Moving Towards a More Relevant, Flexible and Timely Socio-Economic Data System: Modernizing HRSDC’s Data Portfolio

March 2011

PRELIMINARY DRAFT
For Discussion Only
Purpose

- Provide an overview of the modernization of HRSDC’s data portfolio
- Discuss new emerging societal and policy needs
- Describe the progression towards a new data strategy, with particular emphasis on the new Adult and Family Longitudinal Platform
- Discuss engagement with the academic community
Societal drivers exert pressures on HRSDC’s data portfolio

**Context**

- **Changing Canadian society**
  - Ageing and increasingly diverse
  - Families increasingly diverse
  - Increased importance of the influence of globalization and new technologies on institutions and society

- **Shift towards government role that supports decision-making by individuals and organizations**
  - Strengthen national information systems to support individuals/organizations in making better choices (LMI, learning, family)

- **Increasing accountability to Canadians**
  - Report/foster impacts of programs and policies for Canadians
  - Maximize returns on data investments

**Pressures**

- **New information needs on:**
  - Labour market and income dynamics
  - Adult & family transitions
  - Ageing/older workers
  - Learning transitions/outcomes
  - Specific populations

- **More policy responsive, flexible and integrated data portfolio**
  - More flexible and responsive data instruments and strategies
  - Better integration of labour market, learning, social development, health, environment data/portfolios
  - Better integration of local, provincial, national, international data

- **Strengthen management and governance of national data assets**
  - Better portfolio management
  - Better planning and governance
  - Better access/dissemination

- **Ensure value for money and relevance of our data investment**

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*Over the past 40 years, development of the HRSDC data portfolio was done incrementally, with a focus solely on outcomes, leading to an overall data system that is not integrated, flexible and responsive.*
Growing dissatisfaction with relevance and efficiency

- **Lacking information on key emerging policy topics**
  - Adult trajectories, planning, outcomes
  - Learning outcomes and institutions
  - Specific populations (aboriginals, recent immigrants, persons with disabilities)
  - Emphasis on outcomes with little information on inputs and outputs

- **Lacking flexibility/responsiveness**
  - To meet new emerging policy needs and priorities
  - To provide information on institutions (e.g. learning) and specific populations (lacking information on input/output)

- **Lacking integration**
  - Survey (e.g. cross-sectional, longitudinal) and administrative data
  - Economic, social, health, and environmental
  - At geographical level: local, provincial/territorial, national, international

- **Is ineffective and costly**
  - Too many surveys with some inconsistencies in content
  - High level of duplication in core information collected
  - Lack of a well-coordinated data collection schedule

**HRSDC’s data portfolio requires a significant transformation to meet new societal and departmental realities**
As a result, the status quo is not sustainable

Modernization of the HRSDC data portfolio is required in the following areas:

- **content** to be more relevant and reflect new Canadian realities

- **data collection strategies** to improve flexibility, timeliness and ensure better integration

- **management** to ensure effective implementation of the new HRSDC data strategy, including:
  - Access
  - Dissemination (e.g. synthesis, analytical tools)
  - Validation/engagement with users, including the academic community
  - Improved coordination between research and data
  - Increased focus on meeting citizen needs (i.e. citizen-centric approach)
HRSDC has worked with Statistics Canada to develop a new approach

The new HRSDC data strategy has been developed taking into account Statistics Canada’s existing socio-economic data portfolio (e.g. NHS, LFS, SLID, GSS, etc.)

The transformation of the HRSDC data portfolio rests on four key components:

1) An integrated conceptual framework
2) Content reflecting societal changes and emerging priorities
3) An integrated portfolio approach to data collection
4) A new management approach (i.e. better access, and dissemination, strengthened governance, on-going validation/engagement, etc.)
The new approach calls for an integrated conceptual framework...

- An overarching Input-Output-Outcome framework to guide integration
  - i.e. framework incorporating measurement of inputs (i.e. public and private resources), outputs (i.e. interventions), and outcomes (i.e. Labour Market/Learning/Social outcomes)

- An underlying conceptual framework that identifies what should be measured, and how, based on a review of 3 different, but consistent, approaches:
  - Life course approach - dynamic perspective recognizing role of social, cultural and economic context and past experiences in shaping the lives of individuals
  - Capability approach – recognizing the individuals’ freedom to choose based on their access to various opportunities
  - Social accounting approach – organizing and integrating social indicators in one data set (i.e. similar to economic System of National Accounts)

- Content developed under the new approach will draw from this framework as well as both the analysis of longitudinal and cross-sectional data and microsimulation
HRSDC has worked with Statistics Canada to develop a new approach that:
- Makes better use of existing data (i.e., survey, program and tax data, as well as data available from private sources and other levels of government)
- Adopts an integrated approach to surveys
  - Working across thematic boundaries (e.g. Health, Social, Labour, Environment)
  - Harmonizing content
  - Using consistent measures across instruments
- Reduces the number of instruments and integrates these into a system consisting of 4 national data platforms
  - **Two Household Platforms**: 1) to monitor Canadians’ outcomes; 2) to follow transitions over the lifecourse
  - **One Business Platform**: to monitor job vacancies, skills shortages and workplace/HR practices
  - **One Learning Platform**: to monitor PSE students and apprentices
- Provides capacity to better monitor and understand societal changes
  - More comprehensive portrait of society
  - Identification of causal links to better understand the impact of these changes on Canadians, businesses and institutions and why they have occurred
  - Increased focus on adult outcomes and transitions, PSE/learning institutions, specific populations, labour market and income dynamics
- Improves access to and dissemination of information to support the information needs of Canadians, including researchers, businesses, and institutions
The modernized HRSDC data portfolio

INTEGRATED INFORMATION PLATFORM
- Integrated data infrastructure, new interface to facilitate data access, new analytical tool for monitoring and analysis (e.g. micro-simulation, reports, indicators, research) and new dissemination strategy

Cross-Sectional Household Platform
- Canadian Adults 15+ yrs, (LFS/NHS frame)
  Children 1-18 yrs (17,000 respondents)

Core Content
- LM/Learning/Social outcomes
e.g. Labour force and learning participation, family and household structure

Rotating Content, e.g.
- Child and Youth outcomes
- Self-employed
- Older Workers
- People with Disabilities

Longitudinal Household Platform
- Canadians 15+ yrs
- 30,000 households
- Potential multiple cohorts

Core Content
- LM/Learning/Social transitions of adults and youth
e.g. Family dynamics, Learning trajectories, Labour market transitions,

Rotating Content, e.g.
- Adult competencies
- Detailed education and training, labour

Business Platform
- Canadian businesses
- 16,000 establishments

Core Content
- Firm demographics, labour turnover, payroll/wages, workforce composition

Rotating Content, E.g.
- Job vacancies and skills
- Workplace Practices

PSE/Learning Platform
- PSE institutions and students
- Based on PSIS and RAIS administrative data

Core Content
- Type of institution, Size, Enrolments, Completions, Age and gender of students, etc...

Rotating Content, E.g.
- Youth competencies
- Student finances
- PSE characteristics
- Returns to education

Survey Data
Labour Market/Learning/Social

Administrative Data
HRSDC Program (e.g. EI, CPP)
Tax (e.g. CCTB)

* Ad-hoc modules can be created for each platform to respond to emerging needs

The portfolio will better integrate different sources of information to improve timeliness, effectiveness and flexibility of information and better support decision-making and analysis.
...And a new management approach

An approach that builds and improves upon existing mechanisms to provide:

- **Better access to data and information**
  - Strengthening relationships with RDCs to complement existing mechanisms
    - Continuing to explore options to facilitate access (e.g. virtual access)
  - Implementing an integrated information platform

- **Improved dissemination**
  - Working with members of the academic community to improve synthesis of information and implement new analytical tools (e.g. microsimulation)

- **Support for decision-making by Canadians, businesses and institutions**
  - Adopting a citizen-centric approach

- **Greater engagement and validation**
  - On-going engagement with the academic community, other government departments (OGDs), P/Ts and other user communities via existing mechanisms and new venues (e.g. biennial user conference)
  - Promotion of links between the data and research

*HRSDC will continue to work with the academic community to foster and develop Canada’s information infrastructure and to support continued analysis in key areas affecting the lives of Canadians.*
Implementation is supported by a new governance structure

- **Internally** to identify needs and priorities, set strategic directions, determine resource allocation, and manage communications and engagement effectively

- **With Statistics Canada** to select the most effective collection strategies, decide on resource allocations and coordinate joint activities
  - HRSDC-STC Thematic Expert Working Groups
    - Explore technical feasibility and make recommendations
    - Identify and develop modules/content
    - Elaborate and recommend implementation strategy
  - HRSDC-STC DG Advisory Group
    - Make recommendations on data needs priorities, data collection, access and dissemination strategies
    - Explore financial feasibility
  - HRSDC-STC ADM Steering Committee
    - Set common directions
    - Approve development and implementation of platform strategies
    - Manage resources allocation
  - Deputy Minister and Chief Statistician
    - Strategic orientations for data portfolio and platforms implementation, and coordination between HRSDC and STC

- **With PTs, academics and other stakeholders** to actively engage with them and work on data shared priorities (e.g. Expert Advisory Groups, F-P/T working groups)
The modernization of HRSDC’s Data Portfolio will unfold over a period of 3 to 5 years and will focus on better meeting information needs by:

- Securing core data while implementing changes to HRSDC’s data portfolio and
- Improving access to and dissemination of information

Key milestones include:

- **2010-2011**
  - **Completing** planned collection for existing surveys (e.g. National Longitudinal Survey on Children and Youth, Youth in Transition Survey)
  - **Developing** Learning and HRSDC Administrative platforms, as well as data collection strategies for specific populations (e.g. PWD, Immigrants and Aboriginals)
  - **Piloting** Business, Cross-sectional Household, Longitudinal Household and Integrated Information Platforms
  - **Engaging** with the academic community, OGDs, P/Ts and other user communities on key aspects of data plan implementation (on-going)

- **2011-2012**
  - **First data collection**
    - Cross-Sectional Household Platform (e.g. Children and Youth - Survey of Young Canadians)
    - National Adult and Family Longitudinal Data Platform (First Wave)
    - Business Platform (Pilot - Job vacancies/Workforce)

- **2012-2014**
  - **On-going data collection** for the 4 data platforms
  - **Providing access** to “New” Integrated Data Platform on HRSDC programs and on PSE institutions
  - **Engaging** with academics and other stakeholders via the first biennial user’s conference
Key actions to modernize the content of the socio-economic data system

- Change in focus: greater emphasis on the adult population

- Transforming the content by:
  1. Improving the measurement of key outcomes in the labour market, learning and family domains
  2. Putting greater emphasis on the measurement of key transitions in the lives of adults and their determinants
A Strategy for Measuring Key Outcomes

- Improving the measurement of key outcomes by:
  - Focusing on data instruments to gather information on key emerging data priorities, e.g. data on skills through Programme for International Student Assessment (PISA) and Programme for the International Assessment of Adult Competencies (PIAAC)
  - Gathering data on specific populations, e.g. data strategy for people with disabilities, partnership with Indian and Northern Affairs Canada (INAC) on Aboriginal data strategy
  - Establishing and/or strengthening partnerships with P/Ts to obtain information from PSE institutions (Postsecondary Student Information System (PSIS)) and from students (National Graduates Survey (NGS)) on key graduate outcomes
  - Aligning actions with current Statistics Canada infrastructure, when appropriate
  - Gathering data to support Canadians in their decision making, e.g:
    - Supporting the development of a new Learning and Labour Market Information System (e.g. pilot job vacancy survey and private sector job postings)
A strategy for measuring key transitions and their determinants

- Improving the understanding of causal links between determinants and outcomes in the adult population and identifying key factors behind the main life events of adults by:
  - Implementing the new Adult and Family Longitudinal Platform (AFLP)
  - Working with Statistics Canada and other partners to develop complementary methods of collecting information on adult transitions (e.g. modernization of SLID to measure low-income dynamics, avoiding overlap with the Canadian Longitudinal Study on Aging)

- Development of the AFLP based on work done for the Canadian Household Panel Survey and developments at the international level
  - Key features of the AFLP (based on the general household panel survey model)
    - All household members interviewed by non-proxy
    - Indefinite panel length
    - Annual follow-ups
    - All household members followed i.e. adults 15+ interviewed and children are interviewed when they turn 15
  - Flexible data infrastructure
    - Approximately 60% core content (repeated annually), 40% rotating content
  - A multi-topic instrument (Labour, income, family and learning)
  - Based on the lifecourse framework
AFLP data collection- First wave

- First wave of data collection of the AFLP will be coordinated with data collection of the Program for International Assessment of Adult Competencies (PIAAC)

- PIAAC is an internationally developed tool designed to:
  - identify and measure differences between individuals and countries in competencies
  - assess the impact of these competencies on social and economic outcomes at individual and aggregate levels
  - gauge the influence of education and training systems in generating required competencies

- The vision for the coordination is:
  - to have PIAAC adult competency tests available for some longitudinal platform respondents
  - to follow some PIAAC respondents longitudinally
AFLP and PIAAC samples

- The total sample for AFLP and PIAAC comprises a gross of 65,000 households
- Of these, 30,000 are targeted for longitudinal follow-up
  - Sample divided into two parts
    - Half of the 30,000 will receive the PIAAC assessment
- Total net cases (targeted number of respondents): 19,000 households, 35,000 adults at wave 1
- 8,000 adults 16-64 to receive PIAAC assessment
# Proposed core and rotating content of the AFLP

<table>
<thead>
<tr>
<th></th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
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</thead>
<tbody>
<tr>
<td><strong>Labour market</strong></td>
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<tr>
<td>Labour force activity and employment characteristics, Employer characteristics</td>
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<td>Employment income, Hourly wage</td>
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<td>Attainment (highest level)</td>
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<td>Retrospective history</td>
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<tr>
<td><strong>Family</strong></td>
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<td>Marital status, Union formation/ dissolution</td>
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<td>Parent education</td>
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<tr>
<td>Retrospective family history</td>
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<td><strong>Income &amp; financial security</strong></td>
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<td><strong>Other</strong></td>
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<td>Self rated health status, Disability</td>
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<tr>
<td>Programme of International Assessment Adult Competencies (15-64)</td>
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- **Core content**
- ○ Rotating content – Content for wave 2 identified only as potential topic, other possibilities include caregiving, time use, detailed health status, etc.
Key milestones for the AFLP

- **Data collection**
  - First data collection in November 2011
  - Survey data to be released in Fall 2012, with linked administrative data to follow

- **Content development**
  - Planning of content for second collection (March-June 2011)
Opportunities for engagement with the academic community

1. Implementing Export Advisory committees:
   a) Expert Advisory Committee to the ADM-ACS on Socio-Economic Data System
   b) For each of the 4 platforms
      • Cross-sectional Household Platform Advisory Committee
      • Longitudinal Platform Advisory Committee
      • Business Platform Advisory Committee
      • Postsecondary-Learning Platform Advisory Committee

2. Developing an access strategy by
   ▪ Improving use of CDRCN network
   ▪ Testing new approaches for virtual access

3. Developing an engagement and dissemination strategy:
   ▪ Annual data users forum to discuss measurement, collection, access and dissemination
   ▪ Creation of a tool to exchange ideas on synthesis and data access

4. Coordinating and developing partnerships for data and research capacities with CDRCN, SSHRC and CIHR
Next steps

Over the next months, develop and implement the engagement strategy:

- Creation of the Longitudinal Platform Expert Advisory committee (March 2011)

- First meeting of the Longitudinal Platform Advisory Committee (end of March 2011)

- Creation of the Expert Advisory Committee to the ADM-ACS on Socio-Economic Data System (Summer 2011)

- Validation of content for upcoming waves of the longitudinal platform (March to September 2011)

- Potential for planning workshop for first forum of data users in parallel of the RDC Conference (October 2011)
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## Content

<table>
<thead>
<tr>
<th>Non PIAAC households</th>
<th>PIAAC household Non-PIAAC respondent</th>
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<tbody>
<tr>
<td><strong>Basic Background Questionnaire</strong></td>
<td><strong>Detailed Background Questionnaire</strong></td>
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<td>- Family relationship matrix</td>
<td>- Family relationship matrix</td>
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<td>- Demographics</td>
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<td>- Education</td>
<td>- Education</td>
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<td>- Basic health status</td>
<td>- Basic health status</td>
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<td>- Parent’s education status</td>
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<td>- Skills, Literacy, numeracy and ICT at work</td>
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<td>- Literacy, numeracy and ICT in everyday life</td>
<td>- Literacy, numeracy and ICT in everyday life</td>
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<td>- Personal characteristics and opinions</td>
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</table>

**PIAAC assessment**

- Annual labour supply
- Retirement
- Children
- Housing

<table>
<thead>
<tr>
<th>Linked from admin. data</th>
<th>Linked from admin. data</th>
<th>Linked from admin. data</th>
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<td>- Individual T1 history back to 1990</td>
<td>- Individual T1 history back to 1990</td>
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<td>- Individual T4 history</td>
<td>- Individual T4 history</td>
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<td>- Pension plan information for reference year</td>
<td>- Pension plan information for reference year</td>
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<tr>
<td>- Family income information for income reference year</td>
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