign Off on Work Orders
- Generate E-Work Order, when needed
- Distribute Work Orders automatically to the appropriate field crews based on the work activities
- Provide real time status of the Work Order
- Work Order data will be available to all groups that need it
- E-Forms: smart forms that adjust to the specific activity in the field, detailed information
- Provide the history Customer Account
- Provide a central, common repository of information and Work Order related data
- Provide user friendly reporting and analytics
- Provide ability to edit and close out a Work Order in the field
- Ability to track Work Orders
- Support spatial data, interactively
- Support video
- Support storing electronic photographs
- Workflow Automation:
  - Electronic routing
  - Approvals
  - Escalation
  - Auto-notifications

**Reports**
- Report by Service Type
- Report on Work Orders
- Completed Work Orders, by location
- Open Work Orders, by location
- Onsite Inventory reports
- Customer History Reporting
- Tonnage Report
- Contamination Reports
- Customer Reports
- Data analytics
- Dashboard

**Interfaces**
- GIS
- GPS
- erma (Finance/Billing)
- CRM
- PC Scale (scale house software at Transfer station)
- Route Management software
- City website

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