



July 2012 Flooding Update

Mill Woods

Community Consultation

October 1, 2012

Today's Meeting

1. Share preliminary results on July storm and flooding information collected to date
2. Report on the status of current Mill Woods flood improvement projects
3. Explain Homeowner's Flood Proofing Program, subsidies, and potential Provincial Disaster Assistance Fund
4. Outline next steps
5. Answer questions/get input and feedback

After Today's Meeting

1. Summarize and share meeting input
2. Consider community input in work ahead
3. Report on progress of current projects
4. Keep communities informed as studies are completed and improvement options developed
5. Return to the community to present and discuss findings/options in Spring 2013

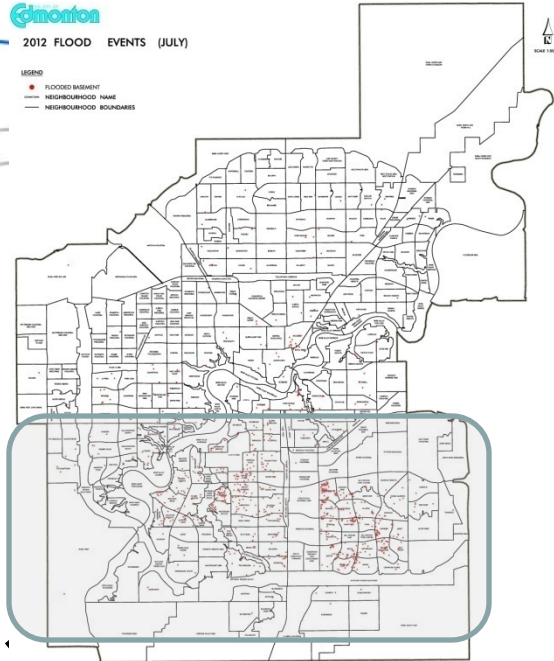
Please hold questions until after presentation

July 2012 Storms

- 4 extreme storm events: localized, intense, short duration

Date	Rainfall	Duration	Area	Category
July 12	50 mm	90 minutes	south Edmonton	E6
July 14-15	85 to 105 mm	30 hour	southeast and west Edmonton	E3
July 17-18	30 mm	30 minutes	south Edmonton	E5
July 23	20 to 25 mm	30 minutes	south and west Edmonton	E5

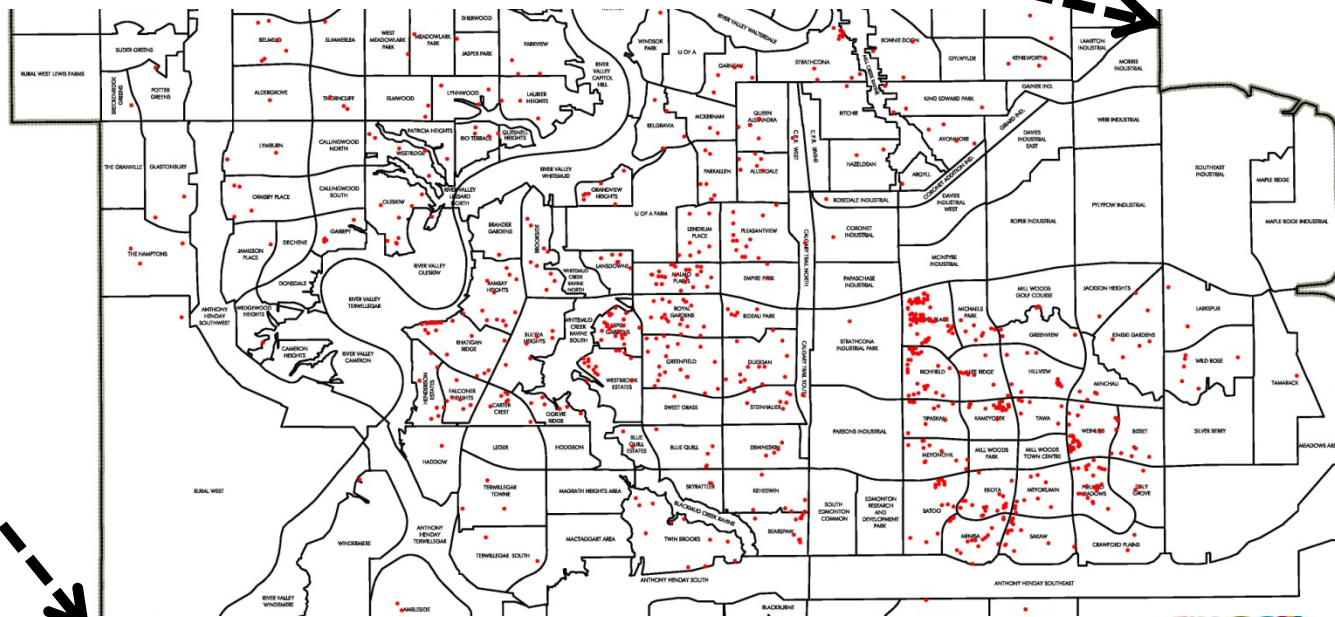
- Area south and west of the city received as much as 240 mm of rain, compared to 90 mm average for July
- The July 12 storm resulted in more than 2.4 million cubic metres of rainfall in the area (2 ½ Commonwealth Stadium)



Impact of Storms

July 12 to August 31, 2012

- 4982 total calls received by 311
- 1752 reported basement flooding
- 502 in Mill Woods



Drainage Response

- Responded to calls to 311
- Conducted field investigations and preliminary assessments
- Emergency repair works
 - ✓ Catch basins and manholes
 - ✓ Sewer main ruptures and blockage removals
 - ✓ Park trail and bridge abutment repair/slope stabilization

Preliminary Assessment Findings

- Localized, intense and short duration storms
 - Heavy rain, hail and strong winds
 - Can occur with little prior notice
 - Can cover several neighbourhoods - not necessarily whole city
 - Flooding on roads and underpasses
 - Water in basement can come from window wells, doors, seepage, sewer backups
- Mill Wood's reported basement flooding breakdown (approximately):
 - 30% Sanitary backup
 - 10% Private property issues (e.g. seepage, sump pumps, lot grading)
 - 60% Undetermined causes

Preliminary Assessment Findings

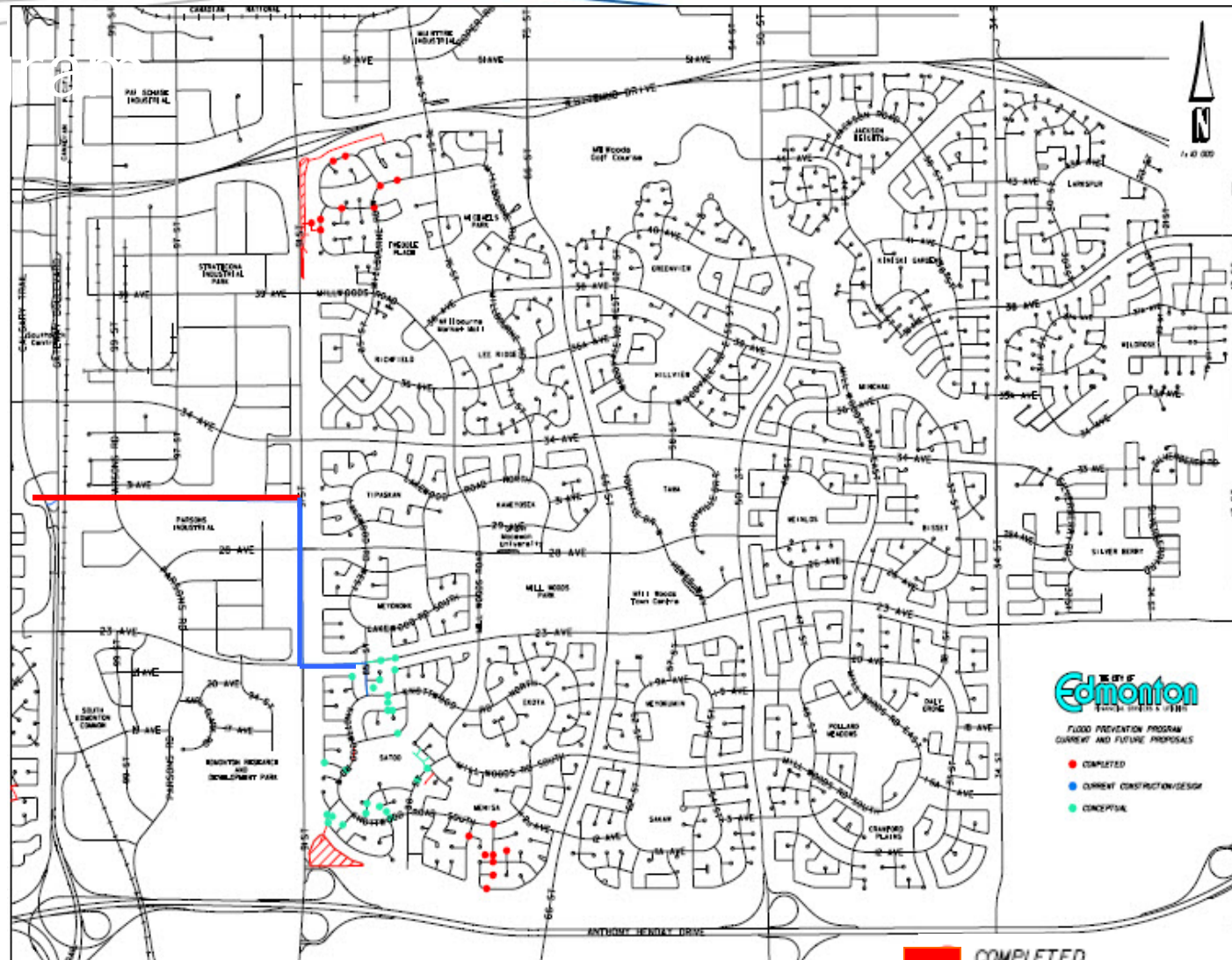
- Existing Mill Woods Double Barrel Trunk Sewers surcharged and backed up local sewer systems in Mill Woods
- Flooding clustered around the lower lying areas in the neighbourhoods

Flood Prevention Program - city wide




- July 2004, city experienced extreme storm resulting in 4,500 flooded homes
- City Council approved \$146M Flood Prevention Program in 2006
- Complete projects in 31 Neighbourhoods by 2020
- The program includes:
 - Upgrading existing sewers and building new sewers
 - Installation of new storm water management facilities where possible
- Progress
 - 12 neighbourhoods are completed
 - 10 neighbourhoods are on-going and to be completed by 2014.
 - Total expenditure to date is \$105M

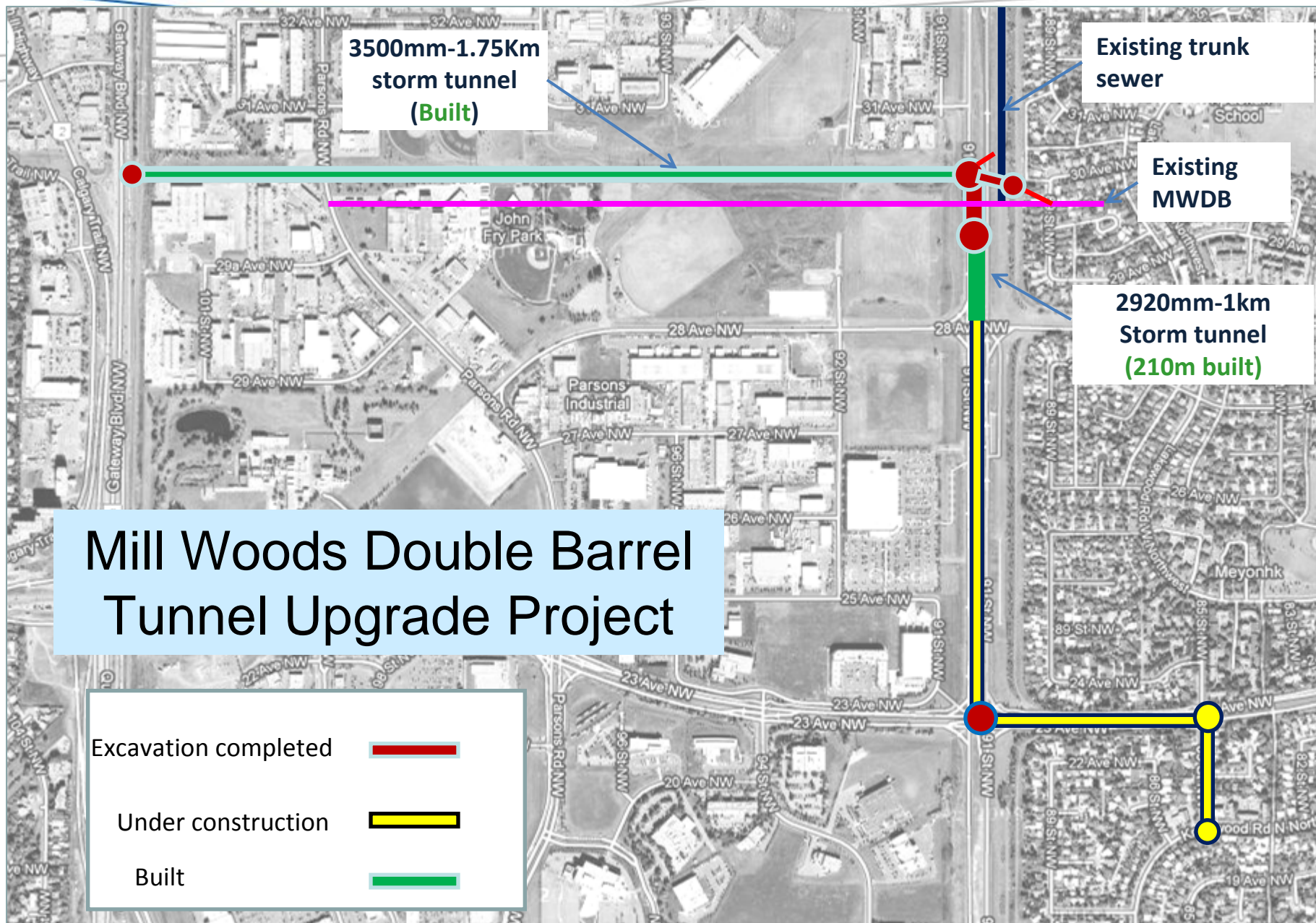
What's been done in Mill Woods

Total investment: \$50M



Mill Woods Flood Prevention Program

-  COMPLETED
-  CURRENT CONSTRUCTION/DESIGN
-  CONCEPTUAL



3500mm-1.75Km
storm tunnel
(Built)

Existing trunk
sewer

Existing
MWDB

2920mm-1km
Storm tunnel
(210m built)

Mill Woods Double Barrel Tunnel Upgrade Project

Excavation completed



Under construction

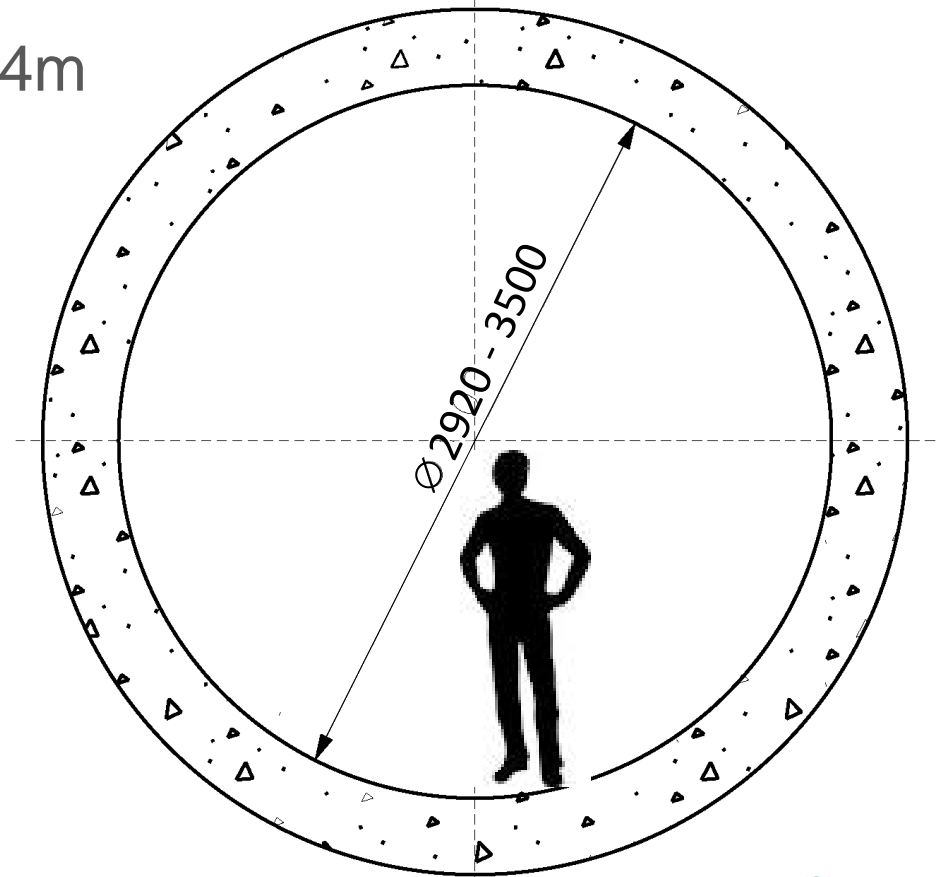
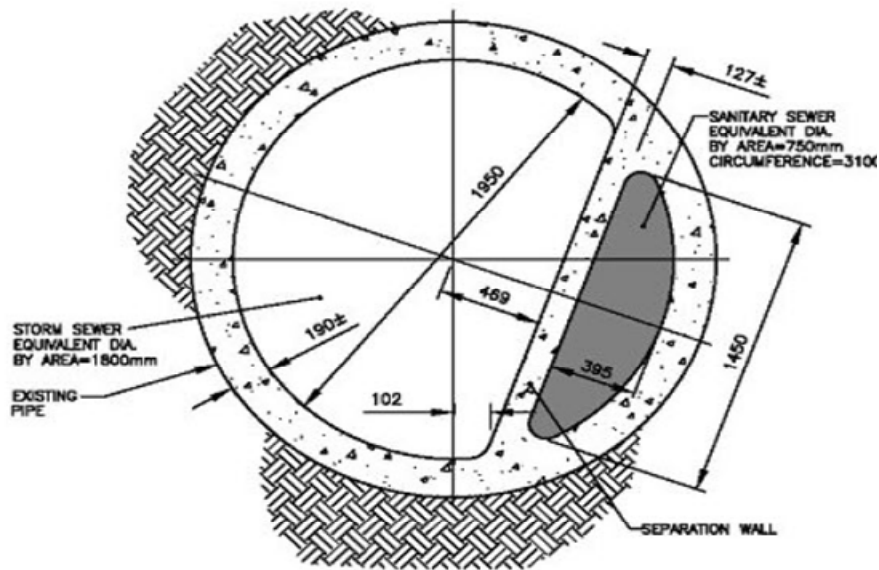


Built



Mill Woods Double Barrel Tunnel Upgrade Project

Depth range from 16 to 34m



Next Steps

- Further evaluation and assessments
 - Explore additional local area improvement opportunities in Mill Woods
- Develop options and costing
- An Expanded Flood Protection Program will be developed and recommended to the City Council for approval.



flood*proof*

Flood Prevention Program

Consists of ...

- Home Check up Program
 - free to all residents
 - single and multi family program
- Website information -
www.edmonton.ca/floodprevention
- Print materials - Homeowner's Guide to Flood Prevention, Flood Prevention tips for Homeowners etc.

Also ...

- Community presentations - sump pumps and backflow valves (NAIT)
- Backflow valve reimbursement program
- Follow- up in neighbourhoods where flood prevention sewer upgrades are done

Provincial Disaster Relief Fund

- The City of Edmonton has applied to the Alberta Emergency Management Agency for a Disaster Recovery Program for flooding events that occurred between July 12th to 23rd 2012.
- **If the application is approved**, homeowners affected by the flooding will be able to apply to the Province for disaster financial assistance for uninsurable losses.
- At that time, the citizens can register for assistance and the Province will verify the eligibility of their claims.
- <http://aema.alberta.ca/disaster-recovery-programs.cfm>