



DC Smart Buildings Plan



Smart Buildings Plan Project

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DISTRICT
DEPARTMENT
OF THE
ENVIRONMENT



green **n**space ^{NCR}

National Mall

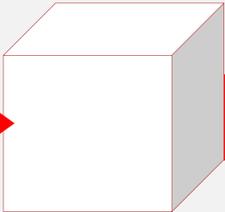
Capitol

DC City Model

First Phase



EXTRAPOLATION ENGINE



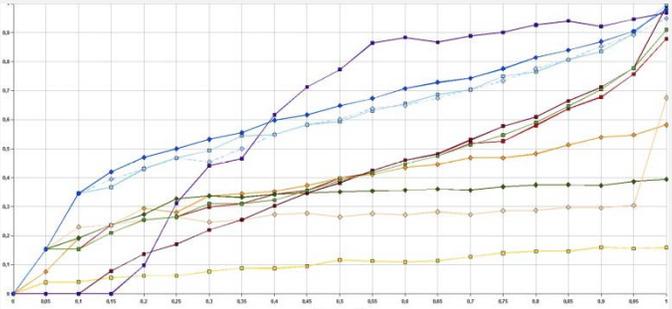
CITY ENERGY PORTALS



- “Clinical Trial” for a manageable number of buildings
- Develop a three dimensional and user-friendly tool

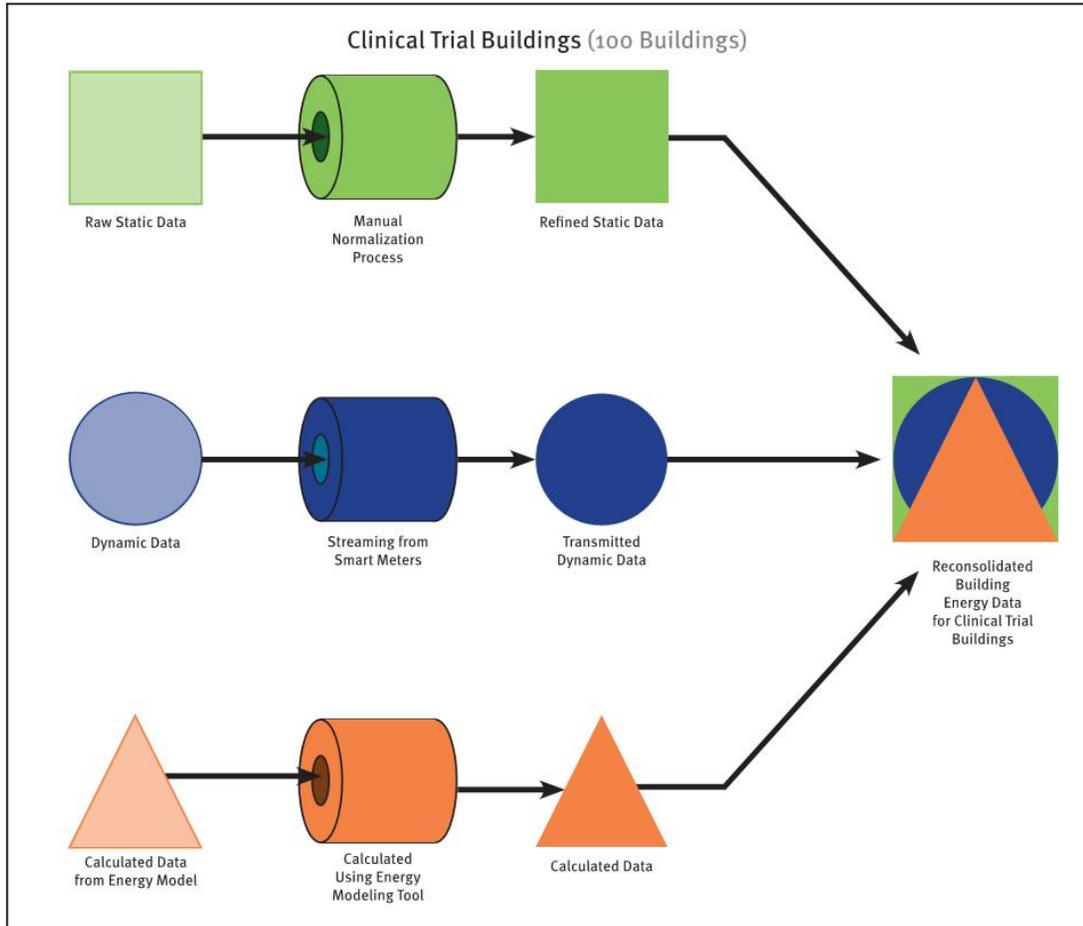
Second Phase

Track Building Samples



Analytical City Model Engine (ACME)

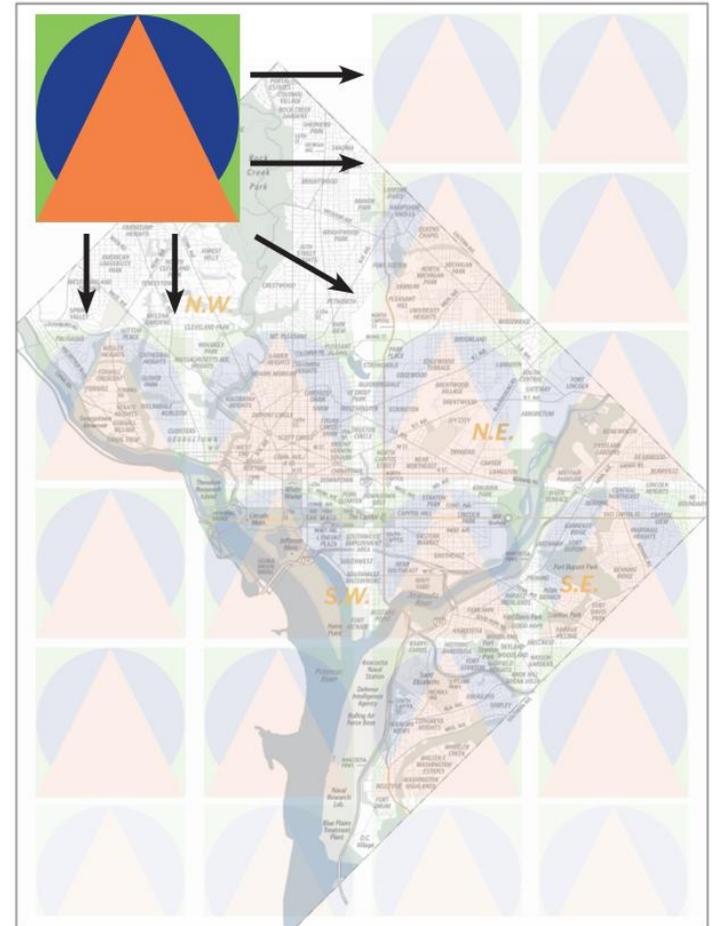
Three Data Systems



Data = Electricity, Gas, Potable Water

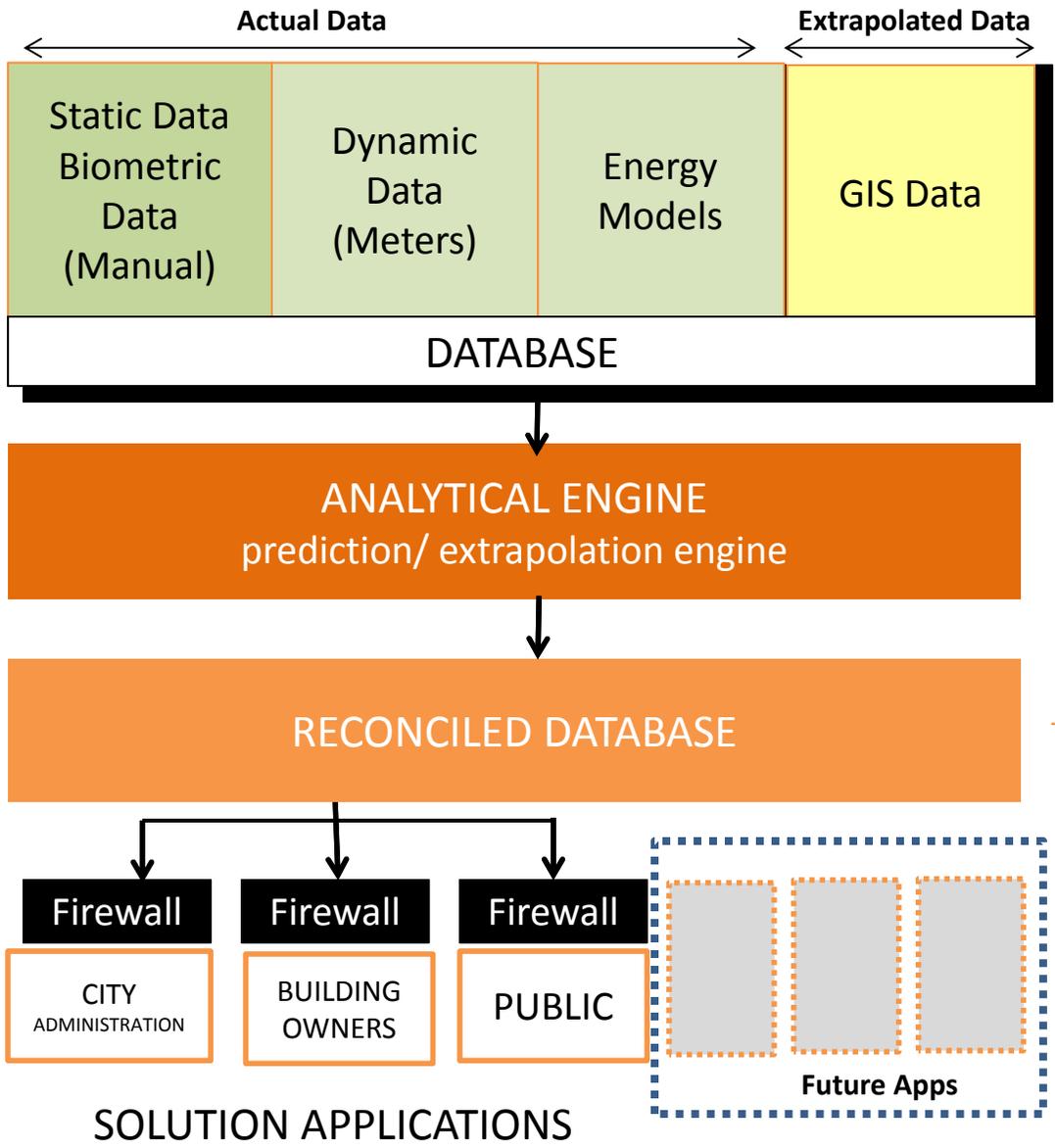
City Model Data Tracking Platform

Extrapolate Data to all City Buildings



District of Columbia

CITY MODEL



- **Application Developers/ Computer Programmers**
- **Manufacturers, Vendors**
- **Academia, Researchers, National Labs**
- **Utility Companies:**
 - Pepco
 - Washington Gas
 - DC Water
- **Federal Entities**
- **Venture Capitalists**
- **Real Estate Companies**
- **Private Foundations**
- **Technology Companies:** Google, Autodesk, etc.

CLINICAL TRAIL

100 BUILDINGS

	Tax Code	Building Use Type	Number of Buildings	
1	001	Residential- Single Family	1	10
2	002	Residential- Multi Family	4	
3	015	Residential_ Mixed Use	2	
4	016	Residential- Condo- Horizontal (less than 3 floors)	1	
5	017	Residential- Condo- Vertical (more than 3 floors)	3	
6	031	Hotel- Small	2	8
7	032	Hotel- Large	4	
8	036	Dormitory	2	
9	042	Store- Misc	4	14
10	047	Store- Super Market	4	
11	043	Store- Department	3	
12	044	Store- Shopping Center/ Mall	3	
13	034	Club- Private	1	8
14	045-067	Store- Restaurant/ Commercial- Restaurant	5	
15	045	Store- Beauty Shop	1	
16	165	Vehicle Service Station- Kiosk	1	15
17	051	Commercial- Office- Small	5	
18	052	Commercial- Office- Large	8	
19	061	Commercial- banks, Financial	2	9
20	No Code	Commercial- Federal	5	
21	No Code	Commercial- DC Gov. Office	4	
22	062	Commercial- Parking Garage	1	
23	066	Theaters, Entertainment	3	
24	072	Industrial- Heavy Manufacturing	0	
25	073	Industrial- Light Manufacturing	0	
26	081	Religious	3	
27	081	Medical	2	4
28	088	Health Care Facility	2	
29	082	Educational	11	
30	084	Public Service	2	
31	086	Embassy, Chancery, etc.	1	
32	087	Museum, Library, Gallery	8	
33	189	Special Purpose- Memorial	0	
34	No Code	Data Centers	2	
TOTAL			100	

Team Players Smart Buildings Project

