

#### Contemplor Infrastructure Analytics and Front Office

# As you progress through these slides, press demo buttons to view detail

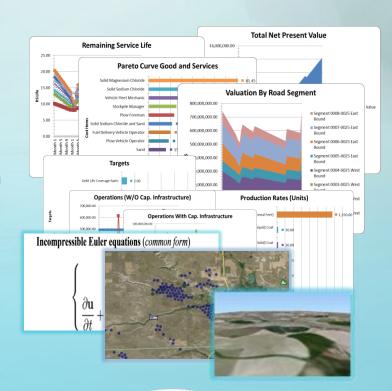






#### What does Contemplor Offer?

- Contemplor can provide data, analytics and front office extensions to existing asset-work management and planning systems
  - Every asset and work step has data that is customarily gathered, but not formally associated with the system databases including:
    - Commercial and transactional information
    - Scientific, environmental, and social information
    - Project work breakdown systems, GIS, dimensional and other highly granular information
- Existing Alternatives:
  - Limit analysis to constrained data; or
  - Require entry and revision of data multiple times and in disconnected systems
- Contemplor provides the efficiencies of unconstrained analysis and work product









### Contemplor Features: Precise and Comprehensive Data Structures

- Every item knows what it is and its place.
  - Example:
    - A road segment may have many drainage related items and signs
    - But each drainage item may have one or may have multiple related road segments
    - Signs belong to one road segment.
- Hierarchical relationships are everywhere
  - Difficult to represent in spreadsheets and most management systems
  - Difficult to store, analyze and report



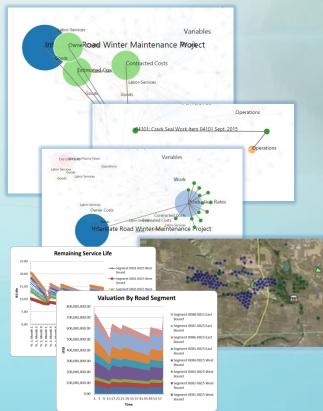






Contemplor Features: Evaluation and Analysis

- Most industry systems have constraints that require a fixed number of attributes for each item prior to data entry and once set are fairly rigid
  - The reality is that some assets, components or segments have many diverse parts and need to be treated different without any constraints from software.
  - These items not only need to be compared within the system but may also need to be benchmarked against external items, targets or indices
- When complex items converge, Contemplor provides system integrity and automation.
  - For example road and bridge analysis may require the use of complex fluid and erosion data that in turn affects, service life, operations, cash flow and valuation. Contemplor extends your existing data in powerful ways.









### Contemplor Features: Front Office Automation

- Link back office with front office
  - All work prepared using document, spreadsheet and presentation automation
  - Output to browser, office suite, pdf and other file types
- Also link to all detail, training materials, filing and other documents









## Infrastructure Systems Technical Considerations

- Contemplor handles myriad of data types
  - Geospatial, financial, images and text
- Leverage features of leading database systems
  - Security
  - Multi-user functionality
  - Storage in the "cloud" or internal networks
- Function on a wide variety of devices
  - Access with desktop or mobile devices
  - Function with or without internet connection
    - e.g. update data in remote field and then synchronize with database when internet connection is reestablished











#### Contemplor Infrastructure

- Integration with powerful component data gathering technologies
- Mobile device and desktop technologies
- Comprehensive and flexible
- Analytics customized for infrastructure assets and work
- Automate front office applications with back office data



