Town of Newtown
Town Building Inventory & Planning Work Group
Wednesday November 10, 2021 Regular Meeting Minutes

The Following Minutes Are Subject to Approval by the Work Group

The Town Building Inventory & Planning Work Group held a regular meeting Wednesday, November 10, 2021. The meeting was held at the BOE Conference Room, Municipal Center. Ned Simpson called the meeting to order at 7:04 pm.

PRESENT: Allen Adriani, Graham Clifford, Bob Gerbert, Fred Hurley, Zach Marchetti and Ned Simpson. First Selectman, Dan Rosenthal was also present

ABSENT: David Schill

VOTER COMMENTS: None

ACCEPTANCE OF THE MINUTES: Graham C moved to approve the minutes of October 27, 2021, seconded by Zach M. Motion passed unanimously.

COMMUNICATIONS: None

NEW BUSINESS:
- Work Group Check Point presentation to the First Selectman

Through a series of slides, Ned S described to Work Group's vision, their definition of the data structure for facilities, systems and components. Graham C provided a demo of the prototype system he has developed for the town's building inventory. The groups distinction between information about facilities and systems that does not change and information that is constantly updated such as condition and remaining useful life.

It was described that in looking for the data to load into the system, it became clear that paper documents for older facilities and digital files for newer construction were not easily obtained. Town wide responsibilities for building documentation is not defined. And there is not a digital document management system. Therefore document management has been added to the scope of the prototype.

The Work Group considers the data definition and underlying structures sufficiently defined to move to initial data capture and operationalizing to keep the data current and broad uses of the data. Systems such as mechanical have routine maintenance and al lot of the data can be captured as part of that maintenance. Other systems, such as structural, will need focused efforts. Staffing for data capture was addressed including use of interns, existing town staff, and bringing on staff for part time work.

OLD BUSINESS:
Discussion: Purpose, design and development of a Town building inventory
    Discussion deferred to the December meeting
- Follow-up from last meeting
- Discussion of Newtown Information System (NIS) Prototype
- Digitizing, Storage and management of facility documents

ANNOUNCEMENTS:

Next meeting Wednesday, December 8, 2021, Ned will seek to have this meeting at Edmond Town Hall. For the January 12, 2022 meeting Ned will seek to have the meeting at the Community Center. Al Miles, Technology and GIS Director will be invited to the January meeting.

ADJOURNMENT: Alan A moved to adjourn the regular meeting of the Town Building Inventory & Planning Work Group at 8:20 pm seconded Fred H. Motion passed unanimously.

Respectfully submitted,

Ned Simpson, Chair

Slide 1

Status Presentation to
1st Selectman

November 10, 2021
Town Building Inventory & Planning Work Group
Allen Adriani, P.E., Vice-Chair   Graham Clifford
Bob Gerbert, P.E.   Fred Hurley
Zach Manchetti P.E.   David Schill, P.E.
Fred Simpson, Chair

Slide 2

Topics

- Our Vision
- Building Inventory Design
- Demo of Newtown Information System (NIS)
- Uses and Benefits
- Status of Loading Data
- Capture and Management of Building Documentation
- Other Document Management Challenges
- Timeline & Next Steps

Slide 3

Why A Town Building Inventory

- Save Money
- Efficient Buildings
- Limit disruptions to operations
- Consistency
- Transparency
- Accessibility
- Nonpolitical
- Fact Based
- Work Smarter, not harder
- Training and Orientation
- Knowledge Transfer

Slide 4

Defining a Building

- Define as a hierarchy
  - Campus
  - Facility/Building
  - Wing
- Sources for Building information
  - 2010 inventory spreadsheets (mostly schools)
  - CIRMA Insurance filing
  - Individual's knowledge
- Other town systems focus on Properties with information about buildings
  - GIS
  - Vision – Appraiser System
  - IQS – Town Records

Slide 5

Defining Building Components

A taxonomy, consistent vocabulary, was needed
- Structure:
  - Group (Conceptual group, not physical thing)
    - Systems (Physical things)
      - Components (Physical things)
- Systems and Components have Parameters describing characteristics of the physical things
- Collections of components can be defined and named

Facility (Building) System Groups
1. Structural
2. Envelope
3. Mechanical
4. Plumbing
5. Electrical
6. Interior
7. Safety
8. Grounds
9. Other

Slide 6

Component Example Mechanical

A. System: Heating
  a. Component: Boiler
    Parameter: Boiler Plant
    Parameter: Fuel
    Parameter: Boiler Type
    Parameter: BTU Rating
    Parameter: Install Date
    Parameter: Condition
B. System: Cooling
C. System: Ventilation
D. System: Exhaust
E. System: Packaged System - HVAC
  a. Component: HVAC Heat
  b. Component: HVAC Ventilation
  c. Component: HVAC Exhaust
  d. Component: HVAC Cooling
E. System: Controls
F. System: Fuel Tanks
  Parameter: Type
  Parameter: Size (gallons, lbs, other)
  Parameter: Installation Date
G. System: Elevators
H. System: Other

Newtown Information System

7

Operational Uses

- Maintenance
  - What needs to be done
  - What was done
  - Routine (Preventative Maintenance)
    - What
    - When
    - How
  - Repair
  - Follow-up
- Documentation
  - Look-up and Retrieval

8

Project Overlay

- Link a collection of Systems and Components from one or more facilities into a "Project"
- For Planning
- For Operations
  - Maintenance Contract RFQ
  - Regularly performed tasks (e.g. winterization)
  - Schedule

9

Planning

- Project Overlay
  - CIP
  - Non-CIP Replacement
  - Abatement Needed
- Energy Audits
- Ad hoc Queries
- Analysis of Maintenance Data – Patterns to Inform
  - Preventive Maintenance Scheduling
  - Saving for replacement
  - Purchases
- Knowledge Transfer

10

Newtown Information System

Reporting (Look-up) Examples
- Maintenance
- Useful Life
- Economies of Scale
- CIP Description (Components)

https://www.vbbs.com/nis/

11

Facility Documentation

Digital documents, drawings and images that can be associated with System, Component and/or Facility and Wing
- Architectural & Engineering Design
  - Drawings
  - CAD files
  - Specifications
- As Built
- Inspection and Maintenance Reports
- Collect, Centrally Store and Index files for recent construction
- Scan paper documents

12

Building Inventory & Planning Work Group
Going Forward

- Building Inventory
  - An Infrastructure
  - Initial population of the data
  - Ongoing data capture and quality
    - Additions and Replacement
    - Maintenance Routine & Repair
- Document Management
  - An Infrastructure
  - Initial population of the data
    - Existing Document File Capture from recent construction
    - Document scanning and indexing (Phased)
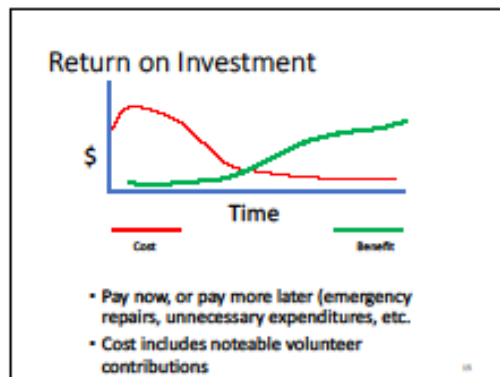 - Ongoing data capture and quality

13

Critical Success Factors

- Ownership
  - Selectman
  - Operational Ownership
    - Director of Public Works
    - Director of Facilities
    - Independent Board
  - Technology Owner
    - Director of Technology & GIS
    - Other
- Initial Load Approach, Training and Timing
- New and Modified Processes
- Ongoing Responsibilities

14

Return on Investment

$

Time

Cost   Benefit

- Pay now, or pay more later (emergency repairs, unnecessary expenditures, etc.
- Cost includes noteable volunteer contributions

15

Timeline & Next Steps

- By April 2022
  - Up-loaded Spreadsheets of Building and Wing information to be Establish Version 1 and build it
  - Prioritize data collection.
    Phase, organize and plan data collection
  - Expose the effort to town staff and bodies
  - Do Phase 1 data collection
- By Summer 2022
  - Establish Technical and Operational Governance
  - Arrange Student Projects
  - Determine support requirements
  - Define and build Version 2
  - Work with BOE & BOS on planning

16