# Automating maintenance of public sector survey frames

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vour future

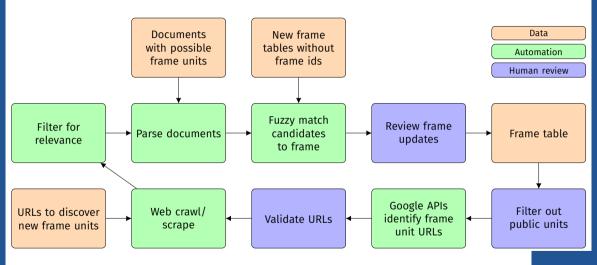
### Frame maintenance is costly

- Public-sector (criminal justice) collections in the Economic Reimbursable Surveys Division
  - Staff manually update frame information, hand match new tables to existing frames
- Much frame information is publicly available on the web
  - Use web scraping to harvest unstructured data
- ▶ How can we reduce the labor required to integrate new frame tables/data?
  - Document parsing, fuzzy matching tools

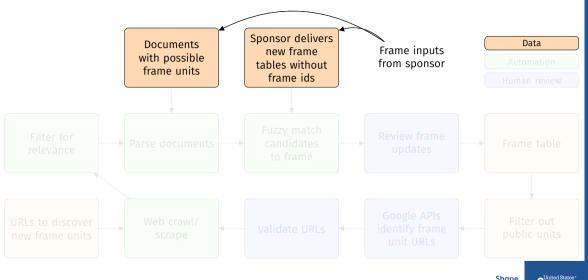


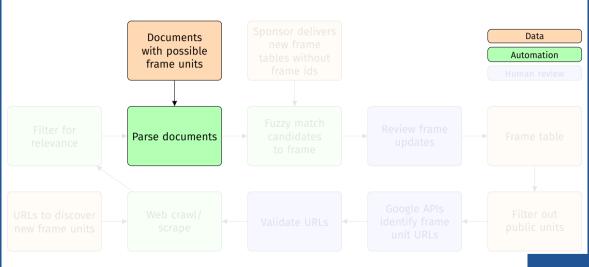
## Civic Digital Fellows developed modular system

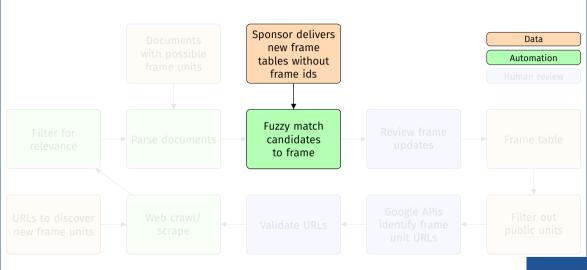
- Worked on this system the last two summers
- Carlos Ortega, a 2019 Civic Digital Fellow, helped us break the problem into smaller pieces
- Everything uses open source tools
- ► A number of the modules can be used for further process automation in our division

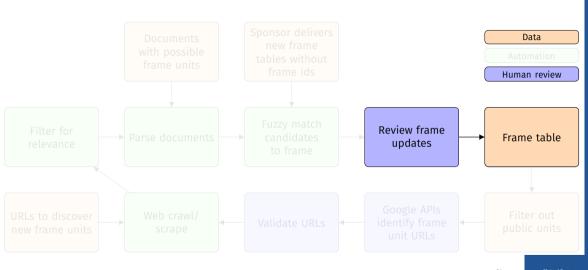


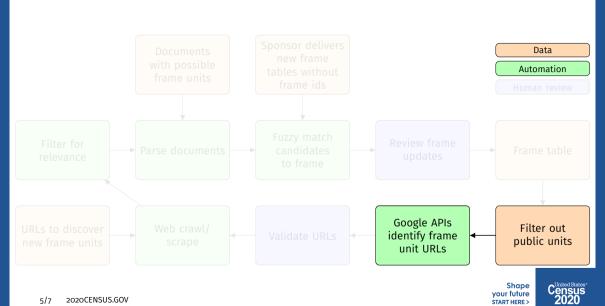
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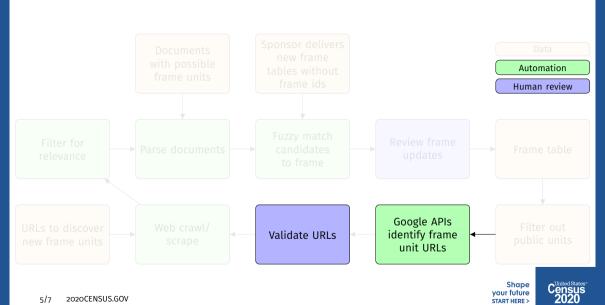


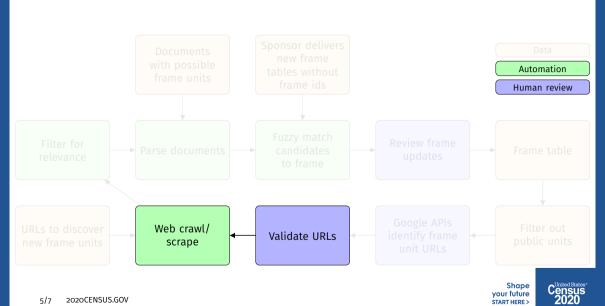


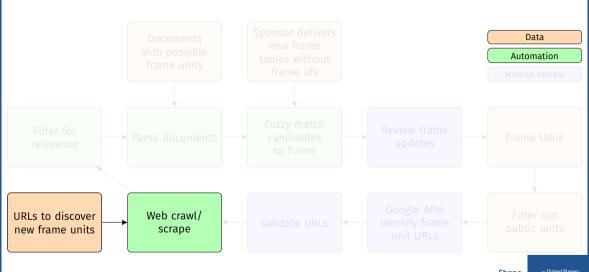


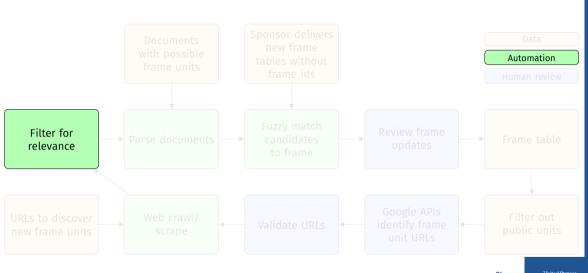


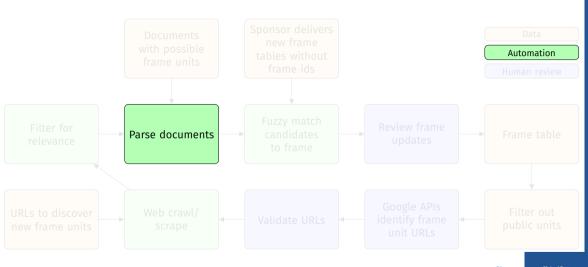


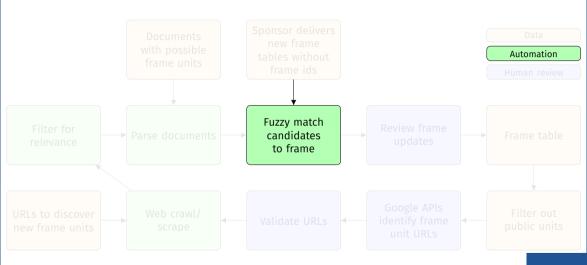












#### **Next steps**

- Improve accuracy of web scraper, expand scope
- Improve speed and effectiveness of frame matcher, move to server
- Move system into production
  - ▶ Has potential to reduce 4 weeks of 3 FTE down to days
  - Staff can be reallocated to response, quality improvements

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### **Thank you**

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