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Information Technology Service Management

Change Management Process

Version 1.0 -- 11/05/2010

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Related Documents

- *Skagit County Information Services Policies;* Draft
- *ITIL V3 Service Transition;* 2007
- *Skagit Public Safety System, Process and Procedures Manual*

Definitions

Activity

A set of actions designed to achieve a particular result. Activities are usually defined as part of a Processes or Plans, and are documented in Procedures.

Change Management

The Change Management Process is responsible for controlling the Life Cycle of all changes. The primary objective of Change Management is to enable beneficial Changes to be made, with minimum disruption to I.T. Services – ITIL V3. In this document references to Change Management shall mean the Change Management Process.

Function

Function is a team or group of people and the tools they use to carry out one or more Processes or Activities. The term function can have two other meanings:

- An intended purpose of a configuration item, person, team, process or IT Service.
- To perform the intended purpose correctly.

Procedure

A Procedure is a document containing steps that specify how to achieve an Activity. Procedures are defined as part of Processes.

Process

A structured set of Activities designed to accomplish a specific objective. A process takes one or more defined inputs and turns them into defined outputs. A Process may include any of the Roles, responsibilities, tools and management controls required to reliably deliver the outputs. A process may define policies, standards, guidelines, activities, and work instructions if they are needed.

Request Fulfillment

The Process responsible for managing the LifeCycle of all Service Requests.

Standard Changes

A change to a service or infrastructure for which the approach has been pre-authorized and has an accepted and established procedure to provide a specific change requirement.

Service Operation

Service Operation is a stage in the lifecycle of an IT Service. Service Operation includes a number of Processes and Functions. The Processes and functions that make up a Service Operation are considered its components.

Resource

A generic term that includes IT infrastructure, people, money, or anything else that might help to deliver an IT Service.

EXECUTIVE SUMMARY

Change management is the process of changing services to meet business need, such as reducing costs or improving services or increasing the ease and effectiveness of support. Change Management may also be reactive as a means of resolving errors and adapting to changing circumstances. The Change Management process has responsibility to address changes through the lifecycle of services. Hopefully this process also reduces the total cost of a service to an organization while minimizing the risks that the service may fail. This process requires planning and risk mitigation. Changes should be managed to:

- Optimize risk exposure
- Minimize the severity of any impact of disruption
- Be successful at the first attempt.

Many day-to-day operations for the general Information Services employee might also introduce necessary changes, such as:

- Raising and submitting Request For Change (RFC)s as needed to address Service Operation issues.
- Implementing Changes as directed by the Change Management process where they involve Service Operation components or services
- Backing out changes as directed by Change Management where they involve Service Operation components or services
- Helping define and maintain change models relating to Service Operation components and services

- Receiving change schedules and ensuring that all Service Operation staff are made aware of and prepared for all relevant changes.
- Using the Change Management process for standard, operational-type changes.

RESOURCES

Change Authority

The individual, organization, or group of people who have the authority to approve a change.

Change Manager

The individual responsible for tracking the change from initial concept to completion.

Initiator

The Initiator is the person or event for which the change request is being created. Any employee of Skagit County wishing to request a change to Skagit County's processes, procedures or operations as they related to Skagit County Information Services my do so at any time.

Request for Change Author

The Request for Change Author is the person who has primary responsibility for writing the Request for Change. This may or not be the Initiator.

SCOPE OF PROCESS

All requests for service from users, management, and potentially other agencies are in essence a change request. This procedure provides oversight of the process of changing the technology services managed by Skagit County Information Services. Information Services has responsibility for:

- Management of the Active Directory
- Management of workstations, tablets and other network computing devices (clients)
- Management of server class systems
- Management of database applications
- Management of Storage Systems
- Management of Electronic Mail Services
- Management of Digital Security Systems
- Management of the Skagit County Data Center
- Management of network resources, software and hardware

- Management of this process.

Management consists of configuration, procurement, changes to, decommissioning, project and management of technology infrastructures and services as defined above.

The Change Management Process is to be used only when a request is outside Standard Changes or pre-authorized changes. A request to add an account is a Standard Change as an example. However a change to the procedure to add an account is not a Standard Change and is required to go through the Change Management Process.

The crucial elements of a Standard Changes are:

- There is a defined trigger to initiate an RFC.
- The tasks are well known, documented and proven
- Authority is effectively given in advance
- Budgetary approval will typically be preordained or within the control of the change requestor
- The risk is usually low and always well understood.

REQUEST FOR CHANGE PROCESS

Creation of a Request for Change

The Initiator reviews the change that is to be made an initiates the Change request using the following criteria.

Standard Change or a change that has been pre-authorized.

Pre-Authorized changes are documented in the Request Fulfillment process. For the public safety service the SPSS Policy and Procedures manual shall be used to identify standard changes.

- No RFC is required

Low Risk or Minor Change

These changes are Request for Changes that meet the following criteria.

- The change is not a new service
- The change is within the budget plan
- There is little risk of impacting any services, functions or processes as a result of the change.
- The change is not within the budget plan and total cost is less than $1,000.

If the change request meets all of the above criteria, then the short form of the RFC may be used to request a change.

Emergency or Urgent Changes

Emergency Changes are changes that need to be made very quickly to resume service levels. In general these changes should be minimized and should never create a greater impact than the originating issue. Emergency Changes may be made and are authorized under the Incident Management Plan.

All emergency changes are to be tested as much as possible, prior to making the change. This type of change still requires that an RFC be completed; however some aspects of the RFC and other documentation will be allowed to be deferred until after the change has been completed.

Emergency changes must identify whom has the authority to authorize the change.

All other Changes

All other Changes that are not Standard Changes or Low Risk Changes will required the Standard Request for Change form.

Standard Change Procedure

1) Perform the Standard Change as documented by the Procedure written for the change.

Low Risk Change Procedure

For Low Risk Changes, the Change Authority is the Change Manager.

1) The Initiator requests a change either by performing this procedure or having the Change Author perform this procedure.

2) The Change Author opens the RFC Creation and Implementation Log located on the Information Services Desktop. [http://sharepoint.skagit.local/sites/isdesktop/default.aspx].

3) The Change Author assigns the next available number in the Number column to the RFC that is being created. The Change Author then puts the description or title of the RFC into the description field. Puts in the Initial Date, identifies themselves as the responsible person, puts in the Work Request Number (if known) and then puts in a status of “Draft” into the Status field. The “Draft” status indicates that the RFC is being written. The new information is saved.

4) The Change Author opens the RFC template file <u>RFC Short Form – Low Risk Items</u> located in the section on the main SharePoint Desktop titled "RFC – Short form Low Risk under $1000". Once open save the file using the following format:

    RFC "Year" – "RFC Number" "RFC Description"

    Where:

    Year = Current Year
    RFC Number = The number the Initiator got when they created the RFC.
    RFC Description = The description or title given the RFC

5) The Change Author fills out the RFC Short Form as follows:

    a. Summary – A summary of the change that is to be made with a discussion on why the change is not a Standard Change

    b. Affected Department(s) – Identify any departments, agencies or users that will be affected by the change.

    c. Expect Cost – Identify all costs that the change may generate or may save here.

    d. Expected Implementation Date – Provide a date requested to perform the change.

    e. Status – Provide the status of the RFC from the list following:

        - DRAFT – Being Written
        - Comment Review – Document being reviewed for comments
        - Routing – RFC is Routing for sign off
        - Approved – RFC is approved
        - Disapproved – RFC was not approved
        - Cancelled – RFC was canceled

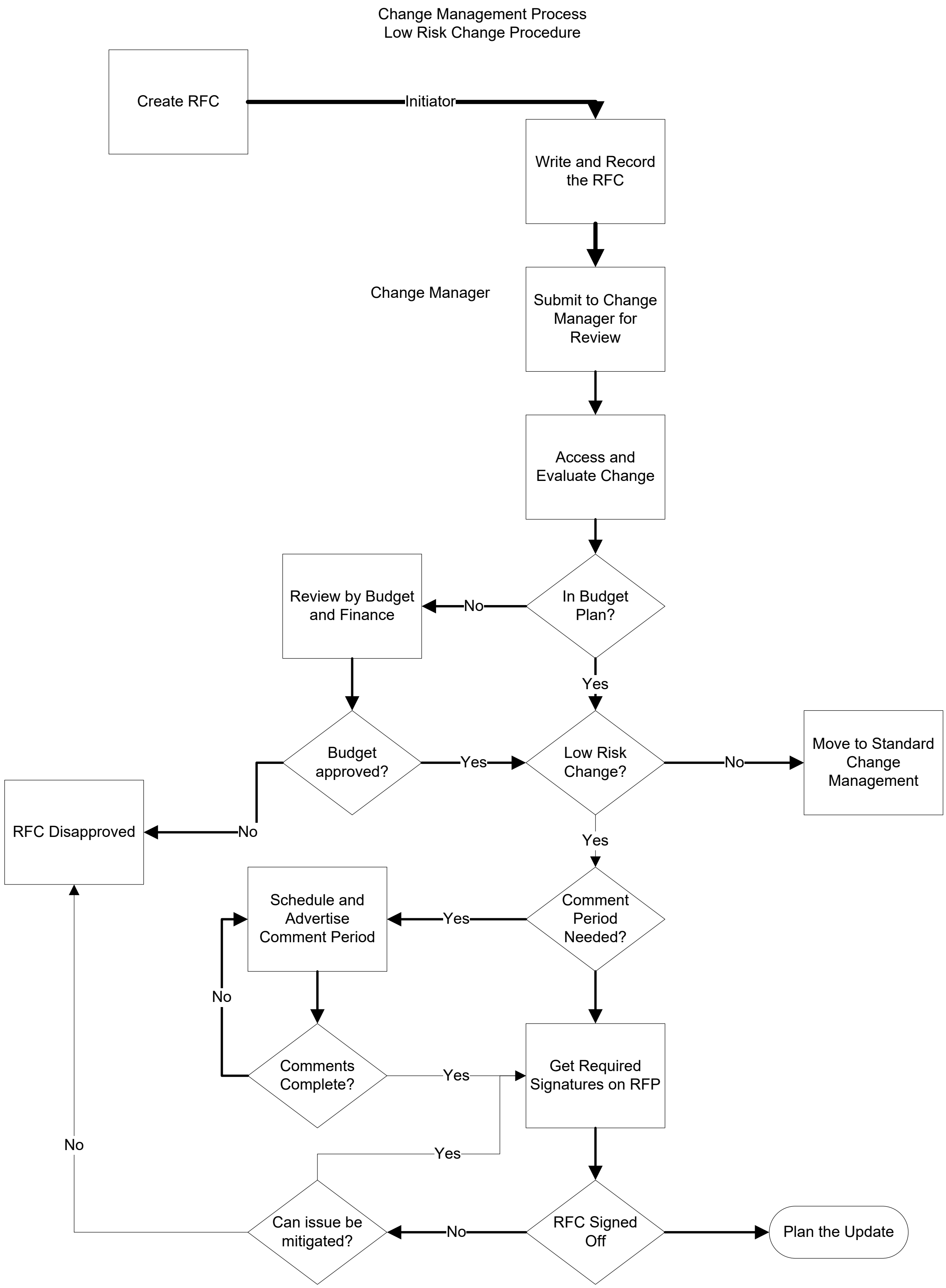
    f. Request/Department – Name of the Request and Department (or agency)
    g. Work Request Number – The work request that has been set up to track the change.
    h. RFC Authors – If different than the Change Author, document who the other authors are.
    i. Sustainability Plan – If the RFC affects the Sustainability plan, processes or procedures, document that affect here. Sustainability review is required for new procurements.
    j. Document Sign Off – This section determines who will sign off on the change request. The Change Manager will make this determination.
6) The Change Author informs the Change Manager that the document is ready for review.
7) Change Manager evaluates the change for budget issues.
    a. If budget issue, then Budget and Finance must sign off
8) Change Manager evaluates change for risk issues.
    a. If risk issue, then move RFC to Standard Change Management Procedure.

9) Change Manager and Initiator/Change Author determine who should sign RFC. This is done primarily to make sure that anyone who needs to know is informed and can comment on any issues to the change.
10) The Change Manager routes the RFC to each reviewer or signatory. The reviewer shall review the RFC and sign the document if they accept the RFC. If they do not accept the RFC, then it is sent back to the Change Manager for further action.
11) The Change Manager is responsible for the routing of the RFC, ensuring that each person has signed or rejected the RFC. The Change Manager updates the Status of the RFC to Routing in the tracking spread sheet.
12) Once all signatures are obtained, RFC is complete and planning and work orders can be generated to implement the change. The Change Manager updates the Status of the RFC to Complete.

If the RFC fails to complete the signatory process or is rejected due to risk or budget, then it may:

1) Be Disapproved with no further action applied. The Change Manager changes the status of the RFC to Disapproved.
2) Sent to the Formal Change Process with further analysis and documentation. The Change Manager initiates a formal change process form using the same RFC number.

The figure following illustrates the flow process for Low Risk Changes.



Change Management Process
Low Risk Change Procedure
Create RFC
Initiator
Write and Record the RFC
Change Manager
Submit to Change Manager for Review
Access and Evaluate Change
In Budget Plan?
No
Review by Budget and Finance
Yes
Budget approved?
Yes
Low Risk Change?
No
Move to Standard Change Management
No
RFC Disapproved
Yes
Comment Period Needed?
Yes
Schedule and Advertise Comment Period
No
Comments Complete?
Yes
Get Required Signatures on RFP
Yes
No
Can issue be mitigated?
No
RFC Signed Off
Plan the Update

Formal Change Procedure

The Formal Change Procedure is used when the change being requested needs greater visibility to the customers, there is higher risk or higher cost than what is allowed under the other two methods for change.

The Change Authority for Formal Change Procedures will be decided by the Information Services Director based on the scope and extent of the change being requested. The Information Services Director may opt to:

- Delegate Authority to the Change to the Change Manager
- Determine that the Change Authority will be the Information Services Department Head in conjunction with functional area leads.
- Determine that the Change Authority should be a specific group of business managers
- Determine that the Change Authority should be the Board of County Commissioners.

Following is the formal change procedure steps.

1) The Change Author opens the RFC Creation and Implementation Log located on the Information Services Desktop. [http://sharepoint.skagit.local/sites/isdesktop/default.aspx].

2) The Change Author assigns the next available number in the Number column to the RFC that is being created. The Change Author then puts the description or title of the RFC into the description field. Puts in the Initial Date, identifies themselves as the responsible person, puts in the Work Request Number (if known) and then puts in a status of “Draft” into the Status field. The “Draft” status indicates that the RFC is being written. The new information is saved.

3) The Change Author opens the RFC template file RFC – Formal Change Template located in the section on the main SharePoint Desktop titled “RFC – Request for Change”. Once open save the file using the following format:

   RFC “Year” – “RFC Number” “RFC Description”

   Where:

   Year = Current Year
   RFC Number = The number the Initiator got when they created the RFC.
   RFC Description = The description or title given the RFC

4) The Change Author fills out the RFC full Form. The first part of the RFC is an executive summary of the change. More detail is placed in the full RFC body. For the Executive summary the fields are as follows:

a. Summary – A summary of the change that is to be made with a discussion on why the change is not a Standard Change

b. Affected Department(s) – Identify any departments, agencies or users that will be affected by the change.

c. Expect Cost – Identify all costs that the change may generate or may save here.

d. Expected Implementation Date – Provide a date requested to perform the change.

e. Status – Provide the status of the RFC from the list following:

   - DRAFT – Being Written
   - Comment Review – Document being reviewed for comments
   - Routing – RFC is Routing for sign off
   - Approved – RFC is approved
   - Disapproved – RFC was not approved
   - Cancelled – RFC was canceled

f. Questions received on this RFC – This section is for any questions and comments on the RFC. Answers to questions and comments are placed here as well. The RFC may go through several version before a final acceptable version is completed.

5) Change Author fills out the RFC detail or full RFC.
   a. Requestor – The name of the individual requesting the change (The Initiator).
   b. RFC Number – The number of the RFC being drafted.
   c. Department – The department requesting the change.
   d. Year – The year the change was initiated.
   e. Work Request Number – The assigned work request number if the change is accepted for review. The work request number may already exist as well, if the RFC does not get accepted for Comment or Review then the Work Request will probably be closed as well.
   f. Comment Period End Date – The closing date for questions or comments on the RFC.
   g. RFC Authors – If different than the Requestor, document who the authors are.
   h. Business Impact to Organization – A detailed description of the expected business impacts to the organization or a reference to a document that contains that business information.
   i. Effects to Service Level Agreement – If there is a service level agreement in place for this service then there should be a statement as to the affects of the change to that agreement.
   j. Effects to Skagit County Infrastructure – If there are any impacts on other services or to the infrastructure used to support other services, then this should be discussed here.
   k. Effect to non-IT infrastructures – IF there will be changes to the front counter, power service, office space or other non-technology changes due to the change, it should be documented here.

l. Effect of not implementing the change. Describe what might happen if the change is not implemented. This may also be a determining factor in deciding to move forward with the change.
m. Resources required to implement the change. A description of what is changing. This section should also be written so that Service Configuration Item changes can be made to the Configuration Management Database.
n. Current Change Schedule – If there is an implementation schedule that is known as of the writing of the RFC or if there are mitigating issues that will require a schedule to be worked this should be documented. Generally schedules are made after the Change is approved.
o. Projected Service Outage – How long do we estimate the service will be unavailable?
p. Additional ongoing resources if change is implemented – This section should address all ongoing and new Resources required to support the change.
q. Impact to the Business Continuity Plan – If the Business Continuity plan will be changed due to the change being presented, then that is described in this section.
r. Impact to Capacity Plan – If there will be additional resources required due to the change being presented, then estimates of additional resources should be described here.
s. Impact to Security Plan – If the change impacts the Security Plan, then the impacts are discussed in this section.
t. Testing Plan – The plan to explains how the change will be tested to verify it was successful. This section should also address remediation planning to have a contingency in the event that the change is unsuccessful.
u. Impact to Service Operations – Discuss the impact the change may have to current service levels and operations.
v. Impact Sustainability Plan – If the RFC affects the Sustainability plan, processes or procedures, document that affect here. Sustainability review is required for new procurements
w. Risk Categorization – The Change Manager will perform a risk categorization assessment in conjunction with the Initiator (if needed). The assessment will be used to prioritize scheduling of the change.
x. Document Sign Off – This section determines who will sign off on the change request. The Change Manager will make this determination.

6) The Change Author informs the Change Manager that the document is ready for review.
7) Change Manager evaluates the change for budget issues.
    a. If budget issue, then Budget and Finance must sign off
8) Change Manager evaluates change for risk issues.
    a. If the risk issue is significant and there is the possibility of loss of facilities, information or other critical County asset, then Risk Management shall be engaged and have sign off authority on the Change Request.

9) Change Manager and Initiator/Change Author determine who should sign RFC. This is done primarily to make sure that anyone who needs to know is informed and can comment on any issues to the change.
10) The Change Manager routes the RFC to each signatory, ensuring that each person has signed the RFC.
11) Once all signatures are obtained, RFC is complete and planning and work orders can be generated to implement the change.

If the RFC fails to complete the signatory process or is rejected due to risk or budget, then it may:

a. Be Disapproved with no further action applied
b. Revised and resubmitted for review.

Change Planning and Scheduling

Once changes are approved, then a plan will be put together and a schedule determined to implement the change.

Notification of Projected Service Outage

Notification shall be issued to departments describing the nature of the change, identifying the time that the change will occur and the potential impacts to an organization of the change.

There are several business reasons for this notification.

1) Per the Local Government Common Records Retention Schedule, Disposition Authority Number GS2010-01, records of general communications affecting the transaction of business shall be retained for 2 years after communication is received or provided, whichever is later.
2) The need to inform affected parties of planned service disruption or outage.

A notification called a Technical Bulletin will be drafted using a Word Document template that is available in the Information Services SharePoint Desktop.

At a minimum, technical bulletins shall identify the following items:

Item	Description
Date	Creation date of the Technical Bulletin document
Bulletin Number	The number identifier of the Technical Bulletin, obtained from the Technical Bulleting Creation and Implementation Log
Change Authority Number	The Change Number (if applicable) of the Request for Change authorized the change in service.
Work Request Number	The work request number for time tracking.
Subject	A short description of what the Technical Bulletin is addressing
What	A description of what is to be changed.
When	A description of when the change is to occur
Who is Affected	A description of whom the service change will affect.
Fallback Plan	A discussion on how a failure of implementation of the change will be mitigated.
Problem Reporting	Whom to contact in the event that the change had unintended consequences.

Table 1, Technical Bulletin fields and their meaning.

Projected Service Outage Procedure

Prerequisite

The change must have been pre-approved through the Request Fulfillment process or a Request for Change must have been approved authorizing the change prior to implementation of this procedure.

1) Create a technical bulletin form.
    a. Open the file in the Information Services Desktop under the Technical Bulletin Development section titled "Technical Bulletin Creation and Implementation Log".
    b. Scroll to the bottom of this log, select the next sequential number and type it into the next available row in the log.
    c. Enter the description or subject of the Technical Bulletin.
    d. Enter the current date.
    e. Enter the Engineer name of the individual initiating the Technical Bulletin.
    f. Enter the Status of the Log. Valid Status items are:
        i. Draft – The document is being developed
        ii. Complete – the document has completed the steps of this procedure
        iii. Reschedule – The scheduled outage date and time is being changed
    g. Enter the Work Request number the provides detail on the change.
    h. Save and close the file.
2) Open the word document "TB 2010 – xx template".

a. Save this document to the Technical Bulletin Development sharepoint area with a new name as follows:

   TB Year – Number Subject

   Where;

   Year is the current year.
   Number is the Technical Bulletin number as set in the Technical Bulletin Creation and Implementation Log
   Subject Is the description or subject of the Technical Bulletin

b. Fill out the form per table 1 above.

3) Once the technical bulletin has been created, have another individual review it for clarity.
   a. Revise the bulletin if necessary, clarifying any questions brought up or address areas of concern
   b. Make sure all acronyms are clarified by fully writing out the text of the acronym the first time it is used, capitalizing each letter in the text that is used in the acronym and finally showing the acronym in parenthesis. As an example: To Be Determined (TBD).
4) Once the technical bulletin has been accepted as final, the lead engineer shall issue the bulletin to the customer community as follows:
   a. Technical bulletins that have public disclosure exemptions or that pertain to the public safety service shall be sent only those individuals with a need to know the changes that are being made. The lead engineer in conjunction with I.T. management shall make this determination.
   b. For all other Technical Bulletins, the bulletin shall be sent to the Technical Bulletin List Serve with notifications additionally going to any individual; agency or department that as determined by the Lead Engineer and I.T. Management (as applicable).
5) After the Technical Bulletin has been issued the email will be archived into the Electronic Document Retention system. For Public Safety Services, such notices will be secured for access by Information Services staff only. For public exempt notices, such notices will be secured for view access by Information Services staff only and the notice shall have the specific public disclosure exemption identified in the index or metadata fields. All other non public safety or nonexempt notices shall additionally be posted on the internal web site.