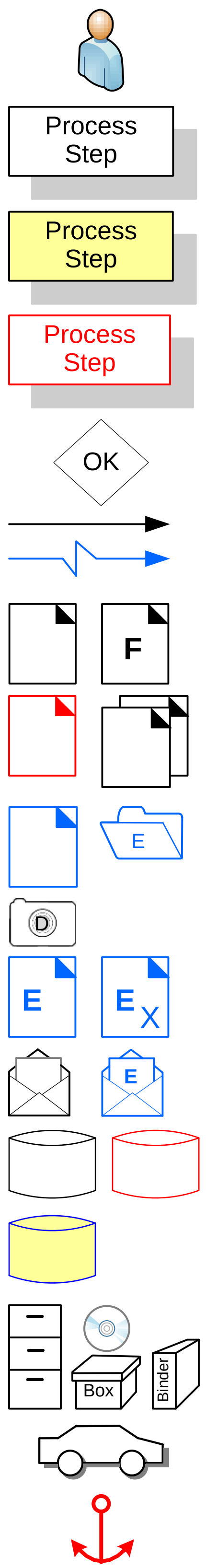
Session 13: Public Works - Start of Service Process

To Be Process Symbol Legend



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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.

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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 — 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.

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

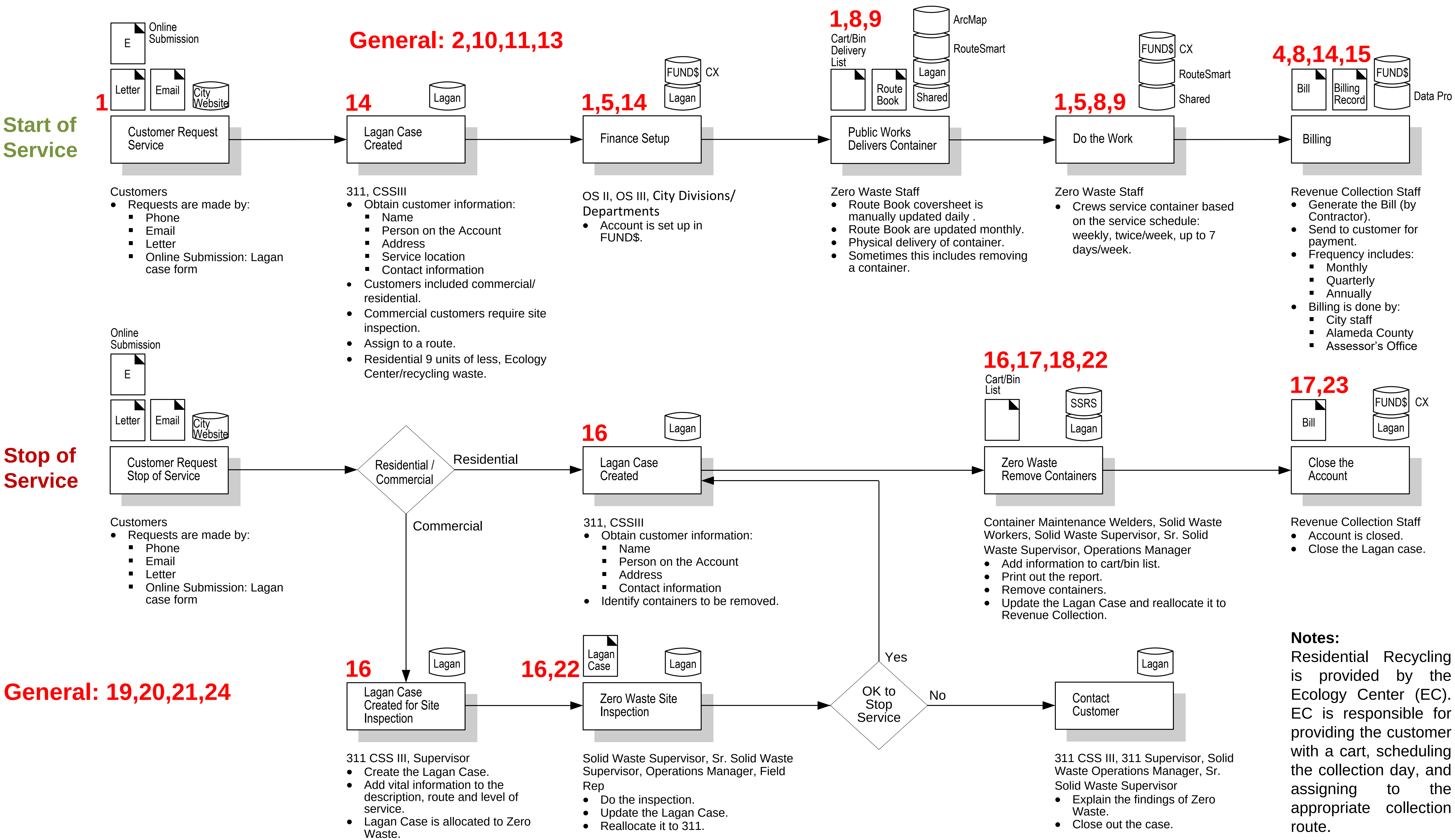
Management / Policy — These solutions entail new management policies and practices that are required as a result of introducing new information technology solutions and / or business process changes. Common examples include policy statements, organizational change, Change Management, Service Level Agreements,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



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Problems:

Start of Service
1. Accurately identifying the service location.
2. Getting reports with useful data for decision making.
4. Billing statements do not provide sufficient level of detail: e.g., correct quantity of level service and service dates.
5. Route books lack the appropriate information.
8. Inefficient process in closing cart delivery Lagan cases.
9. Lack of handheld devices for field staff.
10. Lack of real time communication between crews and 311 Customer Service and Zero Waste Management.
11. Inappropriate using a Customer Relationship Management system (Lagan) as a Work Order system.
13. Lack of integration between Lagan, Route Smart and FUND$.
14. 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.
15. There is no account receivable reconciliation report that end users can run.

Stop Service
16. Customer information, unit number may be missing in the Case, in commercial accounts.
17. Containers may not be removed in a timely manner, due to the process
18. The customer does not always put containers out.
19. There is no workflow automation.
20. A lack of integration and automation between FUND$, Lagan and RouteSmart.
21. Inefficient process with temporary stops of service.
22. A lack of access to containers, or the customer does not want to put the carts out.
23. Final Billing: is not immediate (it might be three months before they get another bill).
24. Systems lack the ability to have history on a property, FUND$ Billing System.

Impacts:

1. - Inefficient service delivery.
2. - Insufficient Operational Data
   - Same as #1.
   - Cost impacts.
4. - Customers could over pay or under pay.
   - Requires bill adjustments.
   - Generates customer questions.
5. - Same as #1 and #2.
   - Missed pick-ups.
8. - Same as #7.
9 - Same as #1 and #2.
   - Could impact billing.
10. - Same as #1, #2, and #9.
11. - Same as #7.
   - Missing tasks.
13. - Same as #1 and #11.
14. - Customers are billed an inaccurate rate.
15. - Makes it difficult to analyze revenue collections.
   - Impacts budgeting.

Stop Service
16. - Same as #1.
   - Affects removal.
17. - The containers do not get removed from the location.
   - Impacts the final bill the customer receives.
   - It can impact the new account.
   - In residential, may inherit the problems from the previous customer.
18. - Same as #1.
19. - Inefficient.
   - Staff time.
   - Redundancy.
20. - Same as #19.
   - Duplicate data entry.
   - Impacts collection crews because it does not get removed from the route books and crews may be sent for no reason.
21. - Inefficient.
   - Angry customers.
22. - Same as #1.
23. - Loss of revenue.
   - Angry customers.
24. - Affects customer service.
   - Frustrated staff.
   - Hard to analyze data.
   - Impacts container resources.

Solutions:

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 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 – Routing Software
- Refuse Billing – CRM: customer service information, service address, service activity
- 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
- 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

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

Benefits:

1. - Improved business processes.
   - Better reports with useful information for decision making.
   - Improved route books.
2. - Same as #1.
4. - Reduced calls to the Customer Service Center.
   - Satisfied customers.
   - Reduce staff time for multiple departments.
   - Billing calls/questions could go directly to Finance, eliminating the middle person
5. - Improved route optimization.
   - Same as #1.
8. - Same as #1.
9. - More efficient operation.
   - Improve customer service and billing.
10. - Same as #1 and #9.
11. - Same as #1.
13. - Same as #1.
14. - Same as #1.
15. - Improve the budget procedure.
   - Improve the cash flow/revenues.

Stop Service
16. - More efficient work processes.
17. - Same as #16.
   - Improved billing
18. - Same as #16.
19. - Same as #16 and #17.
   - More accurate route books.
20. - Same as #16 & 17.
   - Happier employees.
   - More accurate route books.
   - Better customer service.
21. - Same as #16.
   - More accurate route books.
   - Better use of collection crew resources.
22. - More accurate route books.
   - Better use of collection crew resources.
23. - Happier customer.
   - Reduced follow-up calls.
24. - More efficient.
   - Improved customer services.

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

Start of Service

1. Customer Request Service (Online Submission: E; Letter; Email; CRM Request; Zero Ops Request; CRM; Zero Ops; City Website)

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.) feed Zero Ops
  - Public could submit a work request into ZeroOps directly

2. Create Customer Account (Ecology Center; Zero Ops)

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 of less, Ecology Center/recycling waste.
- ZeroOps will push information to ZeroRoute.
- Residential recycling data will be pushed to Ecology Center.

3. Lagan CRM Case Created (Lagan)

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.

4. Finance Setup (FUND$ CX; Lagan)

OS II, OS III, City Divisions/ Departments
- Account is set up in FUND$.
- Finance sends to Zero Waste's "Delivery maintenance queue."

5. Public Works Delivers Container (Cart/Bin Delivery List; Route Book; Cart/Bin Delivery E-List; CRM; Zero Route; Zero Truck; Zero Ops; RouteSmart; Lagan; ArcMap; Shared)

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

6. Begin Service Delivery (RouteSmart; FUND$ CX; Zero Route; Zero Truck; Shared)

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

7. Billing (E Bill; E-Billing Record; FUND$; Zero Ops; Bill; Billing Record; Data Pro)

Revenue Collection Staff
- ZeroOps will generate the bill based on the account activity during the billing period.
- The existing Billing Record will be replaced with an electronic Bill Record in Zero Ops, which will sent to erma GL module.
- Electronic or hardcopy bills will be produced, dependent on the customer's preference.
- Accounts ready to be billed based on the billing schedule.
- Update the account and close lagan case with comments.
- Send file to Data Pro for printing and send bills to customers.
- Frequency includes:
  - Monthly - Billing
  - Quarterly - Billing
  - Annually-County (?)
- Billing is done by:
  - City staff
  - Alameda County via property tax bill
  - Assessor's Office

Stop of Service

8. Customer Request Stop of Service (Online Submission: E; CRM Request; Zero Ops Request; Letter; Email; CRM; Zero Ops; City Website)

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.) feed Zero Ops
  - Public could submit a work request into ZeroOps directly

9. Residential / Commercial — Residential → 14; Commercial → 10

14. Update Customer Account (Resid./ Commercial (Ecology Center; Zero Ops)

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.

15. Lagan Case Created (Lagan)

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

16. Zero Waste Remove Containers (Cart/Bin List; Zero Truck Cart/Bin E-List; Lagan; SSRS; Zero Route; Zero Truck)

Container Maintenance Welders, Solid Waste Workers, Solid Waste Supervisor, Sr. Solid Waste Supervisor, Operations Manager
- Add information to cart/bin list.
- Print out the report in SSRS will be discontinued.
- The crew will be notified of the stop of service electronically.
- Remove containers
- Update the lagan Case in Zero Truck and push that information to Zero Ops. reallocate it to Revenue Collection.

17. Close the Account (E Bill; E-Billing Record; Bill; Billing Record; Lagan; FUND$ CX)

Revenue Collection Staff
- Account is closed.
- Close the Lagan case.
- ZeroOps will generate the bill based on the account activity during the billing period.
- The existing Billing Record will be replaced with an electronic Bill Record in Zero Ops, which will sent to erma GL module.
- Electronic or hardcopy bills will be produced dependent on the customer's preference.
- Send first bill based on the billing schedule.

10. Lagan Case Created for Site Inspection (Lagan)

311 CSS III, Supervisor
- Create the Lagan Case.
- Add description, route and level of service, name, person on account, service address, forwarding address and contact information.
- Lagan Case is allocated to Zero Waste.

11. Zero Waste Site Inspection (Lagan Case; Lagan)

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

12. OK to Stop Service — Yes → 15; No → 13

13. Contact Customer (Lagan)

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

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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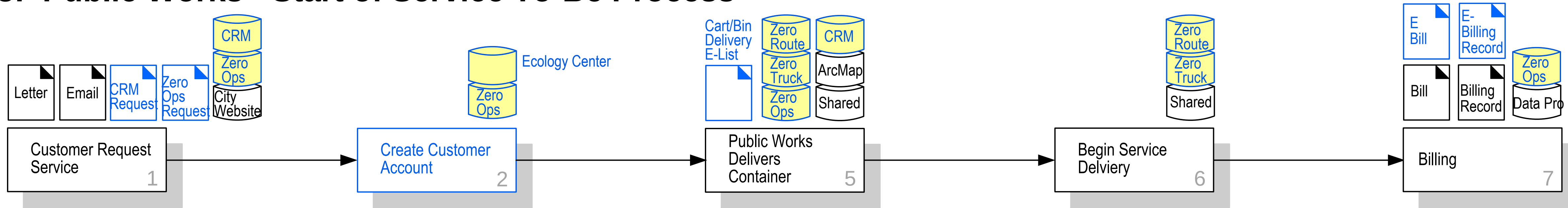
Start of Service



Customer Request Service (1)

Customers

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  - Letter
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Create Customer Account (2)

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- Obtain customer information:
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Public Works Delivers Container (5)

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- Route E-Book are updated daily.
- Physical delivery of container.
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Begin Service Delivery (6)

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Billing (7)

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- Billing is done by:
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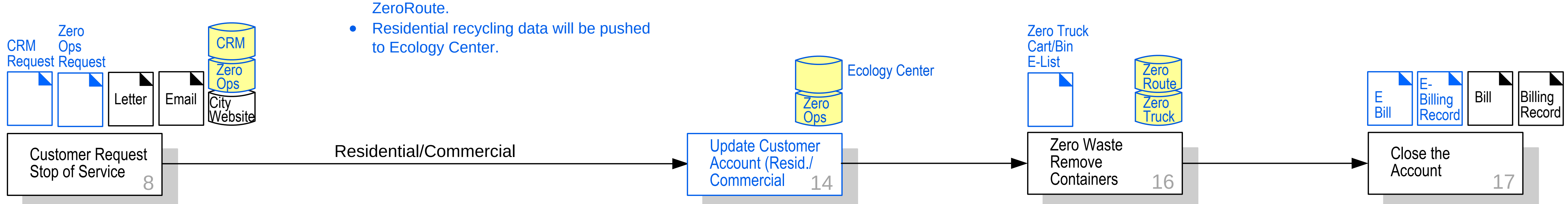
Stop of Service



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Update Customer Account (Resid./Commercial) (14)

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.

Zero Waste Remove Containers (16)

Container Maintenance Welders, Solid Waste Workers, Solid Waste Supervisor, Sr. 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.

Close the Account (17)

Revenue Collection Staff

- Account is closed.
- ZeroOps will generate the bill based on the account activity during the billing period.
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Information Technology Solutions

Refuse Billing Application.
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- 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.
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- 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.

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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 2. Step 2 Create Customer Account: Implement new Zero Ops and Ecology Center software. 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. ZeroOps will push information to ZeroRoute. Residential recycling data will be pushed to Ecology Center.

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

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

O 5. **Step 5 Public Works Delivers Container:** Implement new CRM, Zero Route, Zero Truck, and Zero Ops software. Eliminate old RouteSmart and Lagan software. Replace hardcopy Cart/Bin Delivery lists with Cart/Bin Delivery E-lists. Eliminate hardcopy RouteBooks. Route E-Book are updated monthly Daily.

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 7. **Step 7 Billing:** Replace FUND$ with new Zero Ops software. Produce electronic E-bills and E-Billing Records.

O 8. **Step 8 Customer Request Stop of Service:** Implemenet 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.

O 16. **Step 17 Close the Account:** Remove exiting Lagan and FUND$ CX software. Produce electronic Bills and Billing Records.

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

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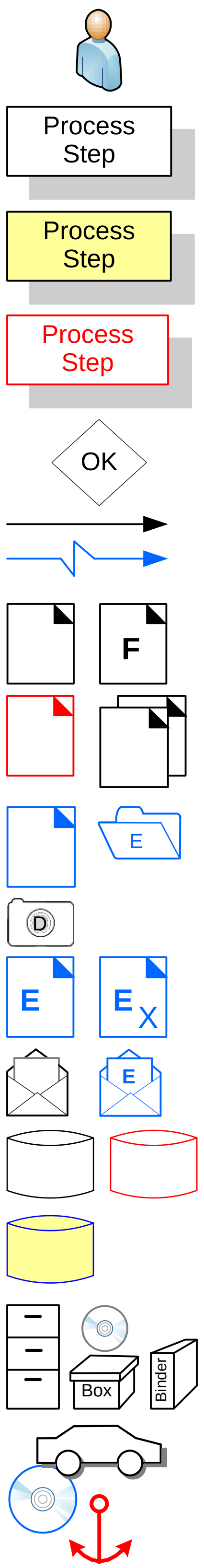

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Session 20: Refuse Billing As-Is Process

Residential: Annual

7 FUND$ CX Refuse Billing Module

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

FUND$ CX Refuse Billing Module

Update the Account

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

4 FUND$ Tax Assess. FUND$ CX Refuse Billing Module

Convert Account to Parcel

Supervisor
- Convert the service address to a parcel in August

Binder, Suummary Legend, Cover Memo, County Portal, FUND$ Tax Assess., FUND$ Land Manage

Tax Assessment

Revenue Collection Manager, Associate Management Analyst, 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 Exception Report, County Portal

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 ACH, FUND$ GMBA Module, ACH

Recognize Revenue

Accounting, Treasury
- Receive an ACH wire transfer
- Deposit directly into the Revenue Account

General: 2,5

Residential/Commercial: Quarterly

FUND$ CX Refuse Billing Module

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

FUND$ CX Refuse Billing Module

Update the Account

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

1,3,5,6 Bill, 3rd Party Website

Send the Bills

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

5 Letter, Credit, $, Check, City Website, FUND$ CR, Bankup, Lagan, FUND$ CX

Receive Payments

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 (Bankup)

7,8 Delinquent Notice, FUND$ CX, FUND$ DMS

Send Delinquent Notices

Field Rep
- Run a delinquency report
- DMS produces the letters
- Print and mail the delinquent notices

Recon Report, FUND$ CX

Account Reconcilaltion

Accounting
- Account reconciliation

Excel Report, FUND$ CX, Excel

Prepare Delinquent Account for Liens

Field Rep, AOS III, AOSS
- Prepare delinquent accounts
- Put in an Excel file
- Adjust the charges from the customer account

General: 2,4,8

Interdepartmental

FUND$ CX Refuse Billing Module

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

FUND$ CX Refuse Billing Module

Update the Account

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

1,3 Text File, FUND$ CX, 3rd Party Website

Send the Bills

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

FUND$ CR, FUND$ CX

Charge Dept. Revenue

Supervisor,
- Charge the department through an Adjust Journal

FUND$ CX, FUND$ DMS

Create Cash Receipts

Supervisor,
- Create a cash receipt

FUND$ CR, FUND$ CX

Post Payment

Supervisor,
- Post payment
- Update the accounts

General: 2,4

Session 20: Refuse Billing As-Is Process

Problems

Residential: Annual
1. Bills do not show the service level. Just the dollar amount.
2. On the annual, can't make an adjustment in the middle of the year.
3. Can't accept credits.
4. Lack of transparency with the conversion.
5. Customers can't view their accounts online.
6. There is no reconciliation (No solution)
7. Not recognizing revenue at the time billing.

Residential/Commercial: Quarterly
1. Bills do not show the service level. Just the dollar amount.
2. Customers can't view their accounts online.
3. Not recognizing revenue at the time billing.
4. Customers can't set up autopay.
5. If no money is due, customers can's see their account online.
6. Do not provide e-billing, only paper invoices.
7. Difficult to produce delinquency notices.
8. Commercial: Land management system restricts location ID to a 1 to 1 ratio.

Interdepartmental:
1. Bills do not show the service level. Just the dollar amount.
2. Not recognizing revenue at the time billing.
3. Do not provide e-billing, only paper invoices.
4. Departments do not provide correct expense account code.

Impacts

Residential: Annual
1. - Billing is incorrect.
   - Customer confusion and phone calls.
   - Could lose revenue if the City has been under billing.
2. - Delay in making adjustments.
3. - Have to convert them to quarterly billing.
4. - More staff time spent.
   - Staff do not know what is happening.
5. - Customer service, customer calls to the City
6. - Potential loss of revenue.
7. - Accounting has to make an Adjustment Entry
   - Staff time.

Residential/Commercial: Quarterly
1. - Billing is incorrect.
   - Customer confusion and phone calls.
   - Could lose revenue if the City has been under billing.
2. - Delay in making adjustments.
3. - Accounting has to make an Adjustment Entry
   - Staff time.
4. - Customer service,
   - Generates calls to 311
5. - Customer confusion.
   - Generates calls to 311
6. - Inconvenient to customers
7. - Reduced cash flow, timing issues
8. - Customer confusion
   - Lack of delinquency notices

Interdepartmental:
1. - Billing is incorrect.
   - Customer confusion and phone calls.
2. - Delay in making adjustments.
3. - Cost to the City, paying for a vendor
4. - Increased staff time.
   - Unable to get the money.
   - Staff phone calls to collect funds
   - Can result in AJs.

Solutions

Refuse Billing System:

Features & Functions
- Customer driven / user friendly functionality
- Bills show the service for all service 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

Residential: Annual
1. - Less customer confusion
2. - Improved customer services.
3. - Same as #2.
4. - Same as #1.
5. - Improved customer services.
   - More accurate billing.
   - More transparency.
6.
7. - Improved city cash flow.
   - Improved analysis.

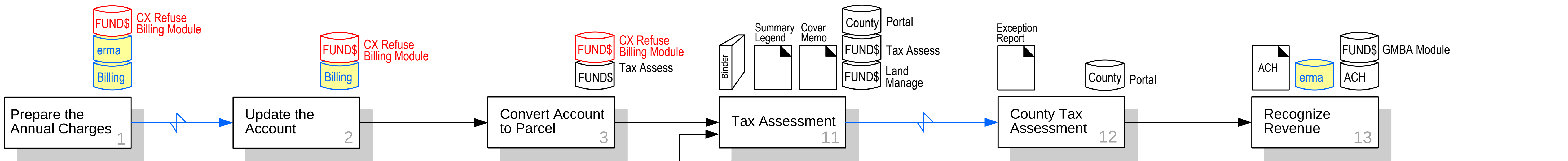
Residential/Commercial: Quarterly
1. Less customer confusion
2. Improved customer services.
3. - Improved city cash flow.
   - Improved analysis.
4. - Improved city cash flow.
   - Fewer delinquent accounts
   - Improved customer service
   - Reduced use of paper
5. - Improved customer service
   - Reduced calls to 311
   - Improved cash flow
   - More business friendly
6. - Reduced use of paper/
   - Easier for customers to pay
   - More timely payments
   - Reduced delinquencies
7. - Get paid quicker
   - Staff time savings.
8. - Eliminate customer confusion
   - Produce less paper and mailing costs.

Interdepartmental
1. Less customer confusion
2. - Improved city cash flow.
   - Improved analysis.
3. - Eliminate customer confusion
   - Produce less paper and mailing costs
4. - Staff time savings.

Session 20: Refuse Billing To-Be Process

Residential: Annual

Notes:
1. Assumes Billing will replace FUNDS CX Refuse Billing.



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 (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.

2. Update the Account
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.

11. 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.

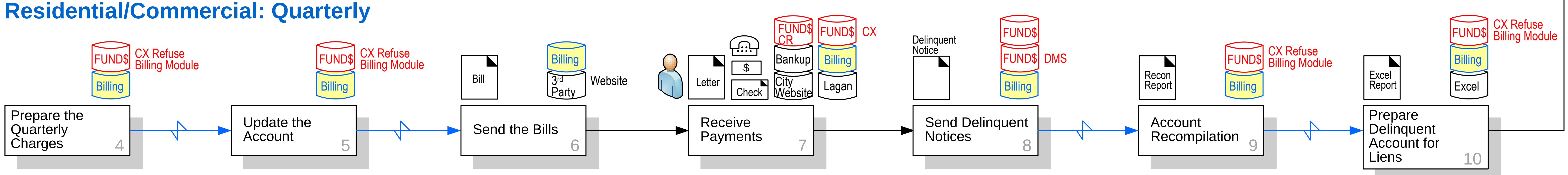
Note: This is an activity that is part of the annual Special Assessment process.

12. 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.

13. Recognize Revenue
Accounting and Treasury
- 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.
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5. Update the Account
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6. Send the Bills
Supervisor
- Send the text file from Billing to a third party vendor for printing and mailing.

7. 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 (Bankup).

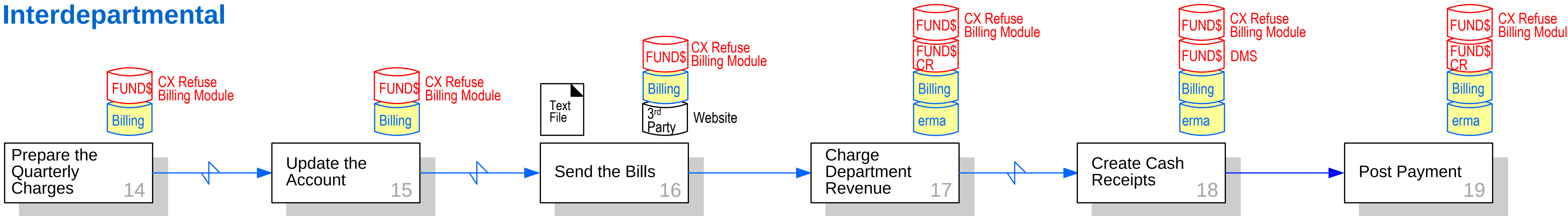
8. Send Delinquent Notices
Field Rep
- Run a delinquency report.
- DMS Billing system will produce letters.
- Print and mail the delinquent notices.

9. Account Recompilation
Accounting
- Account reconciliation will be done in Billing system.

10. Prepare Delinquent Account for Liens
Field Rep, AOS III, and AOSS
- 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
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- Update all of the final charges.

16 – Send the Bills

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

NOTE: Will the 3rd party still be need if this is automated?

17 – Charge Department Revenue

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

18 – Create Cash Receipts

Supervisor
- Create a cash receipt.

NOTE: Will this be required with the new Billing and erma systems?

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- Update the accounts.

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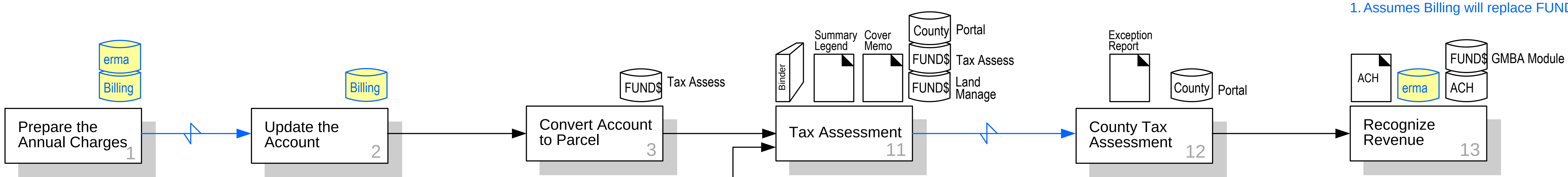

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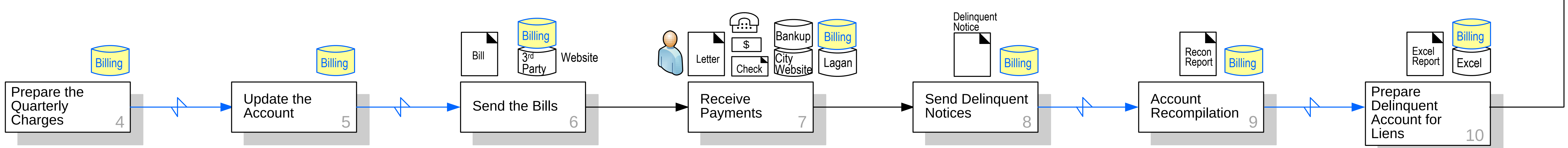

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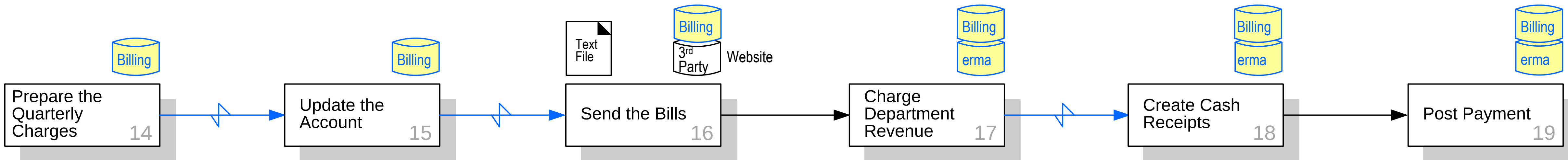
Session 20: Refuse Billing To-Be Process

Interdepartmental



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Session 20: Refuse Billing To-Be Process

Information Technology Solutions

Features and Functions

- Billing Invoice.
- Customer Accounts.
- Customer DB.
- Equipment Tracking.
- Inventory Management.
- Routing.
- Schedule.
- 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 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
  - 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.

O 4. **Step 13 Recognize Revenue:** Implement new erma systems.

Residential/Commercial: Quarterly

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

O 6. **Step 5 Update the Account:** 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 8. **Step 7 Receive Payments:** Replace FUND$ CX with new Refuse Billing software. Remove existing FUND$ CR software.

O 9. **Step 8 Send Delinquent Notices:** Replace FUND$ DMS and FUND$ with new Refuse Billing software.

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

O 11. **Step 10 Prepare Delinquent Account for Lien:** Replace FUND$ CX with new Refuse Billing software. Prepare delinquent accounts automatically by the Billing system, based on some criteria.

Interdepartmental

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

O 13. **Step 15 Update the Account:** Replace FUND$ CX with new Refuse Billing software.

O 14. **Step 16 Send the Bills:** 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).

O 16. **Step 18 Create Cash Receipts:** Replace FUND$ CX and FUND$ DMS with new erma software and the new Refuse Billing software.

O 17. **Step 19 Post Payment:** Replace FUND$ CX and FUND$ CR with new erma software and the new Refuse Billing software.

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

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

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

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

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

OK — 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..

F — 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.

E, D — 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.)

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

E — 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

Box, Binder — 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 — 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.

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

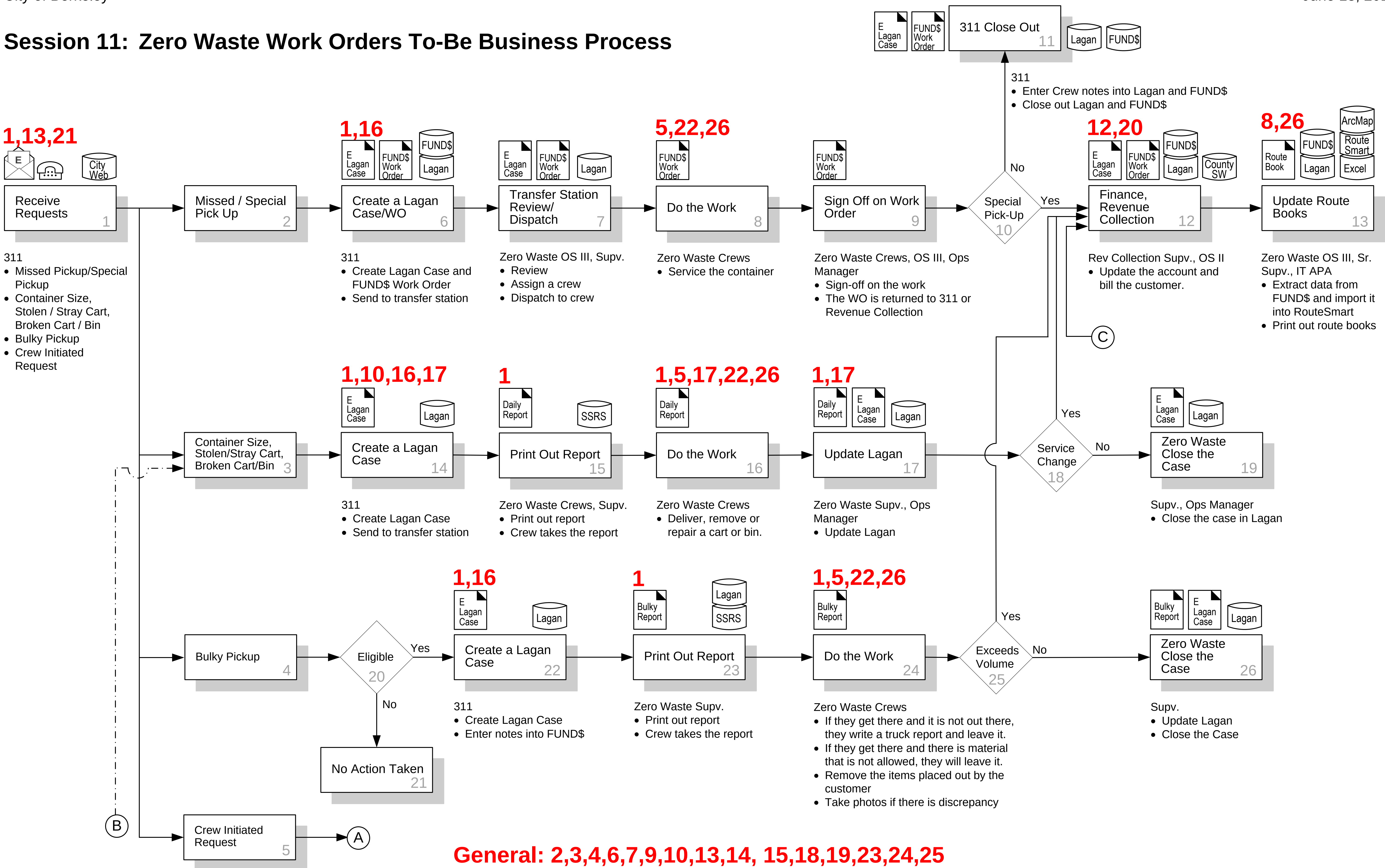
Management / Policy — These solutions entail new management policies and practices that are required as a result of introducing new information technology solutions and / or business process changes. Common examples include policy statements, organizational change, Change Management, Service Level Agreements,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

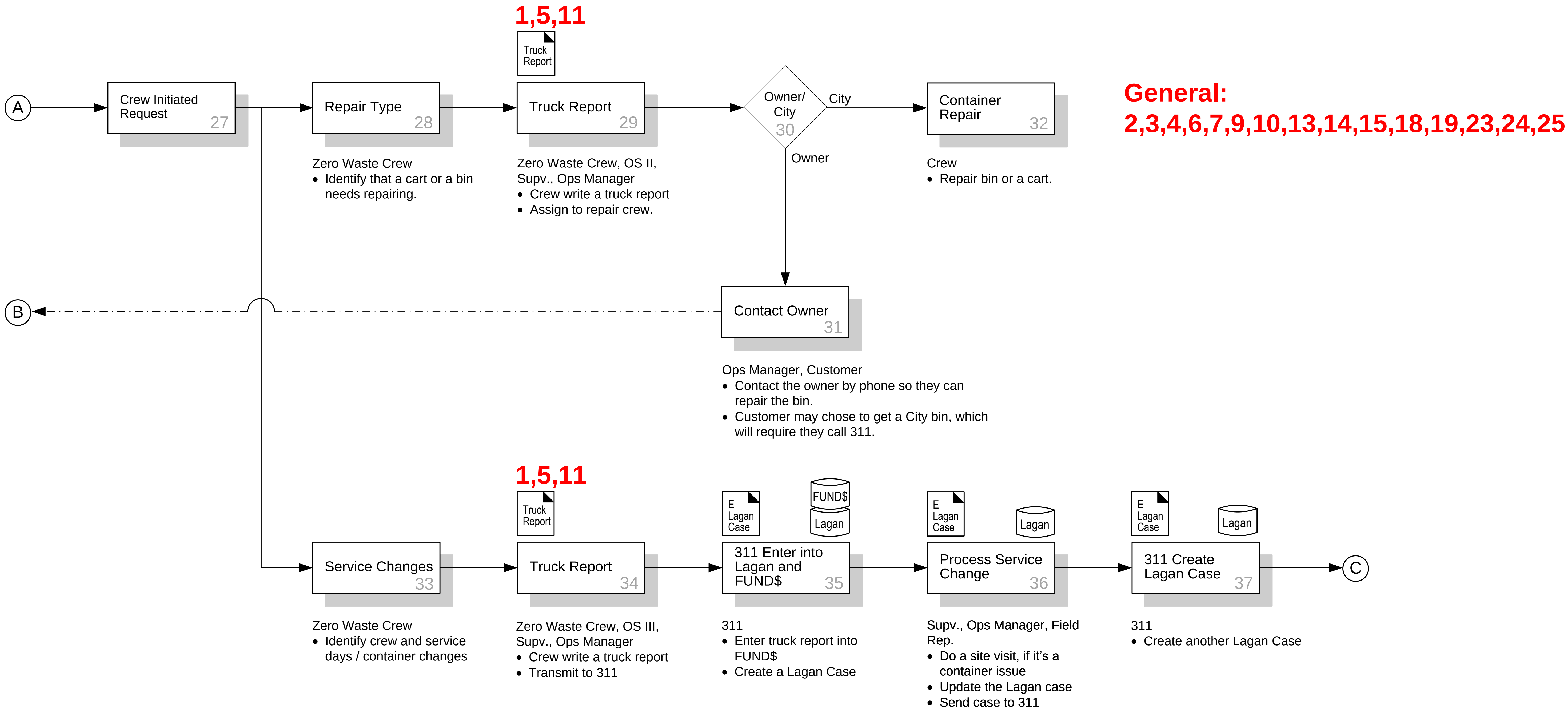
Information Technology — These solutions entail a variety of solutions, including the:

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



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



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. FUND$ 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 FUND$ 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. Its 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 FUND$.
26. Zero Waste do not use GPS and GIS. (The Funds system is set up using a Parcel method.)

Impacts

1. Ends up with allot of wasted staff time.
2. Duplicate data entry. Errors.

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.
- Integrated 'Route Books'
- Provide scheduling capabilities
- Onsite 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
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Reports

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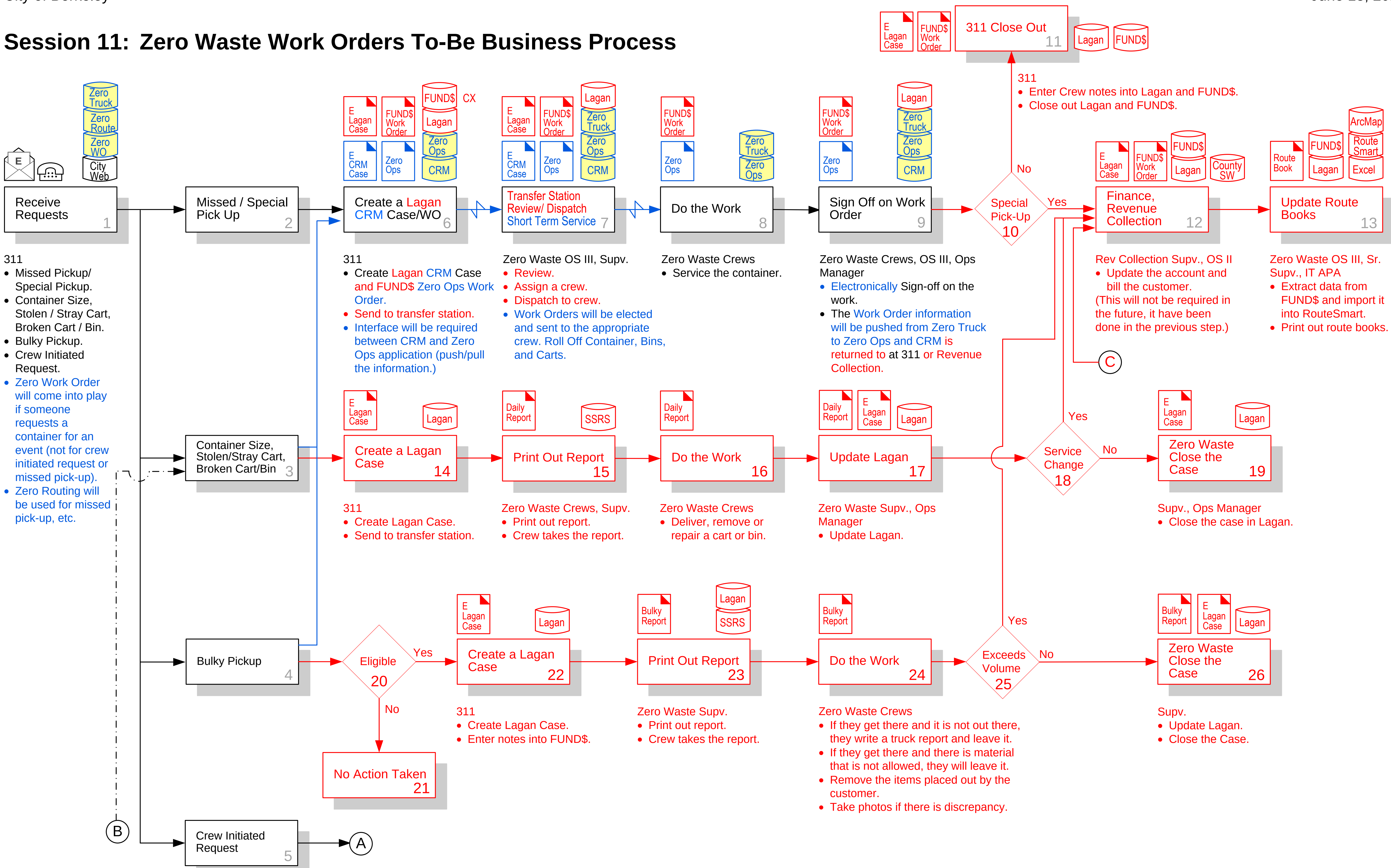
Interfaces

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

Benefits

1. Improved efficient process.
   Fewer complaints.

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



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

A → Crew Initiated Request 27

Repair Type 28 (Zero Truck, Zero Ops)

Zero Waste Crew
- Identify that a cart or a bin needs repairing.
- If it's a Bin, a decision needs to be made (Owner/City). If it's an owner's bin, it comes to a supervisor for contacting the customer.
- If it's a city bin, the crew will go directly out to make the repair.

Truck Report 29 (Truck Report)

Zero Waste Crew, OS II, Supv., Ops Manager
- Crew write a truck report.
- Assign to repair crew.

Owner/ City 30 — City / Owner

Container Repair 32 (Zero Truck, Zero Ops)

Crew
- Repair bin or a cart.

Contact Owner 31 (CRM, Zero Ops) → B

Ops Manager, Customer
- Contact the owner by phone so they can repair the bin.
- Customer may chose to get a City bin, which will require they call 311 or use the CRM.

Service Changes 33 (Zero Ops)

Zero Waste Crew
- Identify crew and service days / container changes.
- Zero Waste Management needs customer approval; with additional research. (This will trigger a physical inspection with mobile device.)

Owner/ Approves — Yes / No

No Service Change

Truck Report 34 (Truck Report)

Zero Waste Crew, OS III, Supv., Ops Manager
- Crew write a truck report.
- Transmit to 311.

(This is hardcopy, that will be replaced by the onboard system.)

311 Enter into Lagan and FUND$ 35 (E Lagan Case, FUND$, Lagan)

311
- Enter truck report into FUND$.
- Create a Lagan Case.

Process Service Change 36 (E Lagan Case, Lagan, Zero Ops)

Supv., Ops Manager, Field Rep.
- Do a site visit, if it's a container issue.
- Update Zero Ops Lagan case.
- Send case to 311.

311 Create Lagan Case 37 (E Lagan Case, Lagan) → C

311
- Create another Lagan Case.

Notes:

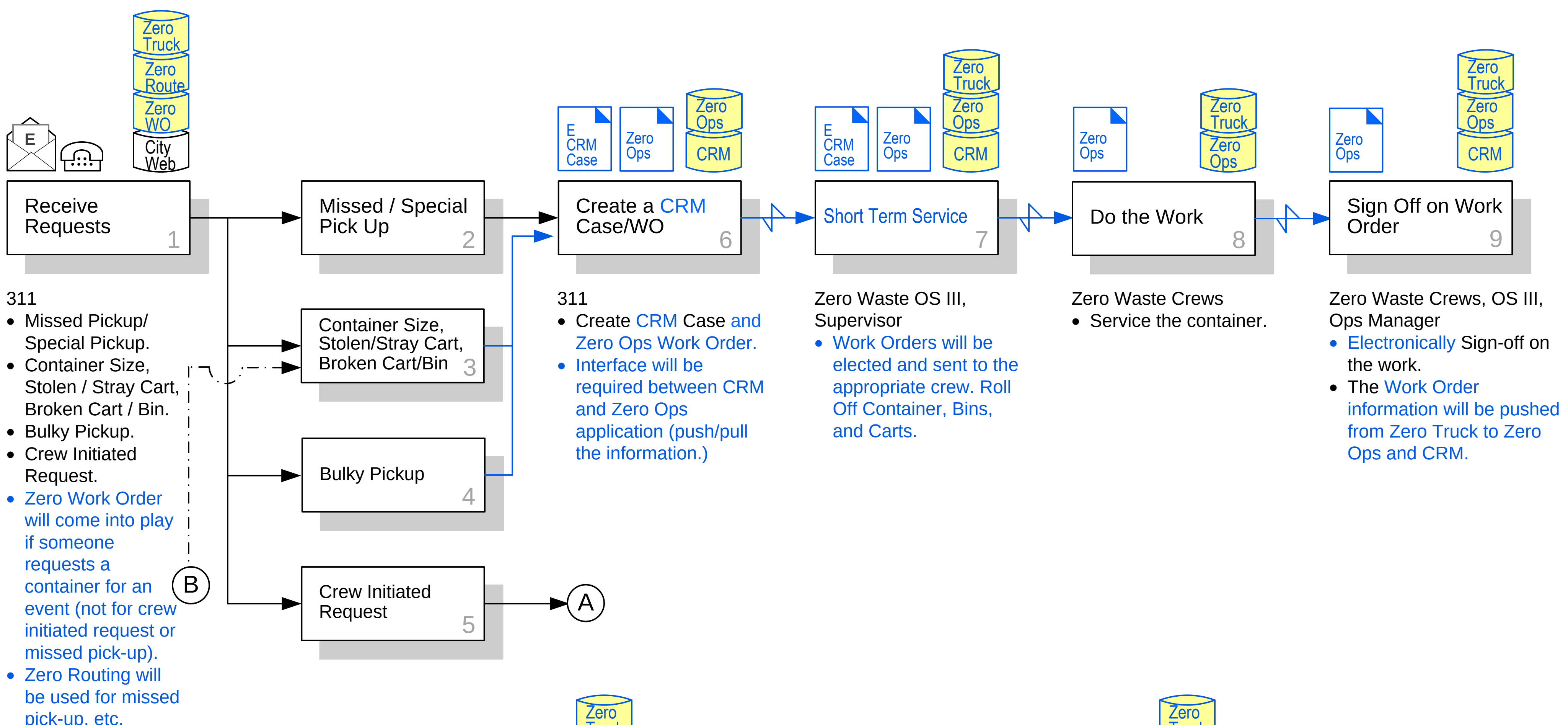
1. There is a narrow level of work that needs Work Orders in Zero Waste.
2. Zero Waste will require Routing, Mobile in Truck, and Customer Operation software.
3. The 'Zero WO' software is a module of the Customer Operations, 'Zero Ops' software in this process map.
4. The 'Zero Truck' software includes 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



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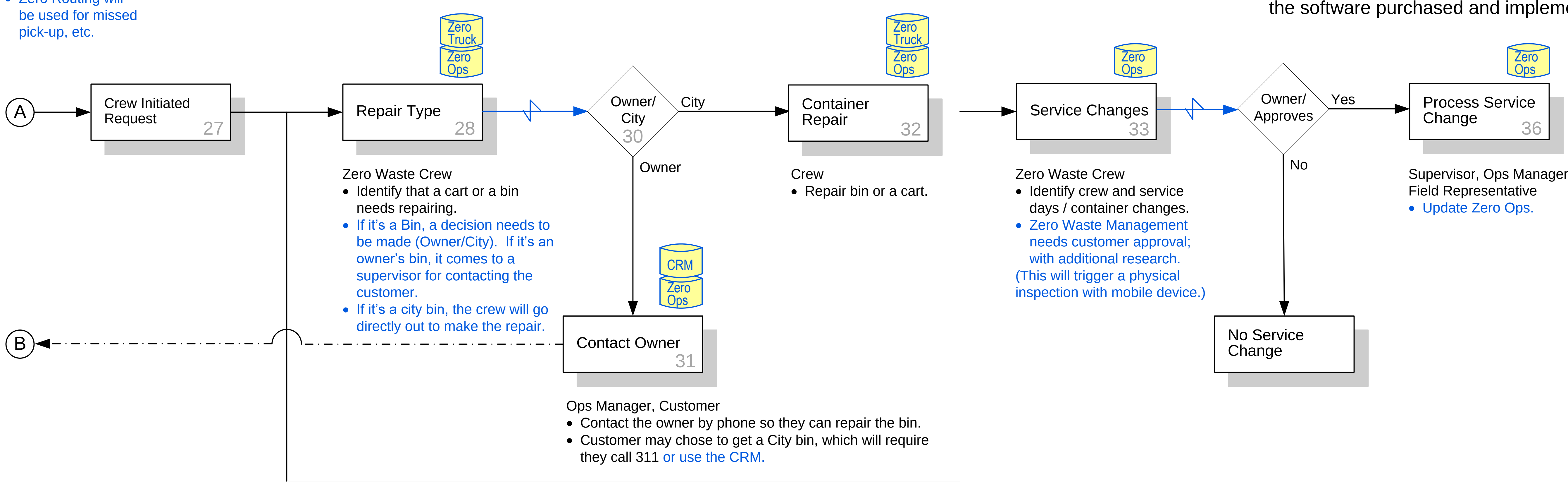

Session 11: Zero Waste Work Orders To-Be Business Process

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 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.
- 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.

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Business Process / Operational Solutions

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

O 1. **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.

O 2. **Step 6 Create CRM Case/WO:** 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).

O 3. **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 crew. Roll Off Container, Bins, and Carts.

O 4. **Step 8 Do the Work:** Adopt Zero Truck and Zero Ops applications,

O 5. **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.

O 6. **Step 10 Special Pick-Up:** Delete.

O 7. **Step 11 311 Close Out:** Delete.

O 8. **Step 12 Finance Revenue Collection:** Delete this step.

O 9. **Step 13 Update Route Book:** Delete.

O 10. **Step 3 Update Route Book:** This step will proceed to step 6.

O 11. **Step 14 Create a Lagan Case:** Delete.

O 12. **Step 15 Print Out Report:** Delete.

O 13. **Step 16 Do the Work:** Delete.

O 14. **Step 17 Update Lagan:** Delete.

O 15. **Step 18 Service Change:** Delete.

O 16. **Step 19 Zero Waste Close the Case:** Delete.

O 17. **Step 4 Bulky Pickup:** This step will proceed to step 6.

O 18. **Step 20 Eligible:** Delete.

O 19. **Step 21 No Action Taken:** Delete.

O 20. **Step 22 Create Lagan Case:** Delete.

O 21. **Step 23 Print out Report:** Delete.

O 22. **Step 24 Do the Work:** Delete.

O 23. **Step 25 Exceed Volume:** Delete.

O 24. **Step 26 Zero Waste Close Case:** Delete.

O 24. **Step 28 Repair Type:** Adopt Zero Truck/Zero Ops applications. If it's a Bin, a decision needs to be made (Owner/City) If its 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.

O 24. **Step 29 Truck Report:** Delete.

O 24. **Step 32 Container Repair:** Adopt Zero Truck/ Zero Ops applications.

O 25. **Step 31 Contact Owner:** Adopt CRM/Zero Ops applications.

O 26. **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.

O 24. **Step 34 Truck Report:** Delete.

O 24. **Step 35 311 Enter into Lagan and Fund$.** Delete.

O 36. **Step 36 Process Service Change:** Adopt Zero Ops application to update the case. Eliminate the use of Lagan.

O 24. **Step 37 311 Create Lagan Case:** Delete.