

William Warren Munroe – Population Analyst
Employee Performance and Development Plan
February 10, 2005

Job Description states...to develop

- For sub-provincial regions
 - Current demographic estimates and projections
 - Employment by Industry
 - Migration projections
- At the provincial level, forecasts of
 - Migration and
 - Immigration

Made up of

- 35% Projections of migration flows
 - 30% Estimates
 - 15% Regional employment projections by all major industries and occupation groups
 - 10% Forecasting BC population annually
 - 10% Provide expert analysis and written reports indicating the impact of demographic change on existing and proposed government policies and programs for use by senior provincial government policy initiators and program directors, as well as for public consumption in the form of BC Stats' releases. As the ranking provincial expert on regional migration flows, provides consultative services including recommendations to complex problems on provincial and regional demographics to ministries, regional and municipal governments, school boards, hospital boards, unions, companies and other organizations concerned with demographic statistics.
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Year One – Main activities and Estimated % of year
January 2002 to December 2002 inclusive

- 5% Current events forms (CEF)– Design database attributes
- 15% CEF – Updates and Maintenance
- 5% Analyzed the *Major Projects Inventory*, the *Manufacture's Directory*, the BC Business Registry, building permits, and housing starts data identifying changes in and providing regional sub-provincial breakouts of activity throughout BC;
- 10% Developing a GIS database including
 - boundary files of various regions
 - inputting industry (mines, mills etc.), features, & services data
- 10% Revising Migration spreadsheets
 - cleaning up errors, building spreadsheets to work from bottom up inputs as well as top down, developed projections using distributions, capacities etc.
- 10% Rewriting description page of PEOPLE
- 15% Estimates
 - Analyzing raw data and modelling outputs against migration assumptions

- 10% Developed a new methodology for estimates using people per meter
 - 10% Analysis & Written Reports
 - Published – Business Indicators: DR 1;
 - FVRD Migration;
 - Migration Highlights
 - Summaries of Forestry, Mining, and Energy
 - 10% Support
 - Formatting documents and .csv files
 - Generating .pdfs
 - Joining .pdfs
 - Generating webpages
 - 10% Requests
 - population and migration estimates
 - webpage referrals
 - special runs
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Goals for Year Two

- Project planning course
 - Access/GIS course
 - Attend seminars on subjects related to position
 - Liaise with ministries
 - Including resource and land ministries (presentations)
 - Analyse data and write more regularly
 - Reduce time spent on activities which can be automated (eg. output formatting) by encouraging refinement to systems and team development.
 - Learn about model and methods to run Regional employment projections by all major industries and occupation groups
 - Learn about model and methods for forecasting BC population annually
 - Improve Descriptions page of the PEOPLE
 - Improve inputs processing and output organization (digital)
 - Improve writing
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**Year Two – Main activities and Estimated % of year
January 2003 to December 2003 inclusive**

- 5% GIS contract revision of RCMP boundary file
- 5% Industry summaries in preparation of P28
- 30% CEF maintenance & requests
- 5% Migration Reports contributions
- 20% Improved projections of net migration
 - Distribution spreadsheet (conversion ratios needed updating)
 - Refine migration forecasting process – Input organization has been greatly improved with the addition of likely impacts
 - Data stored in relational database

- Improved Descriptions page for PEOPLE – All regions – much of it is outdated and wording needs refinement
 - Process to outputs must be refined so that information can be generated into specific outlines
- All places coded hierarchically
- Utilized GIS crystal reports and Access reports
- Analysis of migration data against various factors required eg.
 - Migration by age and sex against Economic, Social and Geographic factors: Industry, Occupation, Quality of life, Urban/Rural, Transportation & Changes in Place of work, spheres of influence.
 - Requested ‘in’ and ‘out’ mobility data to the CSD level
- Annual summary papers on forestry, mining, energy, fisheries, tourism, manufacturing etc.
- 5% Estimates
 - Analysed raw data and model outputs for reasonableness.
- 10% Updated Regional Index webpage with edits and additions to narratives for all topics and places that had yet to be done.
- 10% Support
 - Formatting documents and .csv files
 - Generating .pdfs
 - Joining .pdfs
 - Generating webpages
 - Planned steps to automate html outputs
- 10% Requests
 - population and migration estimates
 - webpage referrals
 - special runs

Goals for Year Three

- Project planning course
 - Access/GIS course
 - Attend seminars on subjects related to position
 - Liaise with ministries
 - Including resource and land ministries (presentations)
 - Analyse data and write more regularly
 - Reduce time spent on activities which can be automated (eg. output formatting) by encouraging refinement to systems and team development.
 - Regional employment projection by all major industries and occupation groups
 - Learn about model and methods
 - Forecasting BC population annually
 - Learn about model and methods
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**Year Three – Main activities and Estimated % of year
January 2004 to December 2004 inclusive**

- 30% Research and maintain databases of economic, social and geographic factors that influence international, interprovincial and intraprovincial migration – refined and populated the CEF database to facilitate managing the input, organization, and ready access of the extensive quantitative and qualitative data used in migration and other B.C. Statistics analyses;
- 10% Analyze and verify monthly and quarterly Statistics Canada migration output data;
 Rewrote the input/output function to produce monthly interprovincial migration estimates from StatCan CTB data;
 Studied StatCan discussion papers on suggested methods of improving migration estimation models. Provide recommendations regarding proposed statistical models;
- 10% Analyze and verify indicators of population change and test annual population estimates employing statistical methods including spatial and time series analysis;
 Analyze variation in direct, indirect, and induced employment by industry (i.e., forestry, manufacturing, mining, agriculture, fisheries, construction, and tourism)
 Analyzed the *Major Projects Inventory*, the *Manufacture's Directory*, the BC Business Registry, building permits, and housing starts data identifying changes in and providing regional sub-provincial breakouts of activity throughout BC;
 Annual reports summarizing the activity of each industry and its impact on migration must be done;
- 20% Produced provincial and regional migration projections (30 years);
 Developed migration assumptions behind the population projections;
 Refined methods to improve migration projection model;
 Provided written summaries profiling the demographics and main economic activities and projections of 280 sub-provincial areas in B.C.;
- 5% Provided written quarterly reports on international, and inter and intra provincial migration trends by age and sex;
- 5% Responded to requests for data, analysis, and explanation of methodologies, etc., from other departments in the ministry; other ministries, federal, regional and municipal governments, private firms, and other clients and stakeholders;
- 10% Current author and editor of the *BC Regional Index* – a publication, using narratives, charts and graphs, describing the industries and the geographic, social, and economic activities in B.C.'s 28 regional districts;
- 10% Initiated, provided the theoretical framework, and successfully co-ordinated the development of a program that manages datasets and enables internet users to access and query (with table and graph outputs) B.C. Stats public data.
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Goals for Year Four

Project planning course

Access/GIS course

Attend seminars on subjects related to position

Liaise with ministries

 Including resource and land ministries (presentations)

Analyse data and write more regularly

Reduce time spent on activities which can be automated (eg. output formatting)
by encouraging refinement to systems and team development.

Refine migration projections

 Incorporate Statcan RD migration estimates by age and sex

Run the Regional Employment model

Update Regional Index annually post censal (personal goal)

Also

See if there is a way to get access reports to word .doc for outlines

Order 'in' and 'out' migration data census '01 20% sample