

# TNGA Database Consolidation and Migration Project

November 2016 – November 2018



# History of Tennessee Legislative Information Systems

- **1986-87** Office of Management Information Services (MIS) Created
  - Initial Database and Applications Developed
    - Wang VS 300 Mini with Approximately 150 Stations and 20 Printers
    - Wang Pace Database
    - Wang Basic
    - Drafting, Bill Filing and Bill Tracking

# History of Tennessee Legislative Information Systems

- **1994** Outside Contractor (XLink) Hired to Develop Replacement of Wang System
  - Local Area Network with Back-End File and Application Servers and Modern Desktop PCs, Printers
  - Front and Back End Access Databases (Separate Database for Each Work Group)
  - Access Basic
  - Drafting, Bill Handling, Calendars, Journaling, Engrossing and Enrolling

# History of Tennessee Legislative Information Systems

- **1996-97** MIS Merged with Office of Legislative Services Becoming Legislative Information Systems (LIS)
  - LIS Took Ownership of Databases and Applications
  - Back-End Access Databases Migrated to SQL Server
  - Access Basic Eventually Replaced with Visual Basic.Net Eliminating Front-End Access Databases
  - First Website Built and Published

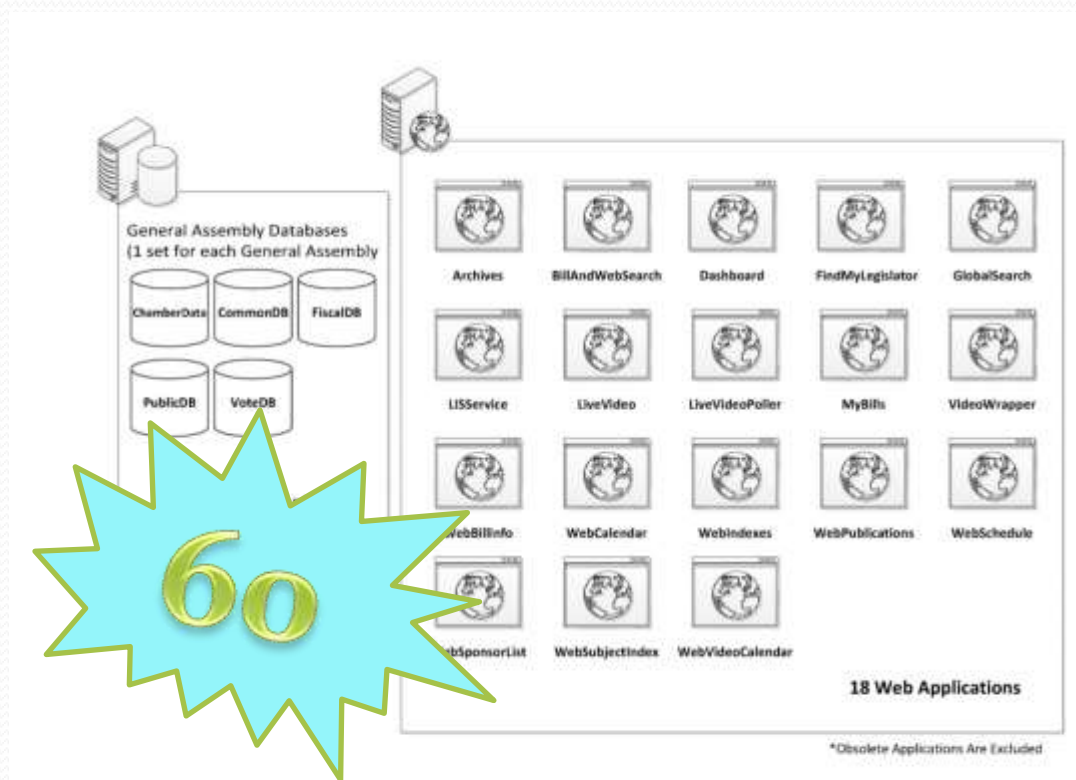
# History of Tennessee Legislative Information Systems

- **1997-2016** Development Continued In-House
  - Existing Applications Refined as Needed
  - New Applications Developed to Provide Increased Functionality
  - SQL Server Databases Remained In Place

# 1996 - 2016 SQL Server Databases

- Each Operational Work Group Had Their Own Database
- An Additional Database Existed to “Tie” the Individual Work Groups’ Databases Together
- Each General Assembly Had Its Own Set of Work Group Databases

# 1996 - 2016 Legislative Databases





# Problems Associated with Those Databases

- Each Group's Assembly Database Contained Tables that were Basically Copies of Tables in Other Group's Database with Minor Differences
- Differences Existed Between an Individual Group's Assembly Databases
  - Tables were Deleted or Added
  - Columns were Re-purposed, Deleted, or Added
- Databases Had Been Designed with No Constraints, No Foreign Keys

# 2016 – 2018 Database Consolidation

- Database Consolidation: Phase 1 of a Total System Redesign
  - Existing Databases Analyzed
  - Single, Normalized Database Designed
    - Separate Schemas Defined Organizational Work Group Ownership
    - Column Constraints Added for Data Integrity
  - Existing Data From All Databases Imported Into New Database
  - Applications Modified to Replace Old Database Access
  - Mock Session Held for User Testing
  - 48 Hour Cutoff/Rollover Implementation

# 2018 Legislative Database



# Old Databases VS New Database

	Old	New	Reduction	
Databases	168	2	98.81%	
Tables	2,563	193	92.47%	
Columns	27,891	1,678	93.98%	
Rows	27,918,886	16,038,708	42.55%	Desktop Only
Stored Procedures	6,551	559	91.47%	Desktop Only
Application Lines	247,592	184,967	25.29%	