**Regression Testing Notes**

2/8/22 - Jason, Charles, Reggie, Nicole

Needs:

* Testing the models
* Testing the FSMF – the end points

Notes:

* Keep these scenarios separate
* Code changes we make to the FSMF are unlikely to change how the models run
* Testing the FMSF – the end points
  + When do we do this? Ideally with each deploy
  + How do we time this? No blockers on the timing
  + Do we build this into the pipeline? Yes
    - Should be fast enough to do it here
    - Doable but need to figure out how to compare the outputs – J-unit tests to compare to canned results
  + This falls under future/O&M work
* Testing the models
  + When do we do it? - after new DLLs, work to change inputs/defects/etc.
  + How do we time it? Needs Nicole
  + Do we build this into the pipeline? Reggie says no
    - Get Nicole Bastion access to allow Nicole to do this but make it easier for her to do, idiot proof button or something like that – Maybe build into the UI Charles is working on for Admins – Potentially
    - Second pipeline with a step function to do this
    - Lambda has to run in 5 minutes which won’t work with run times
    - Another option is a batch script that gets run, but that won’t work for hitting the DLLs directly but could work for the API-esqu work
* Current script Reggie has is to make API calls, download the results
* Testing direct to the models vs the front end. This would be needed when fixing defects related to FMSF code rather than DLL changes?
* Are we still small enough to do this ad-hoc. Yes for the models
* Can we do this from Prod?
  + Testing initiated from SAIC, but Nicole needs the outputs, which means Blue/Green (can’t do this though, virtual server controller issues)
  + If we test in QA then go to Prod without formal testing in Prod we need a roll back strategy
    - GitLab roll back/commit and rebuild the pipeline (when that is the issue)
    - Need to keep QA & Prod together on master so they have the same code
  + Can request a staging env if we want – Jason leaning toward No, QA is likely enough but up for discussion later
* The deploy today (future enhancement – containerize it – it would make it cleaner – out of scope but is this O&M? No)
  + 9 JAR files, 2 systems, 2 window machine images – these are the PIA part, JAR + WAR to app server
  + EPS nothing is automated for Prod – it uses an EAR file – that I manually monitored, and deleted if there are issues and replaced with the original
    - Might not work for us and SAIC
* Can we wire the source code to the Pipeline? Reggie will reach out to Stu to set up a call with Jason, Charles & I as well.
  + This is not an immediate do, would be out of scope for now
  + But it could move us off of windows (which would be a win)