Facilitating disaster recovery by empowering non-expert GIS users in government

Kelly Richardson

NYS Governor's Office of Storm Recovery



Governor's Office of Storm Recovery

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- Created in 2013 to coordinate recovery efforts after 3 major storms, Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy
- 38 counties included in the presidential disaster declaration



CDBG-DR

- Sub-program of CDBG to assist with disaster recovery, started in 1993
- One-time unique funding source to address unmet recovery needs
- Must be spent in presidentially declared areas; i.e. tied to the disaster

GOSR Programs

- Oversees the NYS allocation of CDBG-DR funds (\$4.5 billion)
- New York City has its own allocation



NY Rising Community Reconstruction

- Participatory effort that empowers communities to identify local recovery needs
- Provides assistance to 124 severely damaged communities across NYS
- More than 650 New Yorkers represented their communities on planning committees
- Identified opportunities to make communities more physically, economically, and socially resilient

61 NYRCR Planning Areas

Program Implementation

REGULATORY CONSTRAINTS

- CDBG-DR regulations require documenting beneficiaries of projects
 - Beneficiary information
- Service Areas

Service Area



Service Area and Block Groups



Program Implementation

PROGRAM CONSISTENCY

- 3 regions (Upstate, Long Island, NYC)
- 300+ potential projects
- Rapid increase in project portfolio with little to no comprehensive geographic data collection

Visualizing the Community Reconstruction Program

- Wide range of project types facility generators to workforce training programs
- Data collection by project application
 - Address locations
 - Approximated location of culverts
- Multiple location projects
- Project information changes weekly

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Pro	ojectPoints_2017	0929					×
	OBJECTID *	AppID	LocationDescription	Latitude	Longitude	Shape *	-
	1	NYCR-0001	Wilhelm Road	42.143199	-73.961853	Point	
	2	NYCR-0001	Platte Clove Road	42.116929	-74.05664	Point	1 E
	3	NYCR-0002	Staten Island NYRCR Area	40.547758	-74.161495	Point	1
	4	NYCR-0003	Staten Island NYRCR Area	40.547758	-74.161495	Point	
	5	NYCR-0004	Beer Kill West	41.746637	-74.436996	Point	
	6	NYCR-0004	Beer Kill East	41.719779	-74.388418	Point	1
	7	NYCR-0004	Sandberg Creek	41.716412	-74.38673	Point	1
	8	NYCR-0004	Rondout Creek	41.746535	-74.364314	Point	1
	9	NYCR-0004	North Gully	41.70395	-74.38088	Point]
	10	NYCR-0004	Fantine Kill	41.7236	-74.3899	Point	
	11	NYCR-0005	James Street	41.843108	-74.077456	Point]
	12	NYCR-0006	Bull Run Chappel	42.150968	-74.651716	Point	1
	13	NYCR-0007	Village of W ord	42.791591	-73.679029	Point	1
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CR Project Dataset

399 NYCR-0213 R4-CR-DASNYHowBCathChtiesPrgss Dvlomt-PE-UN 400 NYCR-0214 R4-CR-DASNYLMCatholicArchDioNY 401 NYCR-0216 R4-CR-DASNYRockECongregationKnesethIsrl-PF-LMI 402 NYCR-0217 R4-CR-DASNYRedHookGoodShepServices1-PF-LMI 403 NYCR-0218 R4-CR-DASNYLMGrndStSttlmntNYRCC-PF-LMI 404 NYCR-0219 R4-CR-DASNYLMHenryStSttlmnt1-PF-LMI 405 NYCR-0219 R4-CR-DASNYLMHenryStSttlmnt2-PF-LMI 406 NYCR-0220 R4-CR-DASNYSouthBrklynPJCCGCI-PF-LMI 407 NYCR-0221 R4-CR-DASNYStatenIslandNYRCCPubServJCCSI-PF-UN 408 NYCR-0222 R4-CR-DASNYSheepsBayKingsBayYMYWHA-PF-LMI 409 NYCR-0223 R4-CR-DASNYRedHookGoodShepServices2-PF-LMI 410 NYCR-0224 R4-CR-DASNYHowBNYFamiliesAutisticChil-PF-UN 411 NYCR-0225 R4-CR-DASNYRockawayPOueensBPI 2-PE-I MI 12 NYCR-0226 R4-CR-DASNYRockawayPQueensBPL1-PF-LMI 413 NYCR-0227 R4-CR-DASNYRockERckwyWtrfrontAlliance-PE-LML 414 NYCR-0228 R4-CR-DASNYSouthBKPShoreYMYWHABriMhttnBeach-PF-LMI 415 NYCR-0229 R4-CR-DASNYSouthEBWSaintBernardRomCathPar-PF-UN 416 NYCR-0231 R4-CR-DASNYLMUnivSttlmntofNY-PF-LMI 417 NYCR-0232 R4-CR-DASNYRockEYoungIsraelWvcrestBayswtr-PF-LMI 418 NYCR-0233 R4-CR-DASNYNYRCCQueensBoroLibHowBeaResImp-PF-U 419 NYCR-0234 R4-CR-DASNY-NYRCCQueensBoroLibSeasideResImp-PF-U 420 NYCR-0235 R4-CR-DASNYStFrandeSalesResImprov-PF-UN 421 NYCR-0236 R4-CR-DASNY-NYRCCStarsCommunityCtrResImp-PF-UN 422 NYCR-0237 R4-CR-NTowerFirehouseResiliencyImprov-PF-UN

423 NYCR-0238 R4-CR-East12thRoadBoardwalkRepair-PI-UN

NYRCC Catholic Charities Brooklyn and Queens Re Howard Beach NYC NYRCC Catholic Charities of the Archdiocese of NY Lower Manhattan NYC NYRCC Congregation Kneseth Israel Resiliency Im Rockaway East NYC NYRCC Good Shepherd Services Resiliency Improv Red Hook NYC NYRCC Grand Street Settlement Resiliency Improv Lower Manhattan NYC NYRCC Henry Street Settlement Resiliency Improv Lower Manhattan NYC NYRCC Henry Street Settlement Resiliency Impro Lower Manhattan NYC NYRCC Jewish Community Council of Greater Con Southern Brooklyn NYC NYRCC Jewish Community Council of Staten Island Staten Island NYC NYRCC Kings Bay YM-YWHA Resiliency Improveme Gerritsen Beach an NYC NYRCC Miccio Center Resiliency Improvements Red Hook NYC NYRCC NY Families for Autistic Children, Inc. Resil Howard Beach NYC NYRCC Queens Borough Public Library—Far Rocka Rockaway East NYC NYRCC Queens Borough Public Library—Peninsula Rockaway East NYC NYRCC Rockaway Waterfront Alliance Resiliency | Rockaway East NYC NYRCC Shorefront YM-YWHA of Brighton-Manhatt Southern Brooklyn NYC

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ProjectType	ReclassifiedType	MultipleLocation	Budget	Disbursed	DisbursedPct	RemainingPct	CurrentStatus	StatusReclass
Streets & Drainage	Transportation Infrastructure	Yes	1007520	416729.6	0.413619	0.586381	Construction	Construction
Streets & Drainage	Transportation Infrastructure	Yes	1007520	416729.6	0.413619	0.586381	Construction	Construction
TBD	Emergency Preparedness and Recovery Operations	No	65000	12295	0.189154	0.810846	Design	Design
Planning/Studies	Emergency Preparedness and Recovery Operations	No	300000	243814.65	0.812716	0.187284	Design	Design
Public Facilities & Improvements	Shoreline Protection	Yes	3674000	123624.33	0.033648	0.966352	Design	Design
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Streets & Drainage	Drainage Improvements and Green Infrastructure	No	600000	56172	0.09362	0.90638	Design	Design
Planning/Studies	Shoreline Protection	No	1820000	132000	0.072527	0.927473	Design	Design
Water & Sewerage	Drainage Improvements and Green Infrastructure	No	330000	55650.58	0.168638	0.831362	Design	Design

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Community Reconstruction Web Application





Visualizing the Community Reconstruction Program

INTERNAL

- Fields and features relevant to program management
- Links to project documents

EXTERNAL (future state)

- Public outreach
- Links to external project websites, where applicable
- Track project progress



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Thank you!

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