

First Flight Forecast

Methods of the Round 9.0 and 9.1 Employment Forecast

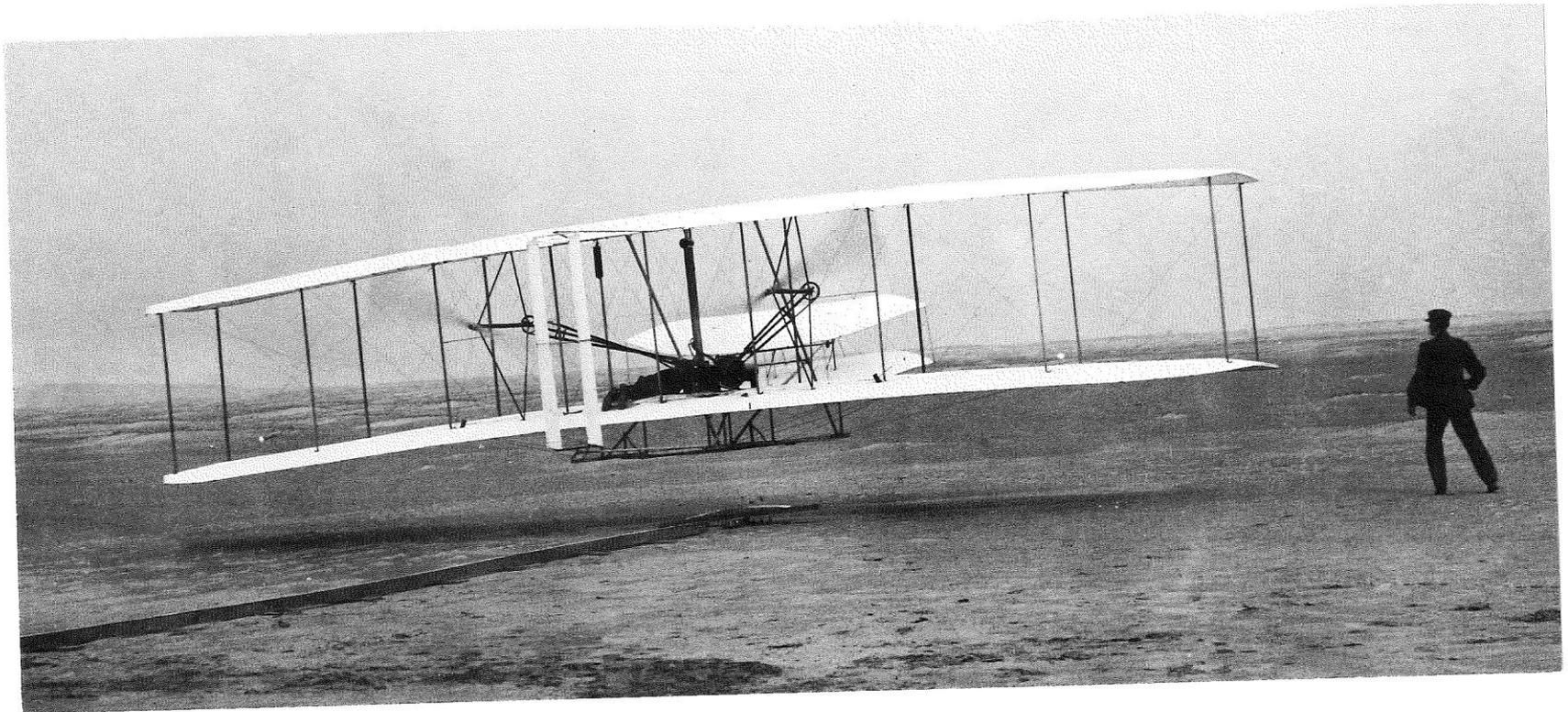
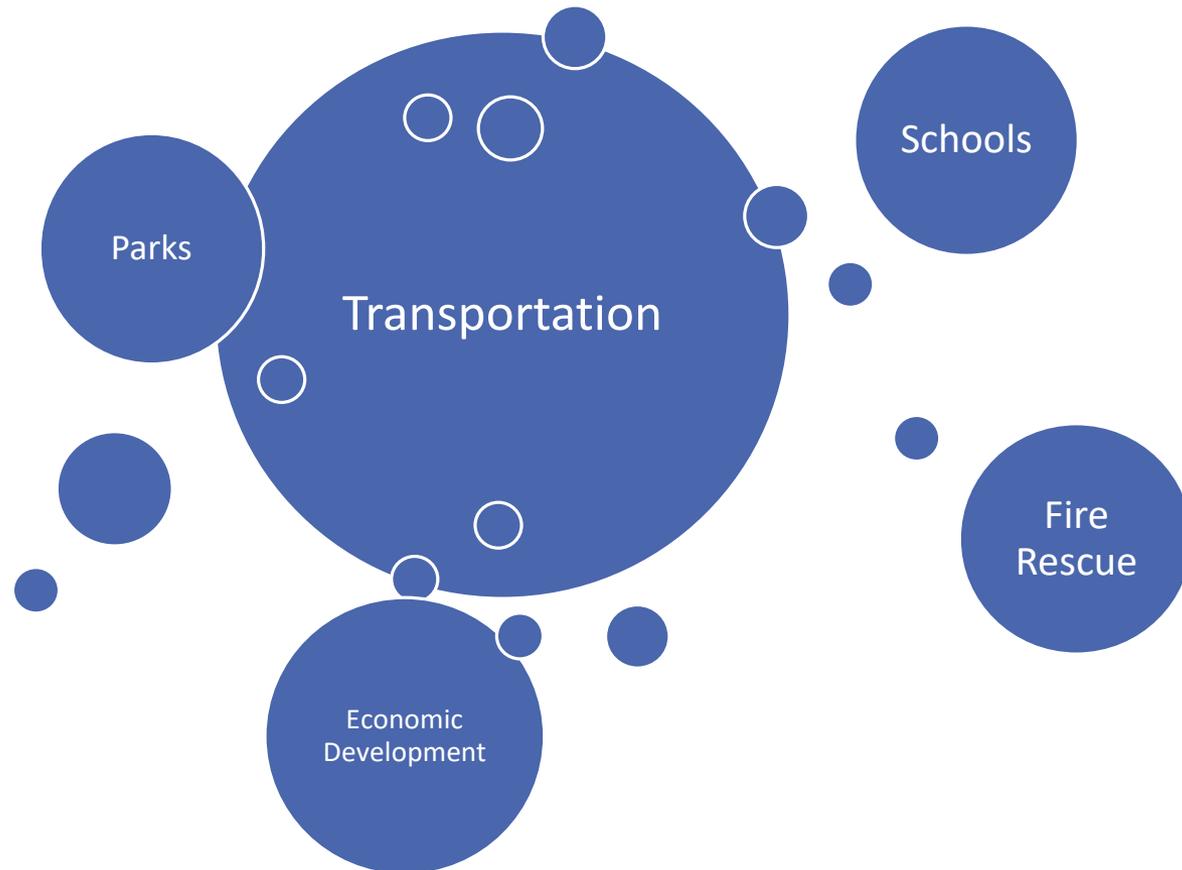


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Why is it important?

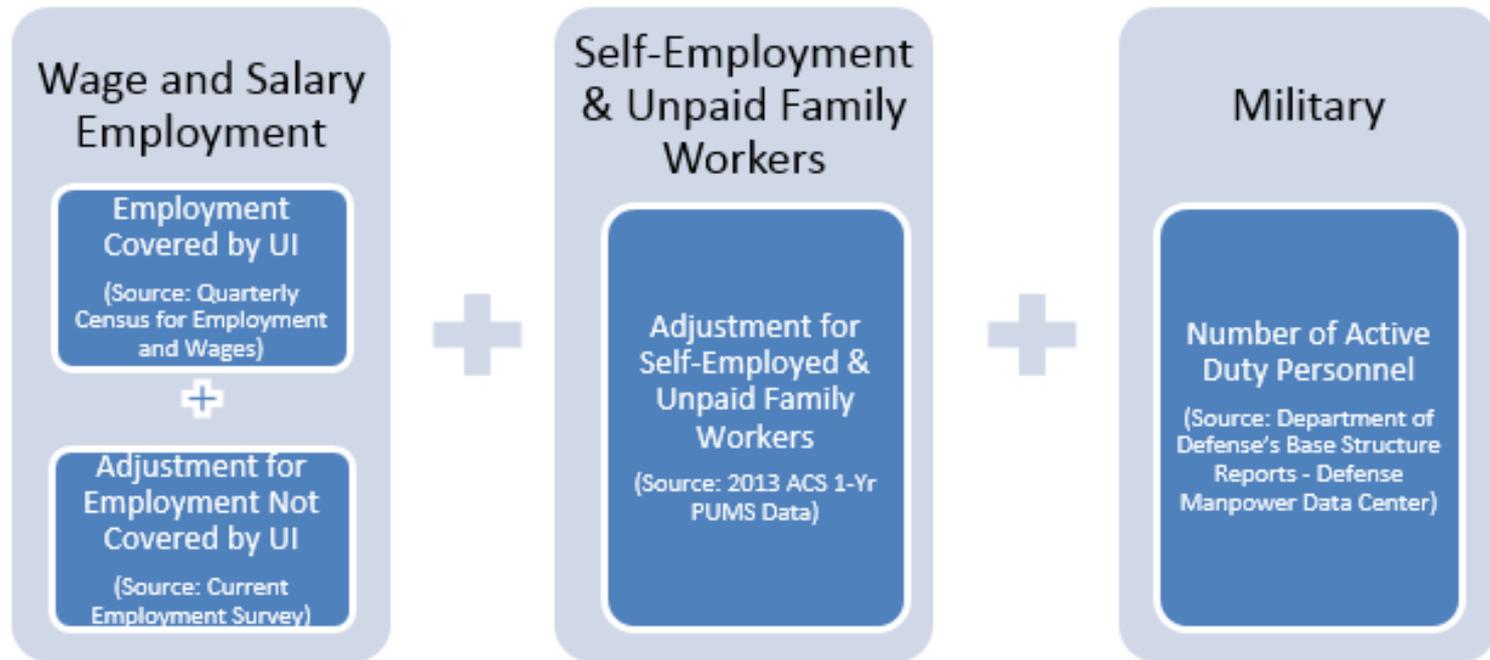


What's New in the 9.0 Series?

- 2045 is New Horizon Year
- Forecast Years 2020-2045 developed from a regression model
- 2015 Estimate developed from multiple sources at parcel level
 - DTA, FCPS, FFX Gov, Virginia Employment Commission, InfoGroup, Fort Belvoir, BPOL, EDA Reports, COSTAR
- New Development “Pipeline” Data (2009-Early 2015)
 - Rezoning, Site Plans, Building Permits
- Maximum Comprehensive Plan Residential Scenario
- Data available at Subzone Level
- Larger Self-Employment Estimated in 2015 (5%)
- BLS Industry Codes converted into COG Categories
- *“Base Year” 2015 was more standardized across jurisdictions*



Standardizing the Base Year Methodology: A Major Improvement



Source: MWCOG

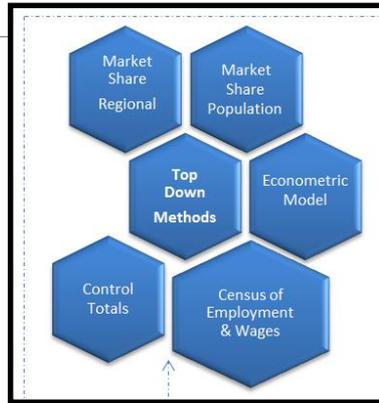
Mapping Baseline Employment

- Fairfax County's 2015 employment estimates were derived for each parcel in the County from multiple sources including:
 - Tax Administration records, Public School records, County HR records, **Virginia Employment Commission (VEC), InfoGroup**, Fort Belvoir, Business Professional Occupational License (BPOL), Economic Development Authority Real Estate Reports, COSTAR (vacancy rates)
 - This required a lot of data clean-up and geocoding
- The employment from each source was tied to a parcel
- Sources were compared and one was ultimately selected and logged
- Roughly 98% of all employment selected originated from VEC or InfoGroup

Note: Fairfax County is very careful to comply with all confidentiality agreements, if any, to use primary sources.

Top Down Methods for Control Totals

A Regression Analysis was performed to determine if there was a significant correlation with industry types and population.



*If there was not a strong correlation, a Regional Share of the **Econometric Model** was applied using past trends.*

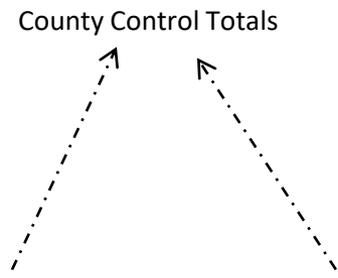
Population Share Example

Health Service Trends

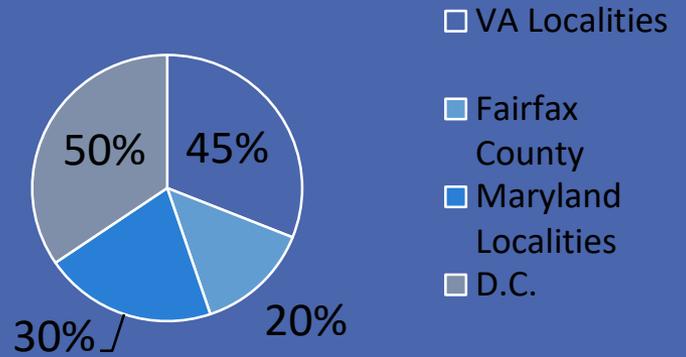


36 jobs: 1000 residents

Total Regional Jobs Forecast



Regional Share Example Construction Trends

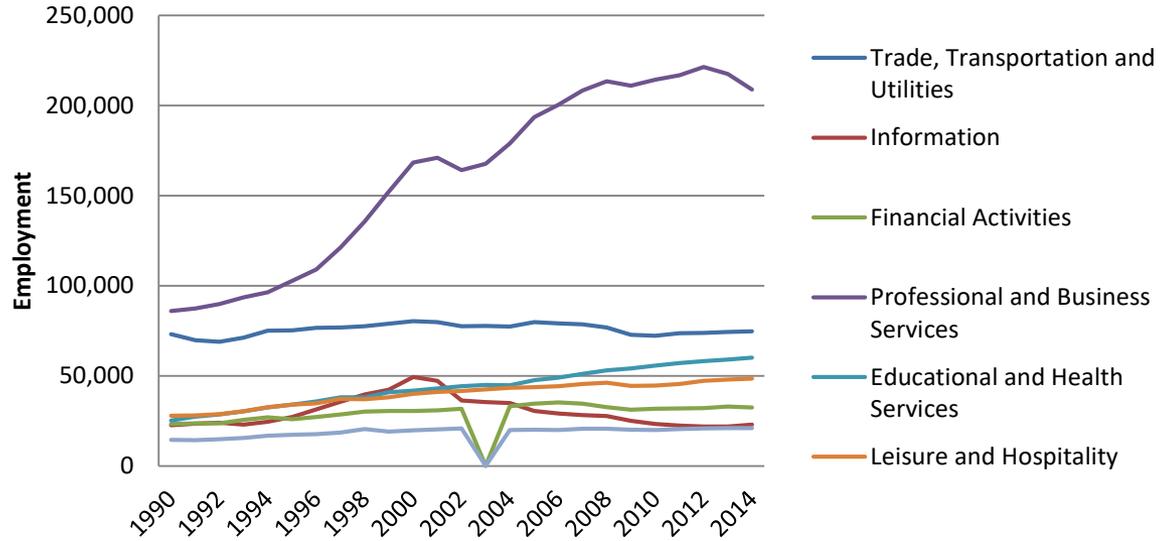


Percentages used for illustration only.

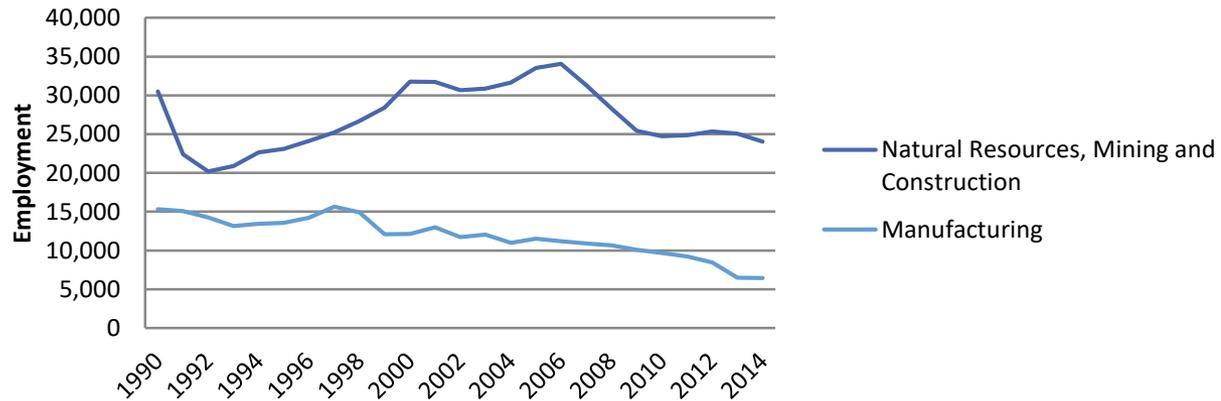
ECONOMIC TRENDS STUDIED

1990-2014

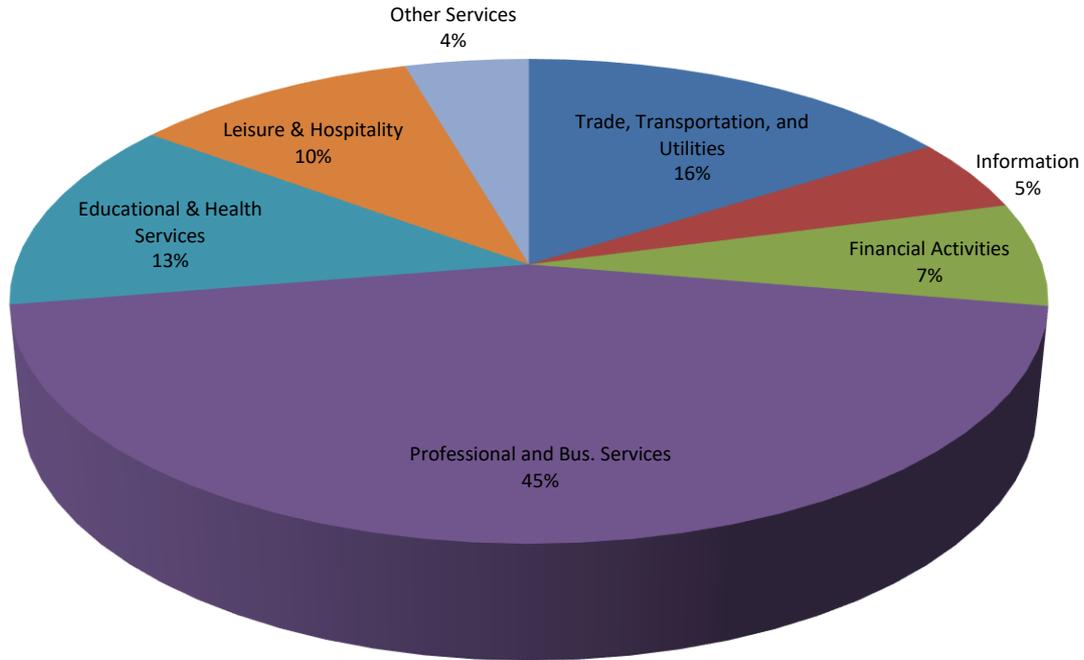
Private Sector Employment Service-Providing



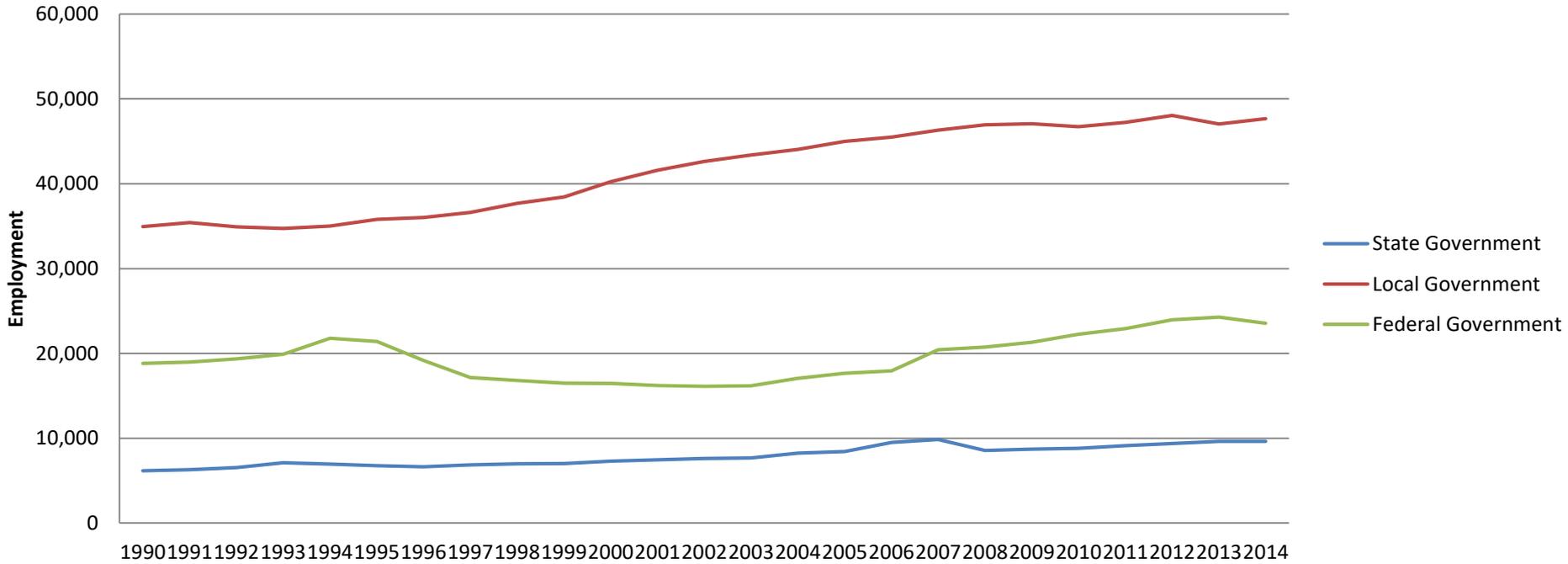
Private Sector Employment Goods-Producing



Service-Providing Employment

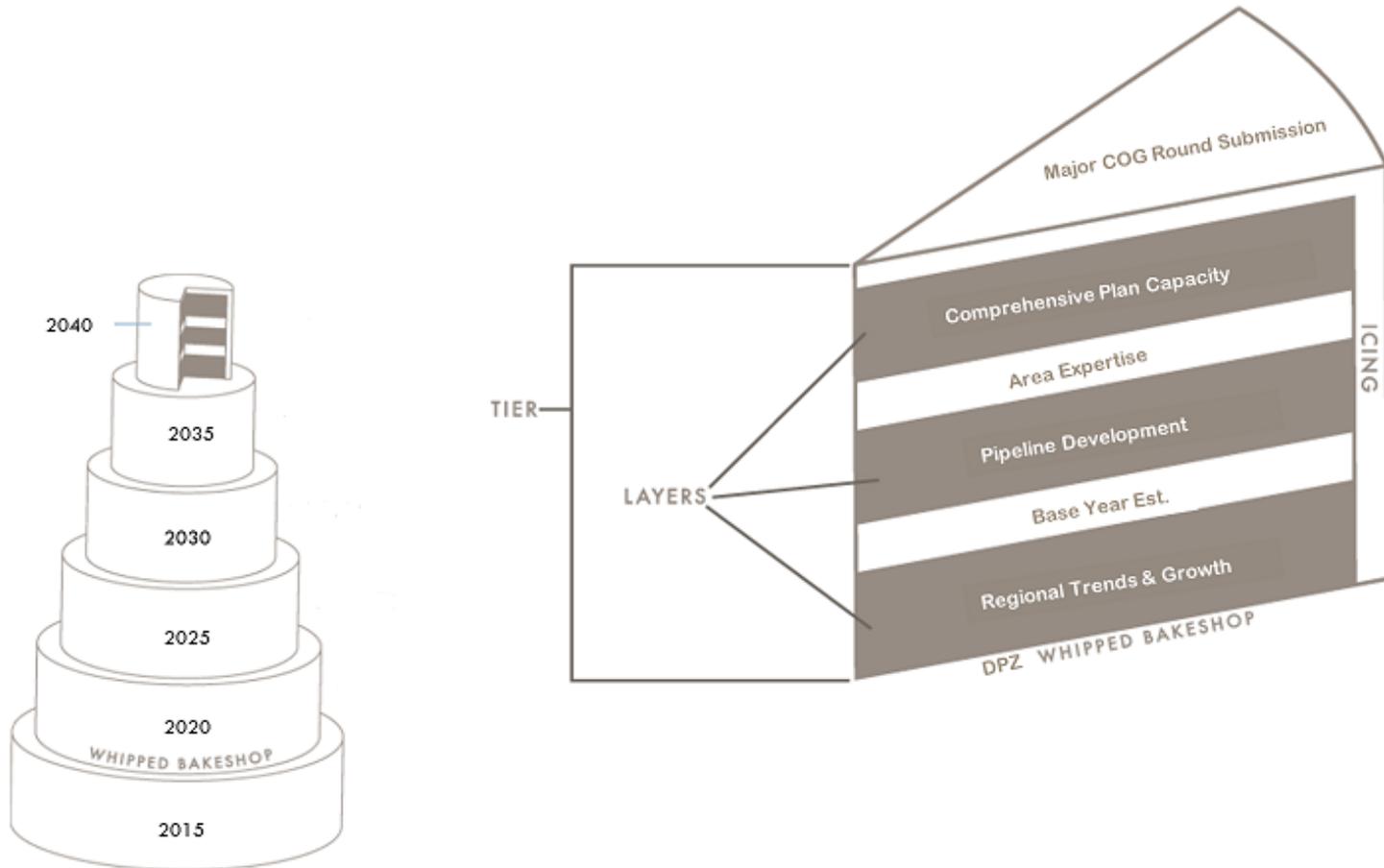


Public Sector Employment Fairfax County



Source: The Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Basic Ingredients: “Bottom Up” Methodology



Development projects are indicators of growth

What job factors were used?

Office-300

Retail-400

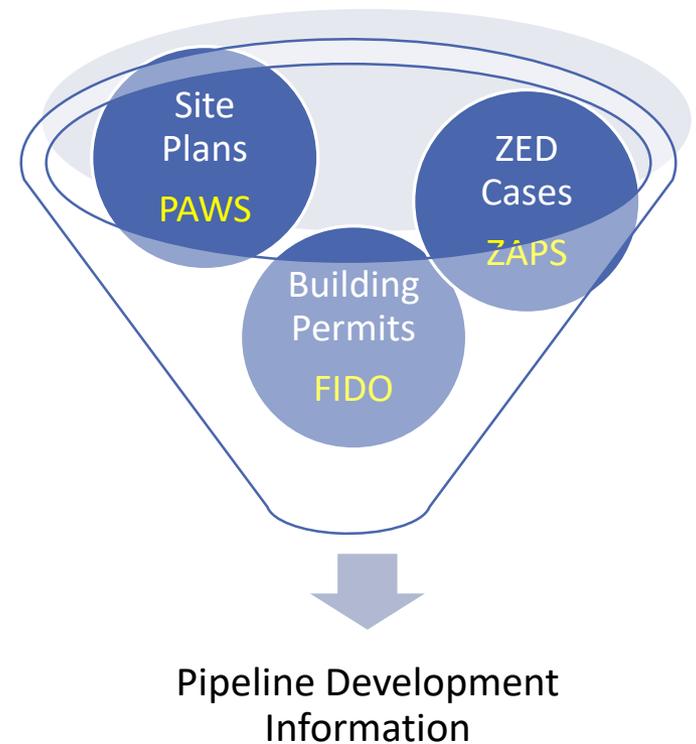
Hotel-1300 (Retail)

Industrial-450

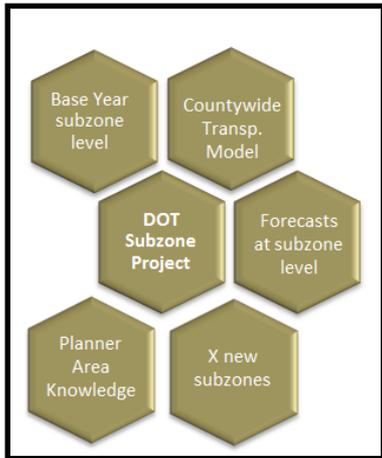
Institutional-500

Why?

County databases supply the data that inform us on how and where the County is changing.



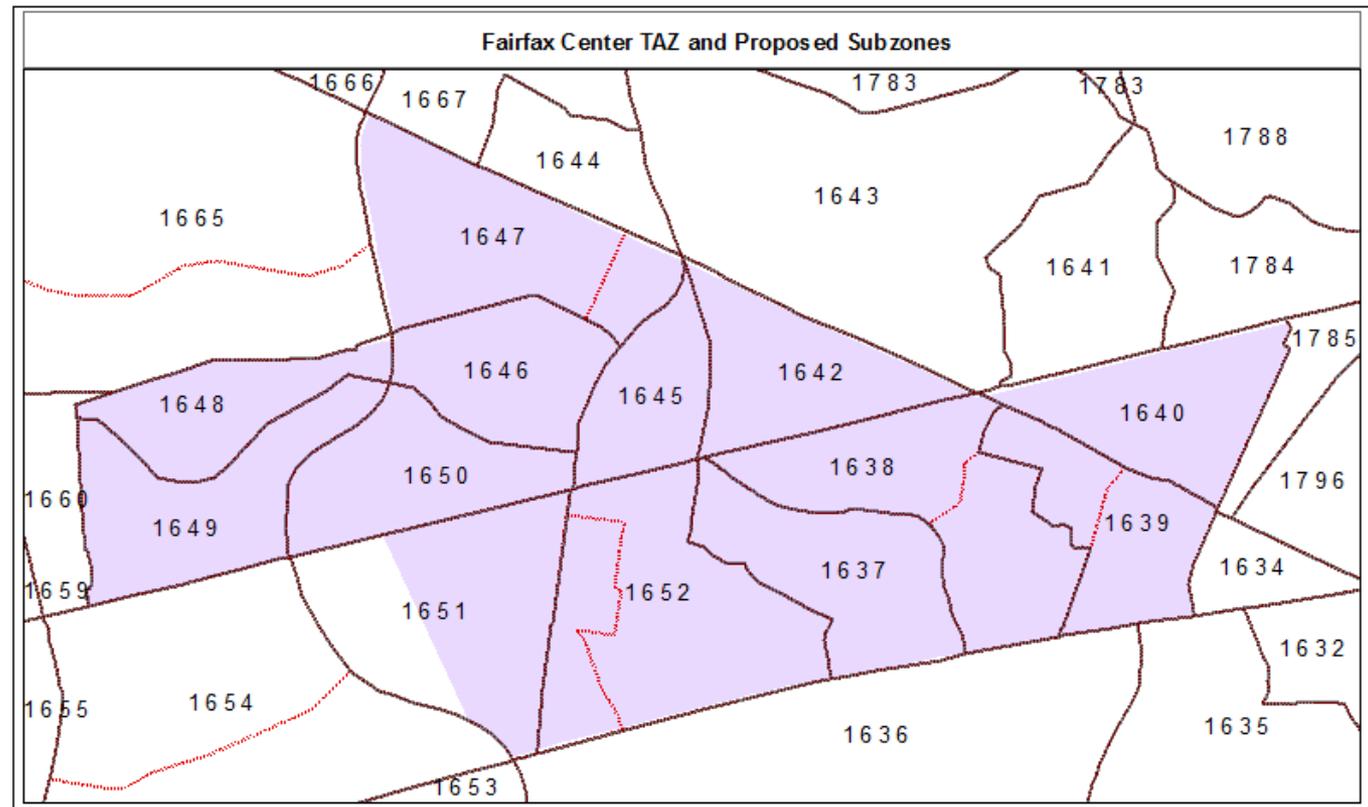
Subzones & Countywide Model

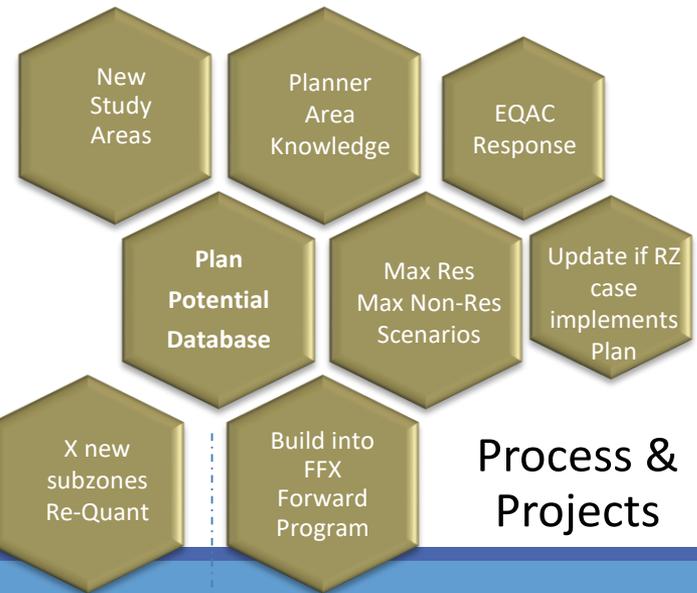
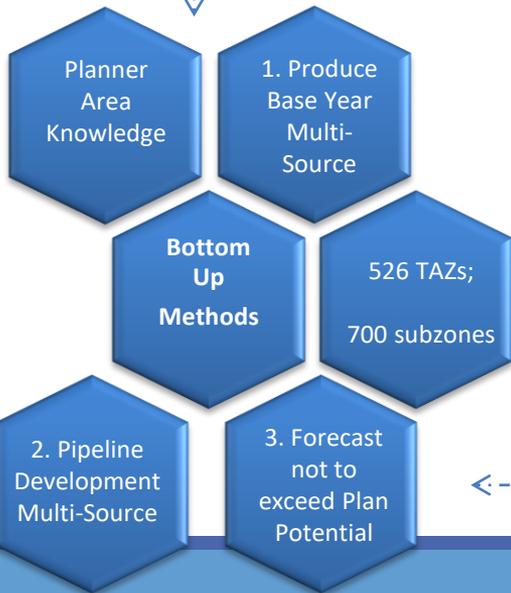
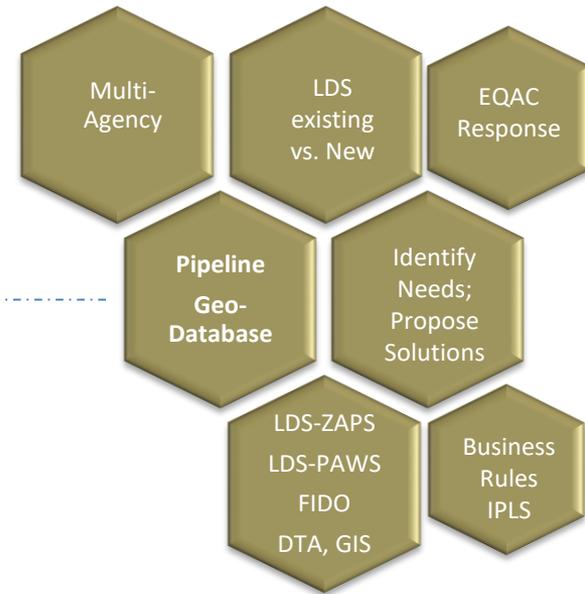
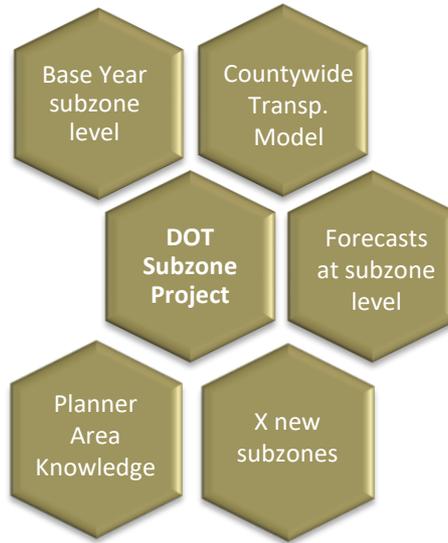


526 TAZs

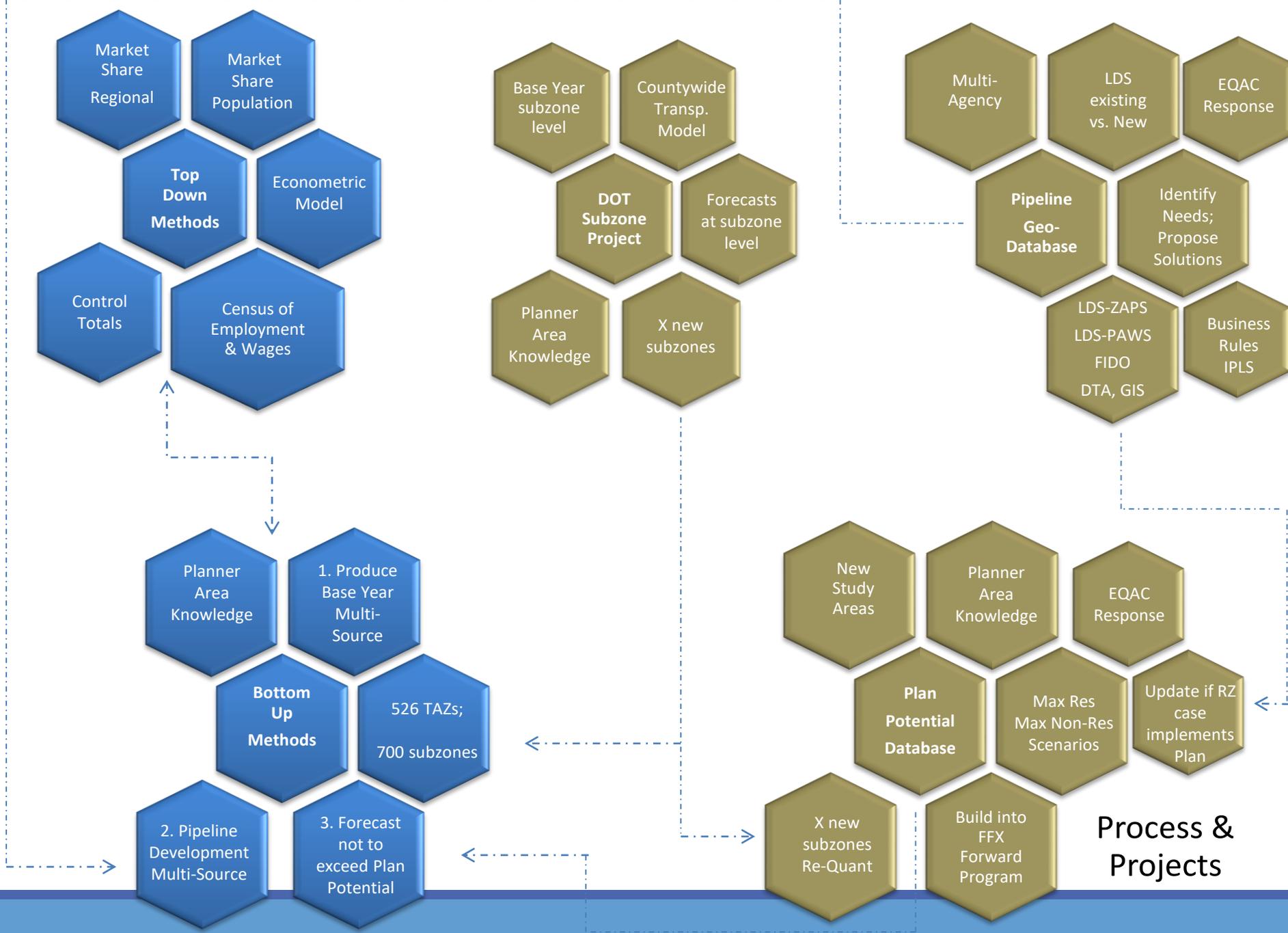
Base year and projections @
subzone level ± 700 subzones

Proposed developments,
Comprehensive Plan Maximum
Scenarios were determined at
the subzone level.

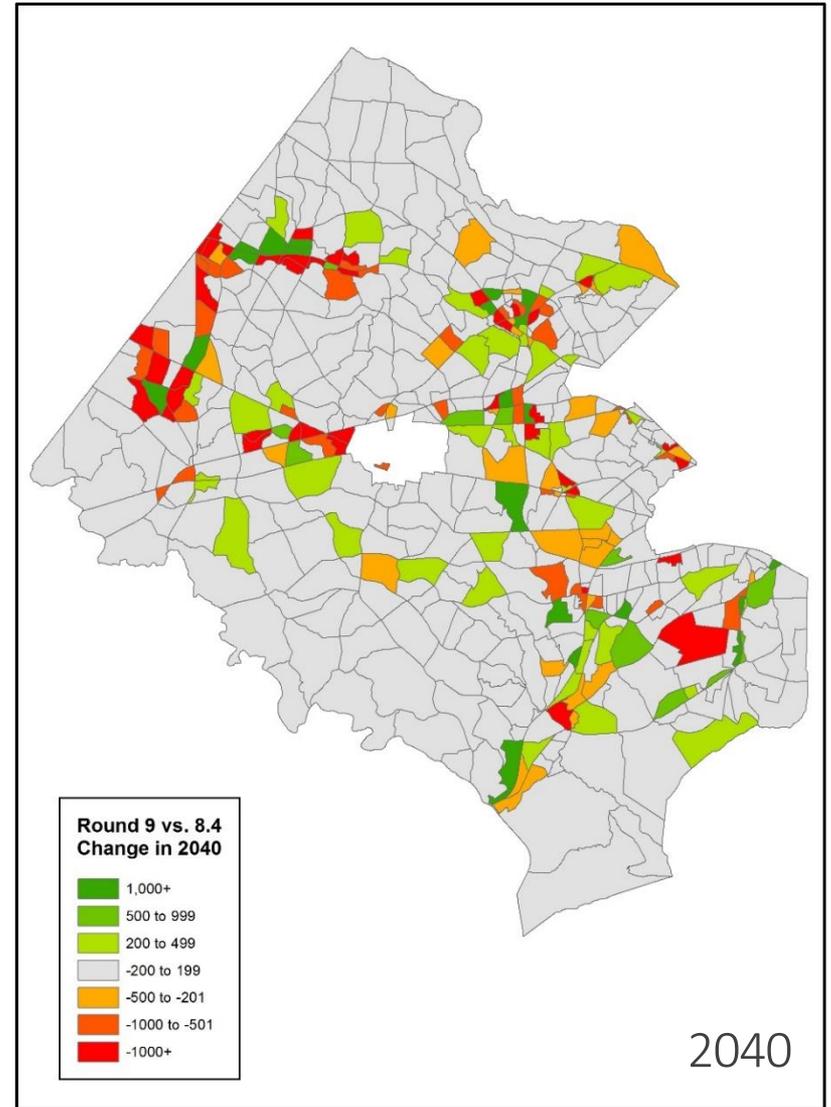
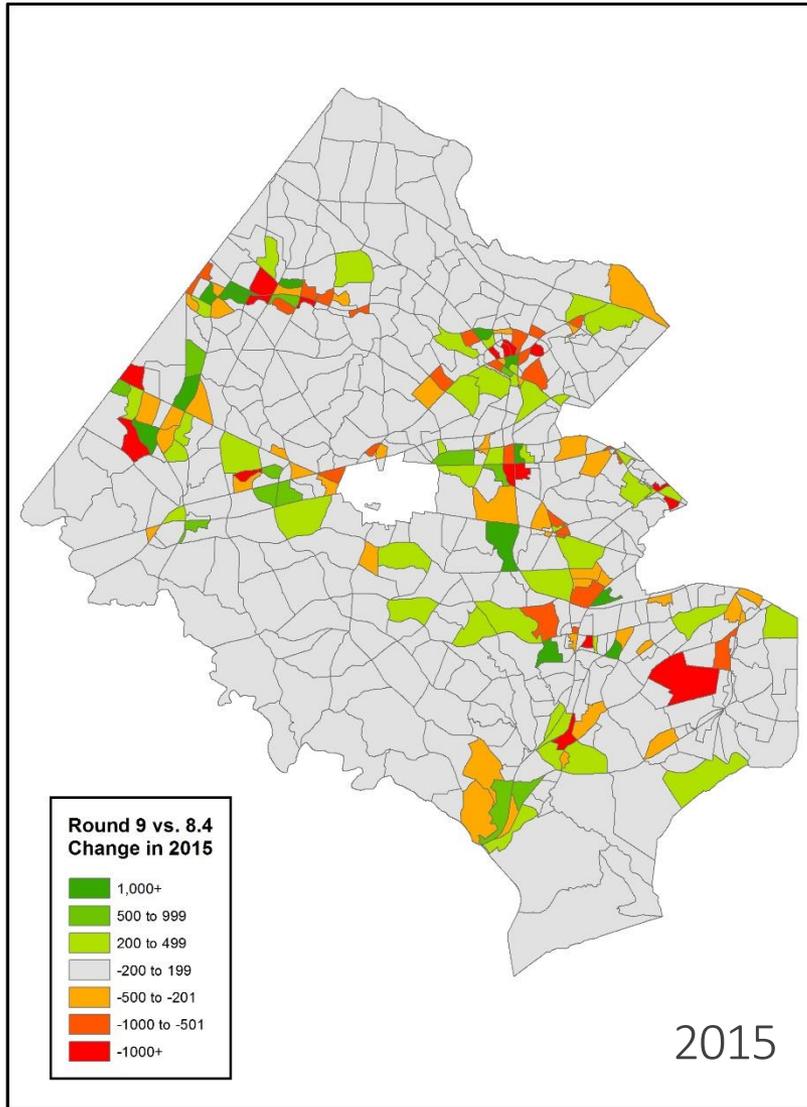




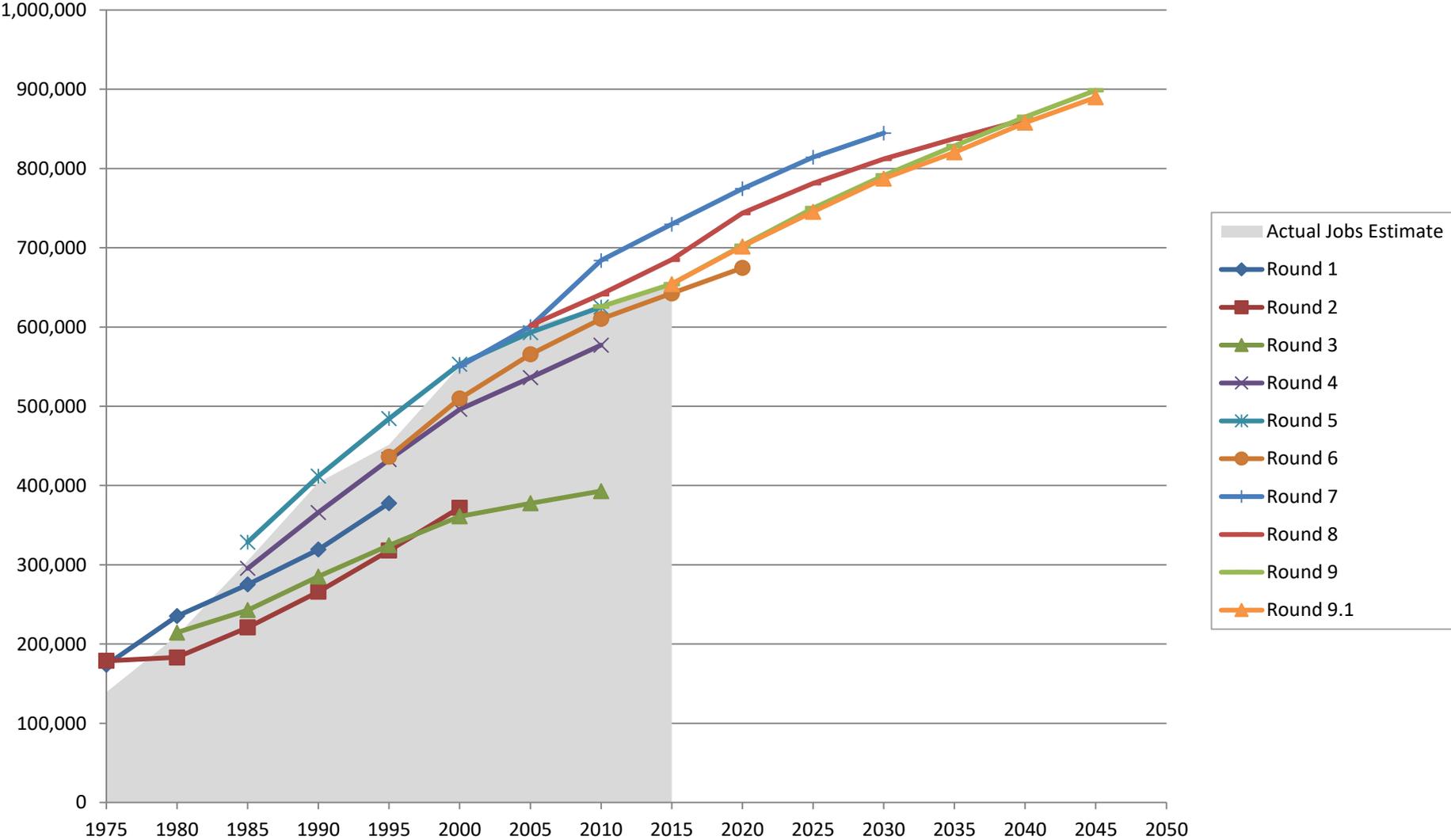
Process & Projects



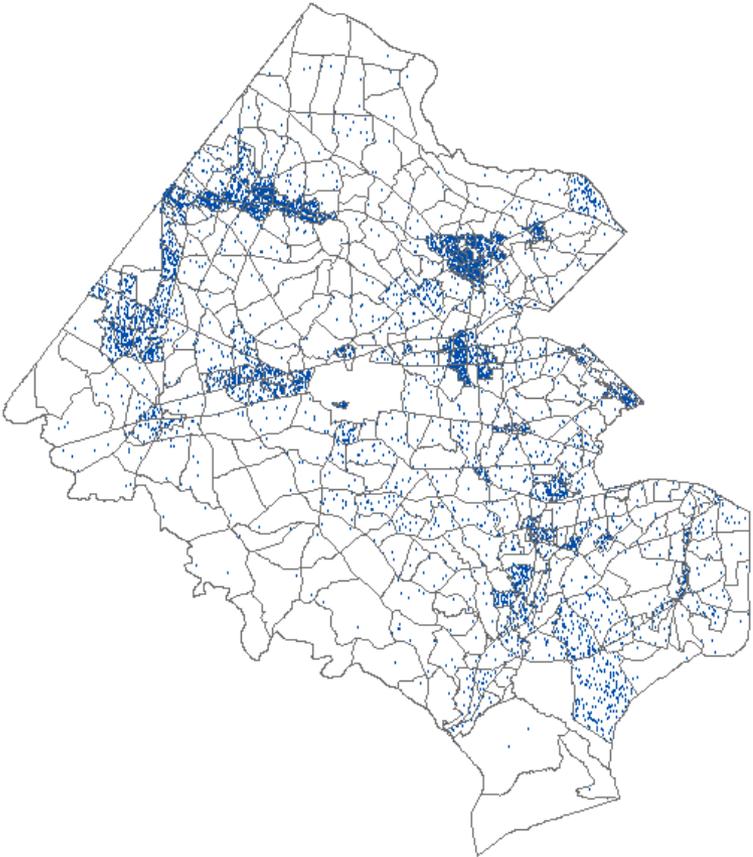
Difference in Round 9 vs. Round 8.4 by TAZ



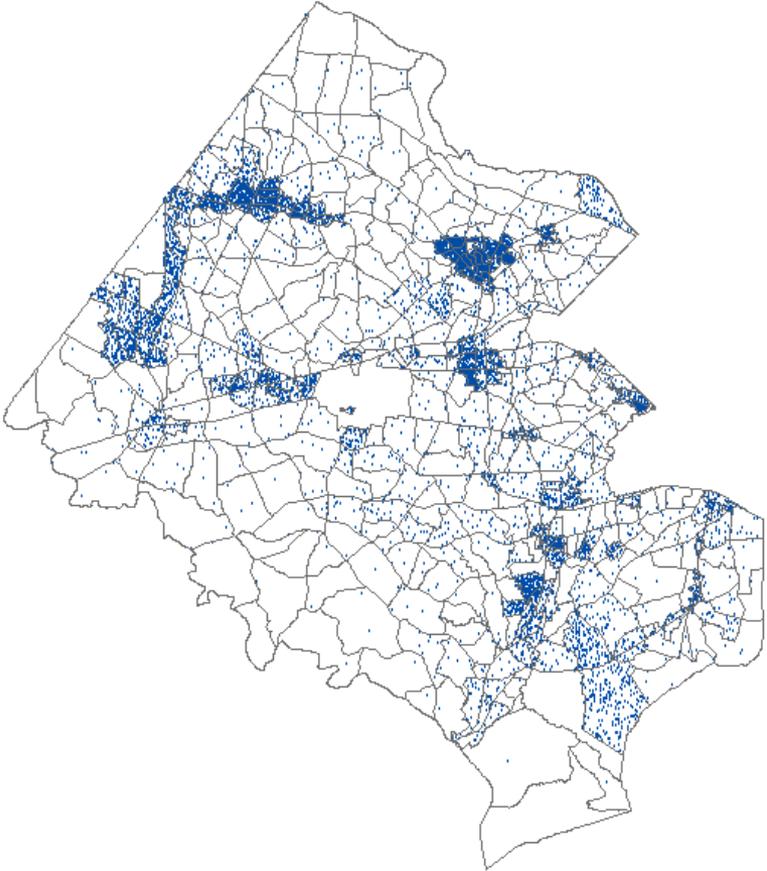
Employment Forecast: Rounds Compared



Round 9.1



2015: 654,000 jobs



2045: 890,000 jobs

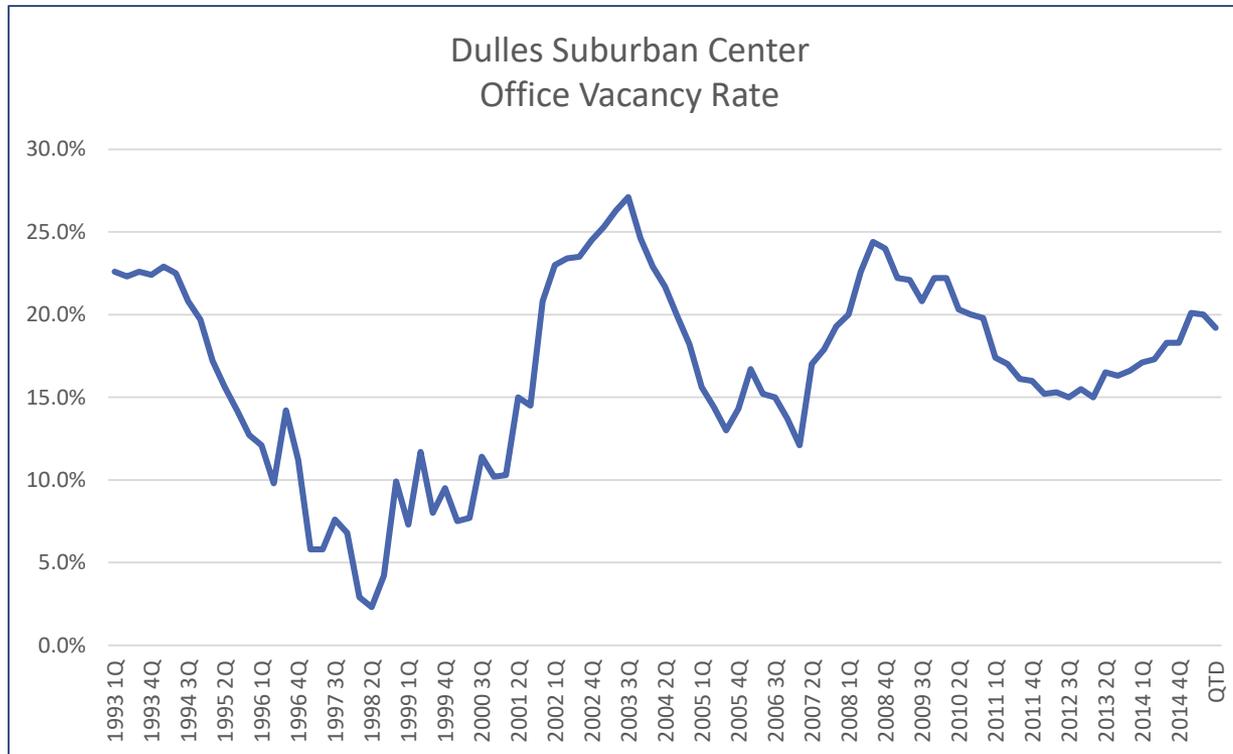
1 Dot = 100

Round 9.1 Focus

- Embark Richmond Highway
 - Community Outreach
 - Comprehensive Plan Amendment (Adopted March 2018)
 - FTA Grant
 - [More Information](#) (Story Map!)
- Tysons
 - No major changes, just a re-allocation of jobs by TAZ
- Reston Transportation Station Areas (TSAs)
 - 26 Rezonings approved; 15 pending
- TSA HQ Relocation-Springfield



Bonus Work Products



Source: Costar.

- Historic Vacancy Rates by Activity Center (Costar)
- Current Vacancy by Building in Centers (Costar)
- July 2015; 2017 Existing Conditions Reports
- Office Job Factor Paper
- Improved Methodology
- Geodatabases for Embark alternative scenarios

Tips

- Obtain Management support
- Two-Year schedule (major round); One Year schedule (minor round)
- Establish a team. Be the project manager.
 - Break work up into mini projects with deadlines
- Partner with other departments and planners to obtain information/data (CIP group, site planners, schools, major institutions)
- Consult your transportation planners
- GIS, databases are key tools
- Geocode addresses against local data
- Use tax assessment data for existing conditions
- Document assumptions (within the databases and with technical papers)
- Seek help/guidance from MWCOG staff or sub-committee peers
- Update work products annually (i.e. existing conditions) time permitting to reduce workload later
- Report out (methods, results, insights)
- Stay organized

Brain Teaser

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<https://www.fairfaxcounty.gov/planning-zoning/>