**Implementation Instructions for Metro Ministries**

Please complete these sections in order (A, then B, then C)

1. **Lambda**
2. From Lambda console
   1. Create New Function
      1. Author from scratch
      2. Create a name for the function
      3. Runtime- choose Python 3.8
      4. No need to select any other options unless this is going into a VPN.
   2. Select Create Function
3. In the function code, delete the existing code and paste in the code from the Lambda Function text file
   1. Click File then Save to save your progress
4. Select permissions, make note of the role name assigned
5. At this point, create your S3 Buckets, SNS Topic/Subscriptions, and IAM policies before continuing

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1. Paste in the settings from the S3 Buckets and SNS Topic
   1. On line 17, replace the <PASTE REVIEW QUEUE BUCKET NAME HERE> with the name of the Bucket you created for non-successfully processed objects to go
   2. On line 18, replace the <PASTE FINAL DESTINATION BUCKET NAME HERE> with the name of the Bucket you created for processed files to go to
   3. On Line 19, replace the <PASTE SNS ARN HERE> with the ARN from the new SNS topic. See the next section for creating the topic and selecting the ARN
   4. Click File then Save to save your progress
2. Click the orange Deploy button to make the Lambda function live
3. At this point, the Lambda function is ready to process files, and has the necessary permissions to access S3 and publish to SNS
4. **S3**
5. Create landing Bucket for scanned files
   1. From the S3 console screen, choose Create Bucket
      1. Create a unique bucket name
      2. Skip to bottom and click Create Bucket
   2. From the console, select the Bucket you just created
      1. Select Properties
      2. Scroll down to Event Notifications
      3. Select create event notification
      4. Enter a name for the notification
      5. Under event types, Select All Object Create Events
      6. Under Destination, select Lambda function
      7. Choose the Lambda function you created in the Lambda section above
      8. Click Save changes
6. Create the Review Queue Bucket
   1. From the S3 console screen, choose Create Bucket
      1. Create a unique bucket name
      2. Skip to bottom and click Create Bucket
   2. Copy the bucket name, and paste into Lambda under task 4a in the Lambda section
7. Create the Final Destination Bucket
   1. From the S3 console screen, choose Create Bucket
      1. Create a unique bucket name
      2. Skip to bottom and click Create Bucket
   2. Copy the bucket name, and paste into Lambda under task 4b in the Lambda section
8. Add IAM bucket permissions to Lambda role (provides Lambda function access to read and write to the Buckets)
   1. From main AWS Console, go to IAM
   2. Select roles, then select the role name assigned to your Lambda function
   3. Select add inline policy
   4. Under service, select S3
   5. Under Access Level, select List, Read and Write
   6. Under Resources, click the arrow to expand
      1. Select Any under Bucket
   7. Select Review Policy
   8. Create a name for the policy
   9. Click create policy
9. **SNS**
10. From SNS landing page- create a name for your new topic, and select Next Step
    1. If you’ve created topics before, go to Topics and then select Create Topic
    2. You can skip all of the options and go straight to Create Topic at the bottom
    3. The Topic should already be selected for you. If not, select the Topic you just created.
11. Next, select create subscription. You can select email, but I recommend doing an SMS subscription as it seems to work better.
    1. Enter your mobile number and select Create Subscription
    2. Repeat this step for any other numbers you want to add.
12. Once complete, go back to topics, and select the topic you just created
    1. From this page, copy the ARN to paste into the Lambda code
13. Add SNS permissions to Lambda role (provides Lambda function access to publish to the Topic)
    1. From main AWS Console, go to IAM
    2. Select roles, then select the role name assigned to your Lambda function
    3. Select add inline policy
    4. Under service, select SNS
    5. Under Access Level, click the arrow next to Write to expand
       1. Select Publish
    6. Click Review Policy
    7. Create a name for the policy
    8. Click create policy