Providing a single view of land and property in Northern Ireland

Gareth Young

Geospatial Innovation & Integration Manager
Ordnance Survey of Northern Ireland







Valuation & Lands Agency

Land Registers
of
Northern
Ireland

Rates
Collection
Agency











Collect, supply and licence authoritative mapping and geospatial data for Northern Ireland Provide geospatial advice and expertise to the public sector



Maintain the Title Register in Land Registry, Statutory Charges Register and the Registry of Deeds Provide accurate land information services



Maintain domestic and non-domestic valuation lists for local taxation

Advice and valuation services, estate management and property information service to the public sector



Collect over £1 billion annually in local property taxes Administer rate relief, benefits and allowances



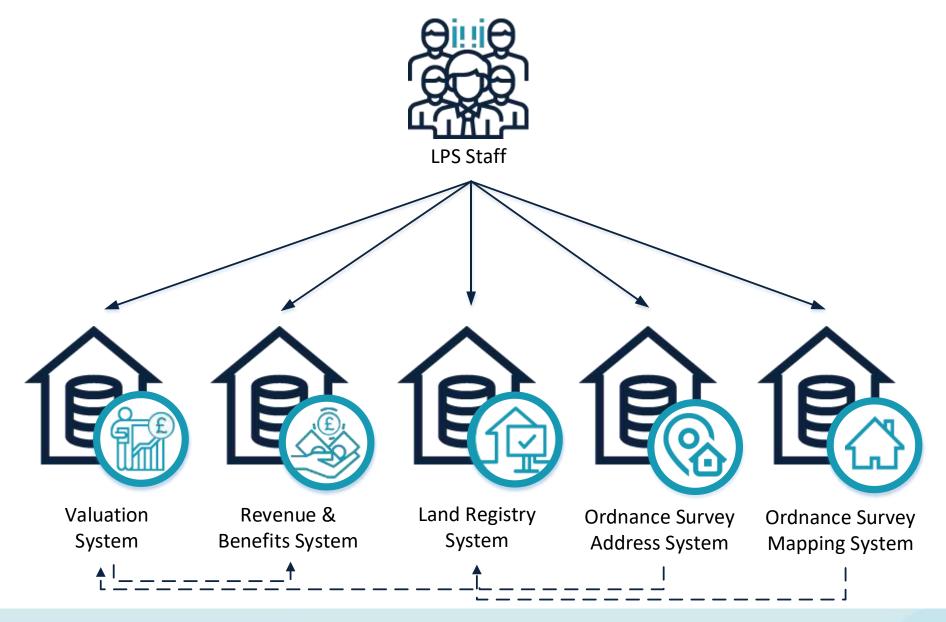


Land & Property Services has a wealth of data relating to both land and property within Northern Ireland.





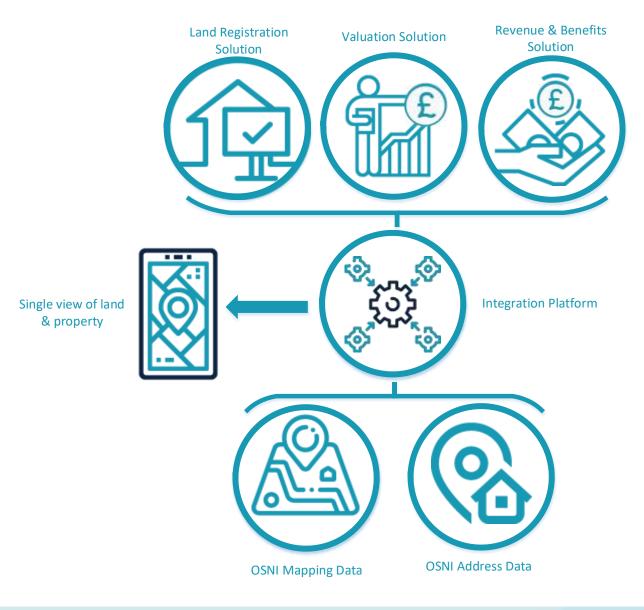














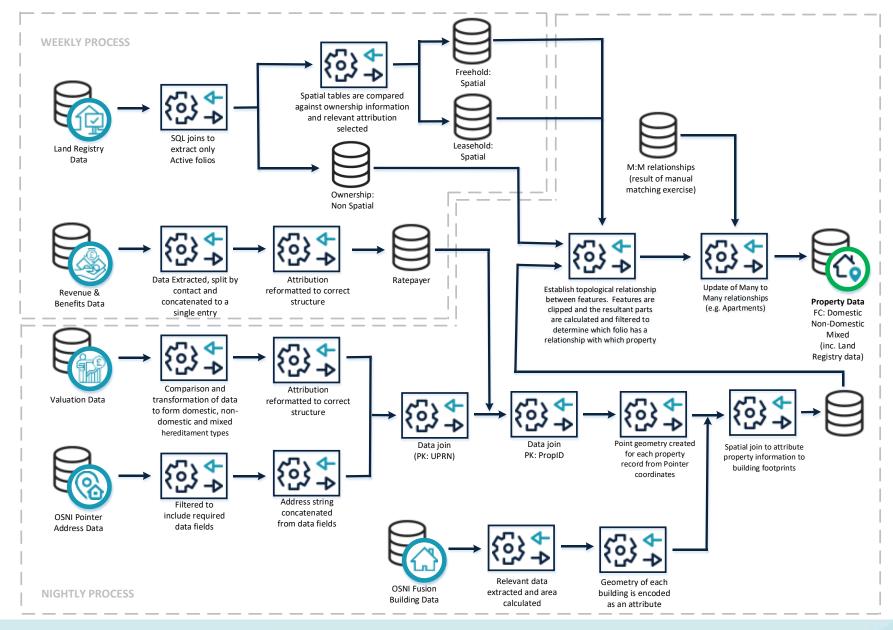


Project 1

Integrated Mapping Application













Building Workspaces

18 Months



Volume of Data Processed Nightly

13.5 Million Records



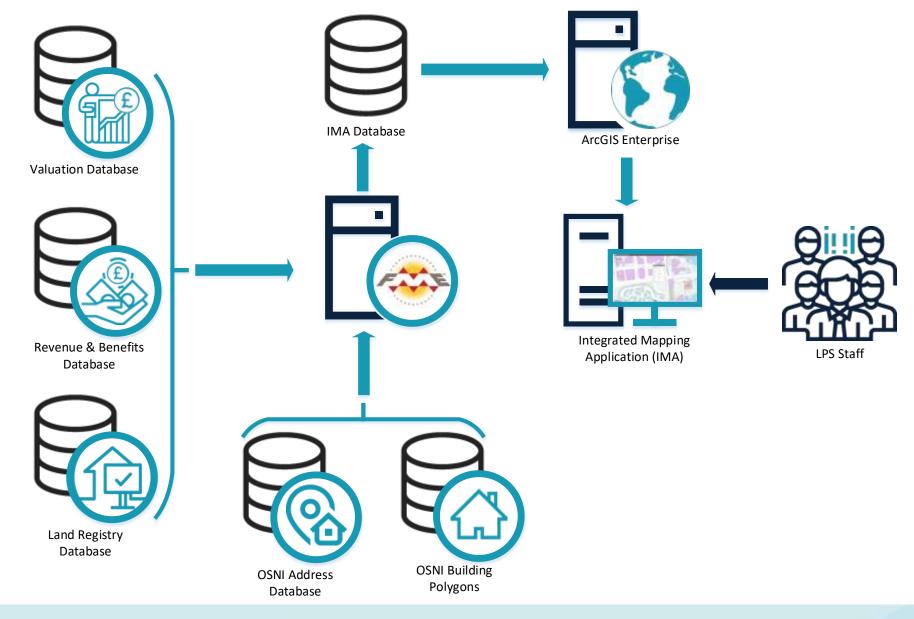
Number of data transformations

225



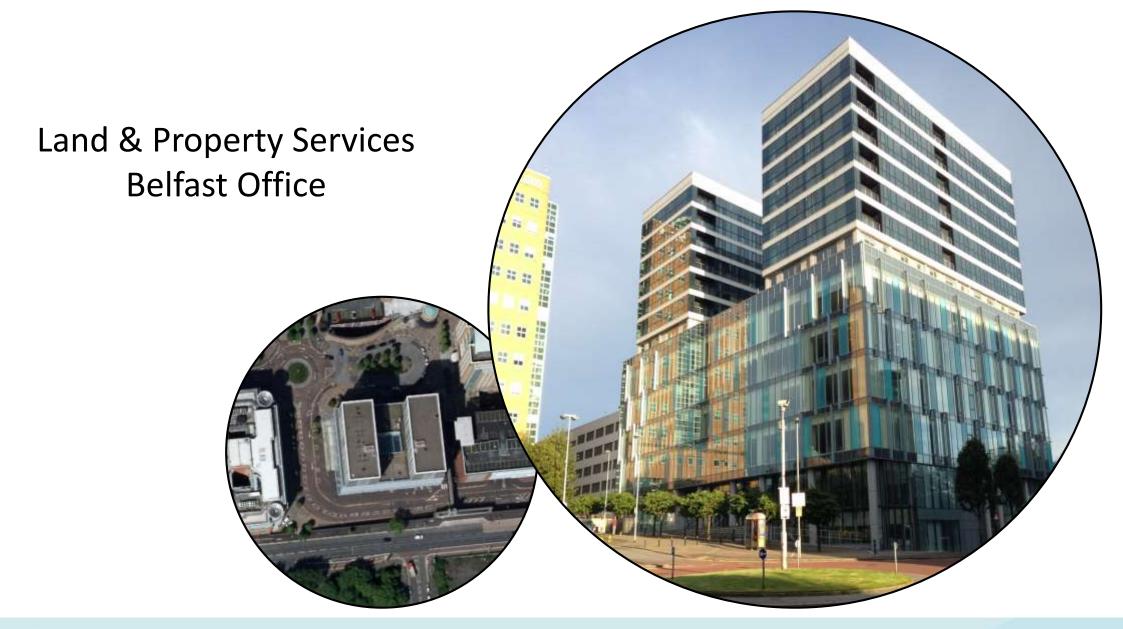
Nightly processing time

7½ Hours



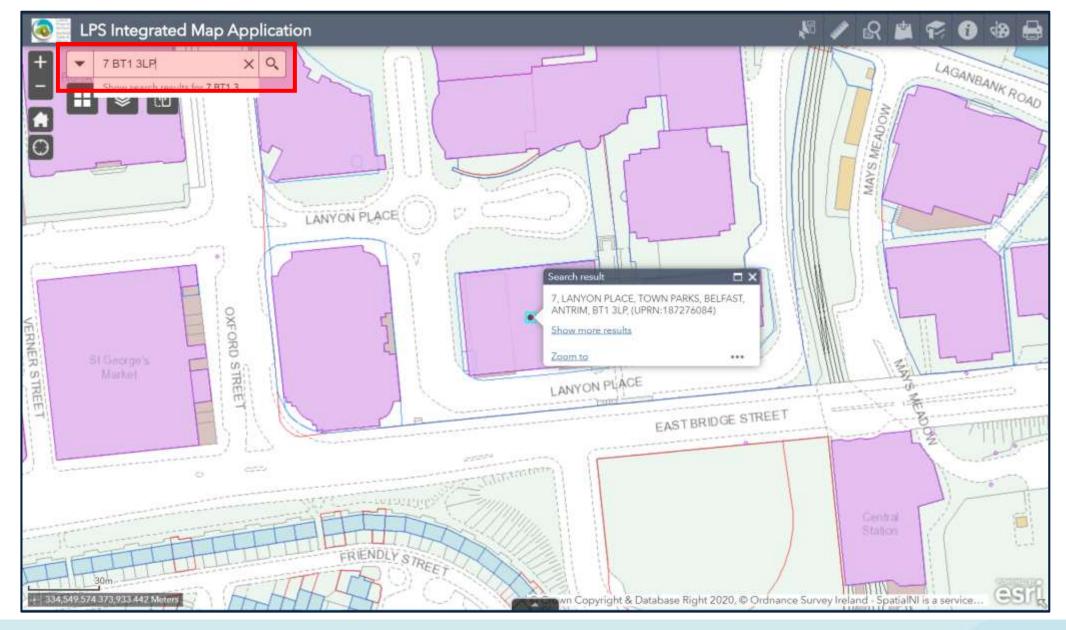






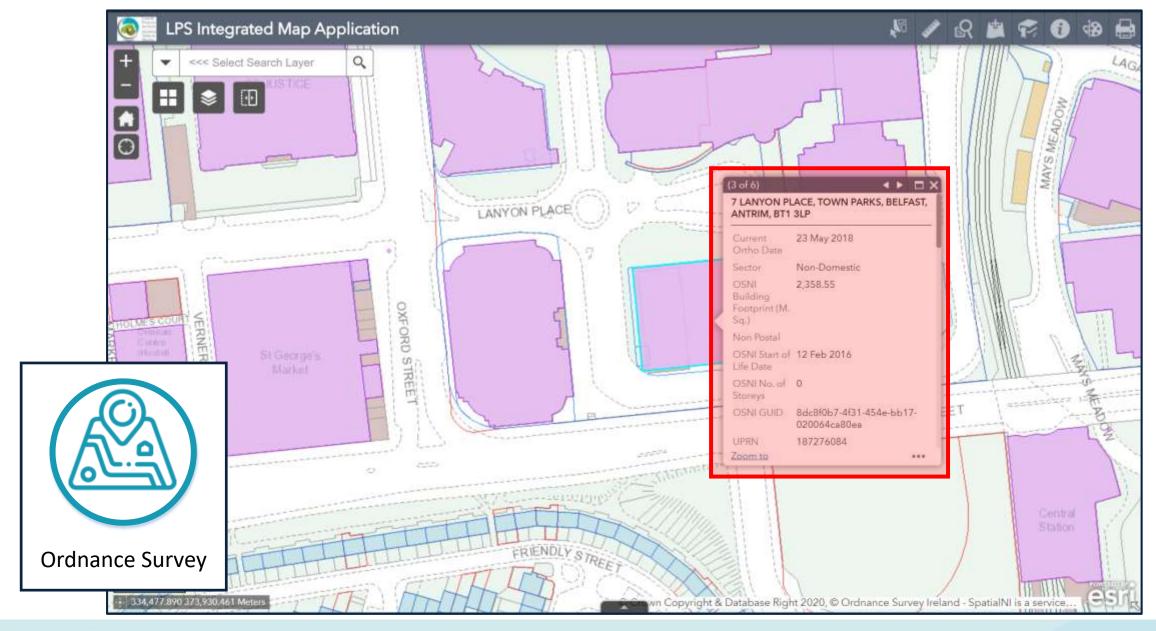






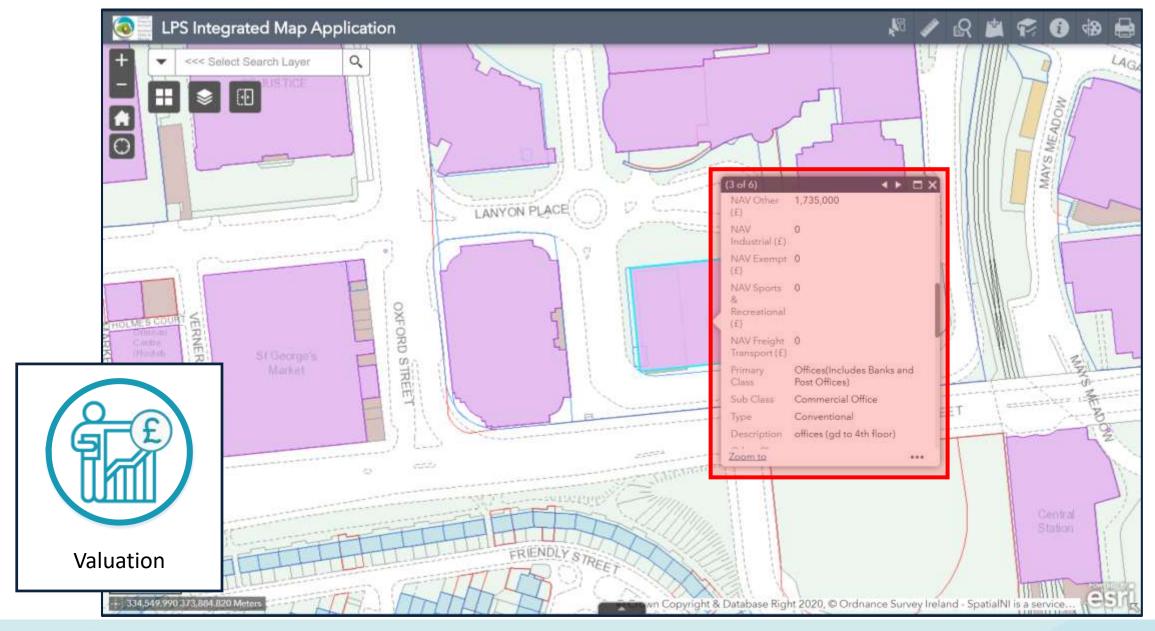






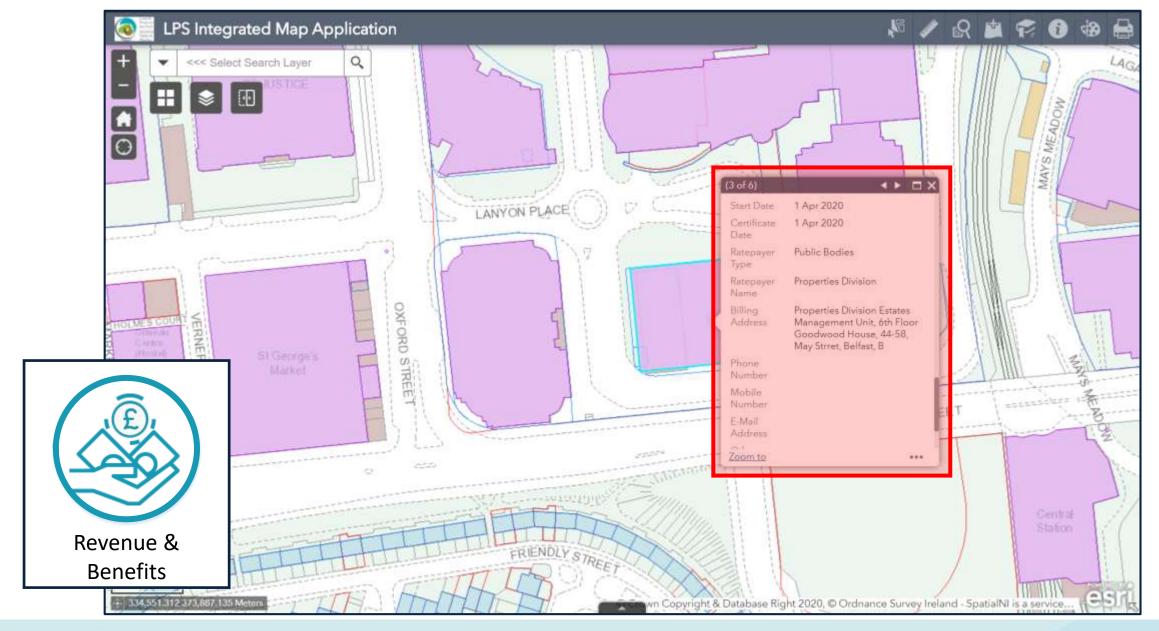






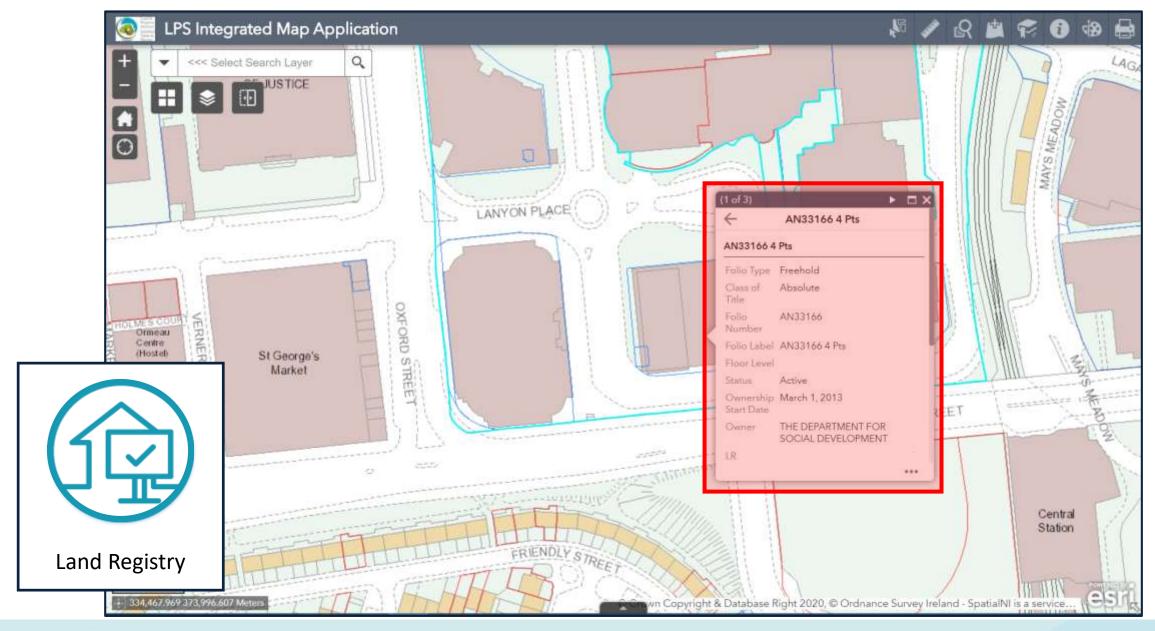






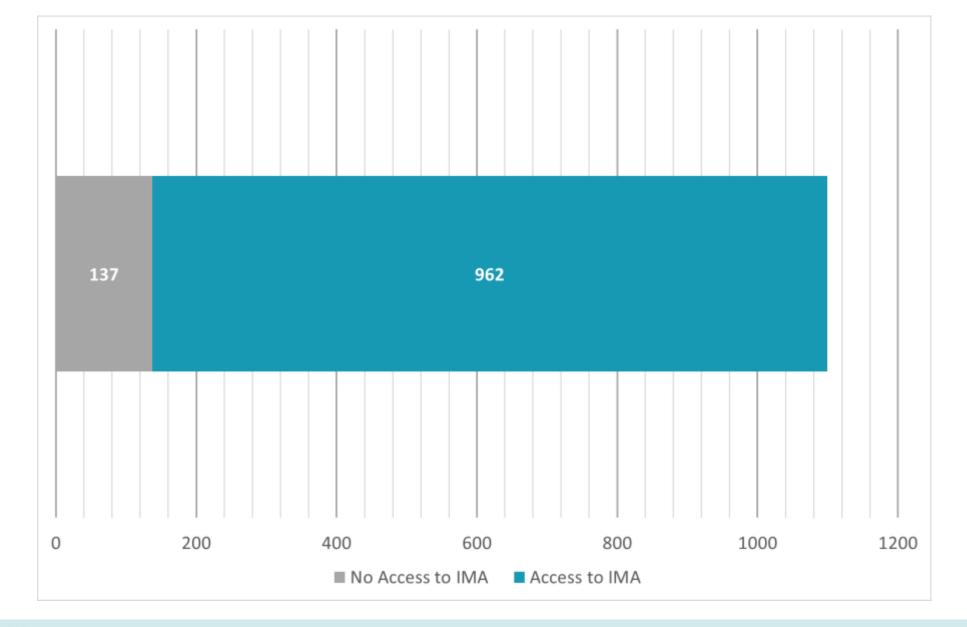




















Benefits

Providing a single view of land and property information in Northern Ireland for the first time.

- Better access to information relating to a property
- Time saving
- Better informed decisions







"The IMA has proved a lot less time consuming than Landweb and gives details on land ownership which in itself can be beneficial when identifying owners of new build properties in rural areas."

Rates Central Investigations Team

"Working in client services, as part of an encroachment case, I was able to use the integrated map viewer to view land registry title data to locate and confirm boundaries and areas."

Client Services Valuer

"The IMA provides me with additional intelligence by linking a ratepayer name to their billing postal address. This has helped me where queries from solicitors state that the postal addresses of properties are inconsistent with the official description of land within a registered folio."

Land Registry Caseworker



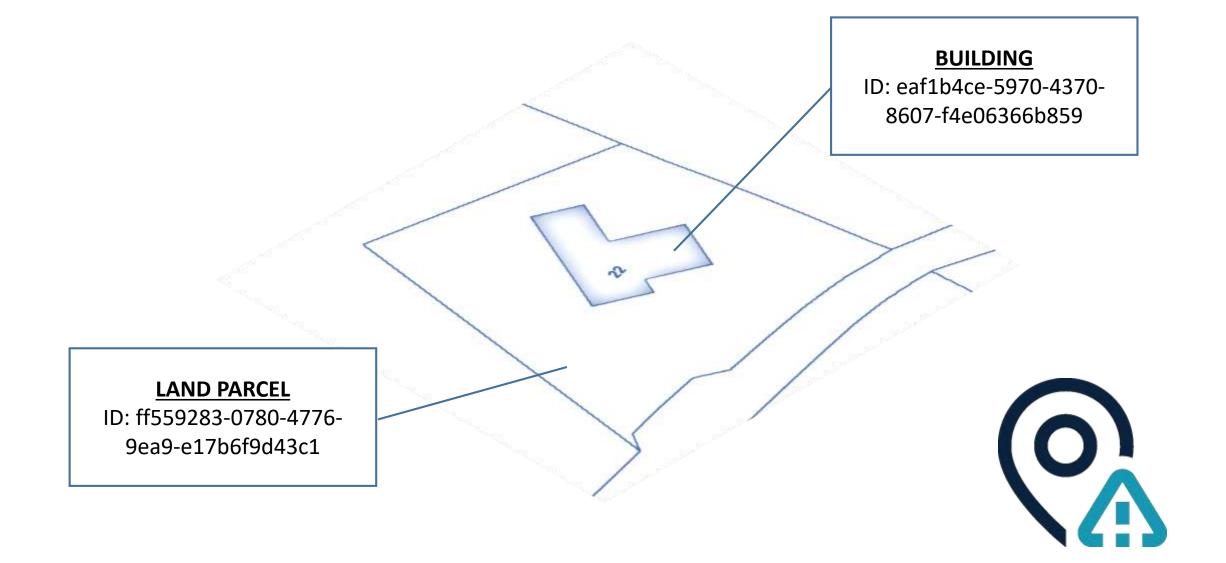


Project 2

3D Building Modelling







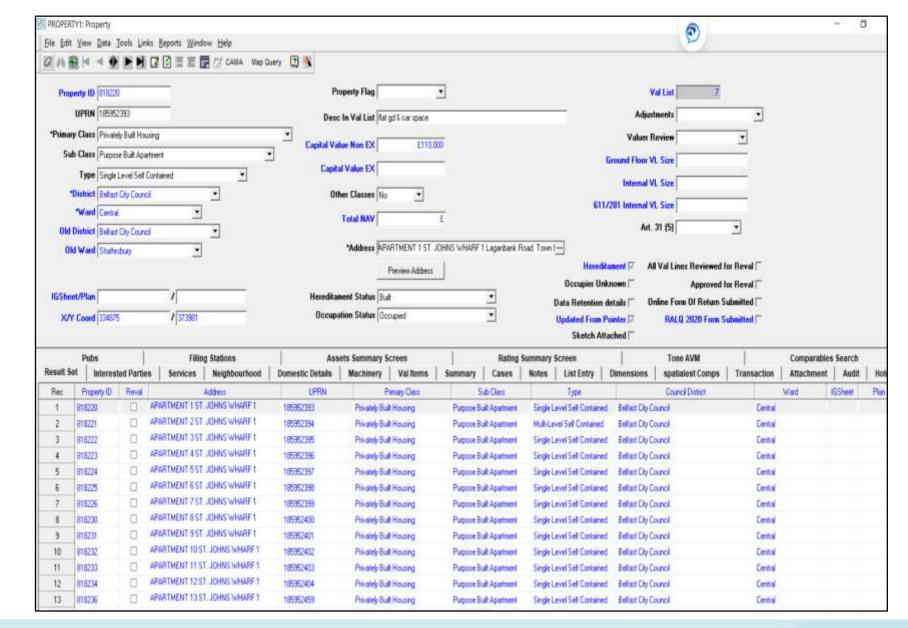








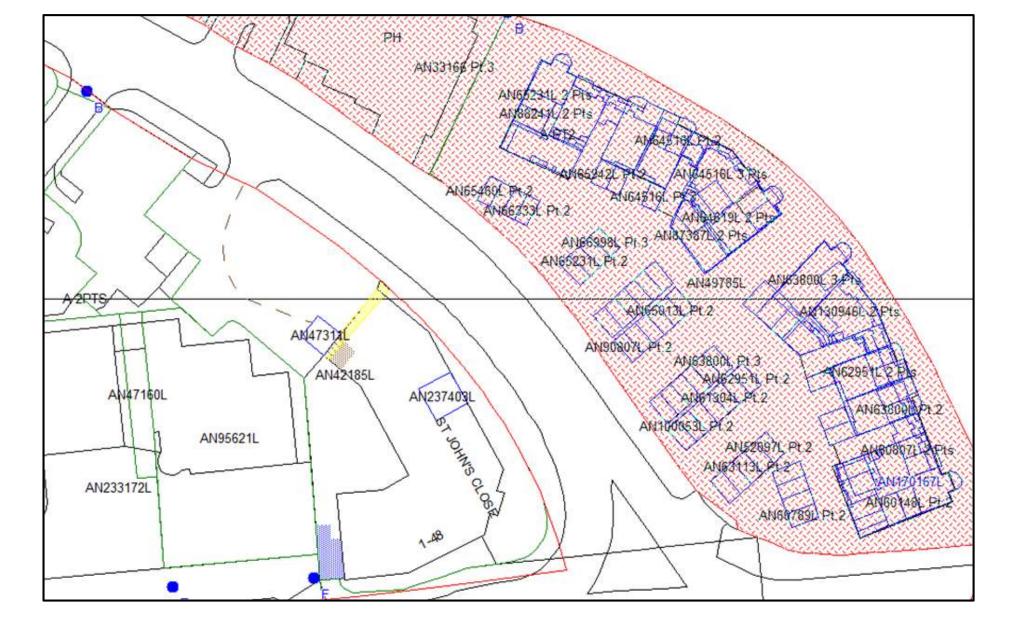












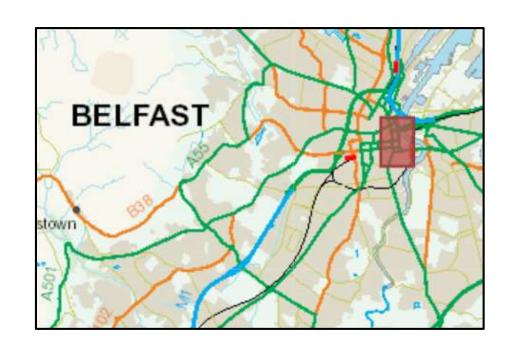








Belfast Pilot Area

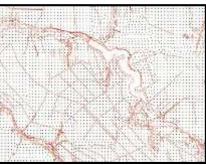




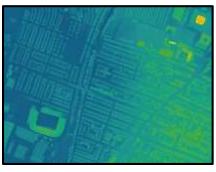




OSNI Fusion Building Footprints



OSNI Digital Terrain Model (DTM)



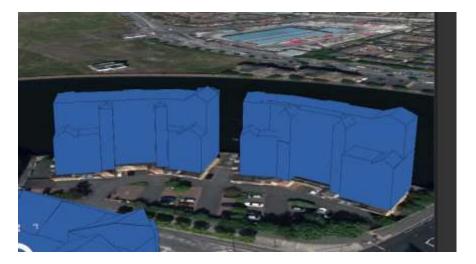
OSNI Digital Surface Model (DSM)



OSNI Orthophotography



Level of Detail 1 (LOD1) Buildings



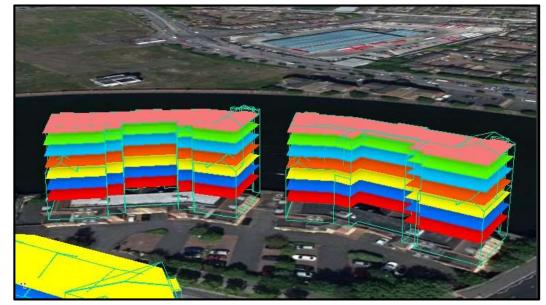
Level of Detail 2 (LOD2) Buildings





July Building Name	Building Name	Ameri	the water	Twantend	Soom	Passanda	Property_LPR	R - Drigmel	935	Primary_Cless	Total Floors	
DEVELO 2 GREATING FLORING	WHITEHOUT PLACE	1000	A Lagaritate Boad	Timos Packs	Berlins.	875.805	BOXBER.	38713553	S ALBERTA COSTAGE B			
SYNES 3 CREATED PLOCE.	WATERINGTPLACE		I Capellar's head	Titled Parks	Bellasi	BILLIAN.	ROBERT .	18710181	A ARTERNA CHARLES	Distributed	- 1	
SHEET WHO THIS IS	WATERWEST TAKE.		R Lagoritant Boar	Toron Parks	Britan	871.307	RAKETHE.		Lamenton modern		- 1	
(bull)	ST OROBUS MARKET	14.m	Seed Bridge Street	Taxan Peris	Britan	811 190	1000HH		FAMILIATION STREET			
997.1	SE GEORGE'S MARKET	49-51	Delard Street	Torsio Parks	Britan	BTS INC.	812138		# WITH TWEET OF			
INT 1	ST OFGREE'S MARKET	49-51	Oxford Street	Town Parks	Bellevi	BT1 3NO	812542		0.0384Fe+03-035			
SAT 4	ST GEGROE'S MARKET	49.51	Cheller & Street	Tream Partie	Bollen	B11.1MD	812545		0.5584Ten#13.485		-	
VACT	IT OCCURE S MANNET	45-11	Order & Street	Town Points	Buffeet	811 1960	917146		4 cellination file ass		- 1	
ARC 6	ST GEORGE'S MARKET	49-51	Clafford Street	Telem Parks	Section	ETT 1960	81,2552		Buttlible entires			
r Nadir	SF GRORGE'S MARKET	49-51	Orbeitsen	Town Perks	belled	ET1.3NO	838560		C 00558eTexamil-MS		- 1	
UNITZ	SF GEGROE'S MARKET	49-51	Chifwyt Serven	Town Parks	Do-Barri.	E11.1NO	\$3856A		0.008/p-980-485			
G(1)(25.240-C)004	HORAL BUILDINGS	40.00	4 East Bridge Street	Time t Parks	Buffeet	BHLIND	941185		#668ETLEST-47			
SPECES SHE FLOOR					Berken	ET1.34G	841000					
	FLORAL RUNDINGS	100	4 Sext Bridge Street	Telescheite.					T (Hart ME21, 8 HE), 425		7	
(Nath	FLORAL BUILDINGS	411	ETS GAR PENNESSMEN	Teen Person	Betain	#T3:3NG	963289		S NORTH PART AN			
WHEN Y	MESSAGE CERTIFIAL MAILWAY SEKTION		47 Kart Striffe Month	Tance Parks	Bertan.	\$13.348	363518		I COMMITTED AND			
SETESS (40 H SLODE) & CAR SPACE)	THE DOWNER.		24 SACT Bridge Street	Times Parks	in bet	211.166	679746		700000000000000000000000000000000000000			
OFFICE HOROCOD - DED GLOSIE & TAN HANCES.	TEM IL ENCHANGE		24 Sun Strake Street	Toron Phillips	toher.	VT1.268	879754		 Tyticatta (a) F 450 		3.	
GROUND RUDOR	HENDY DOCKARGE 2		23 Kest Brodge Street	Teres Packs	Betac	815.358	954234	18758636	6 (ocompanie) 497	Officestrolates	-	
151 (1004	MARKET EXCHANGE 2		22 Natl			-						
also reports	MALEY ENCHANGE 2		22 Table			_			-1			
MED FLORIDE	(2547383096) 2		12 had			P	rima	rv (Class	Tota	II FIC	ore
delti	distr		69 Sad				i i i i i	' y_`	ciass	100		,013
dulir	dute		3 Lago									
(hot)-	Help		TR Ann	1004	40	~	CC:	/1	1 1			_
Nulls	data	101/10	((MM)) - /	504	-44	3F ()	TTICE	sum	cludes			8
IND NAME	SCITTIAH UNGAL RUSCHIRG.	45.67	Chief	501		~~ ~	micc.	21,,,,,	ciuucs			
157 71005	SOTTISH LEGAL BUILDING	10-47	Chief									
ETH PUDOS	MOTTHER POST BUILDING	45.67	Chief	r = 0.4	40	\sim	CC:	_/1	cludes			
INFOLIND FLOOR	SCOTTER LOGAL BUILDING	45.87	[∞] 55-7	504	-44	# C)	TTICE	รบทเ	rillines			8
380 m.008	SECTION LEGAL BUILDING	45.61	Chie	50.		~~		2/	ciaaco			_
-Sult	CONTR. HOUSE	0.5	State Charles									
Made	- Marin	73.75	200	r = 0.4	40	\sim	CC:	_/1	_1, , _1			
		- INFO	- DD-/	'วบ4	-44	90 U	Trices	sum	cludes			8
0011055 257, 2NH & 3MD	CHAIRCHOOSE			٠.				٠,	ciaaco			_
GERCE 4TH-FLOOR	CENTRE HOUSE		78 Chid									
0410353NB Fid0N	CENTRE HOUSE		28 (360 7	402	40	E N	1	. + - N	1			_
rhati-	Major	10.80	Dec 3-6	493	-49	טו כי	iarke	21 S. F	∕larts			2
HBST (LOOR RIVES)	CDALINE HOUSE		7.9 (200)					,.				_
761 6 760	LEROYSCHOLDS.		76 Chid									
			7.0.0	402	40			Cha				2
			ra-e	495	-49	2 2	1005	.onc	owroo			2
								,				
								_				
			7~ ~	402	40		2000	Cha	owroo			2
			ra-e	495	-49	וכיכי	1005	.SHO	ootwe			
								,				
			L									_
			72-0	402	40		aone	Sha	NULLOO			2
			r a-e	490	-43	וכ וכי	1005	,JIII	owroo			2
			L									_
			72-0	/102	_/IQ	5 C	aone	Sha	owroo			2
			a-e	433	47	JOI	IIUP3	, , , , , , , ,				
						_		-				
			L.									_
			/ 2-0	ла2.	_/IQ	5 5	none	She	owroo			2
			ra-e	オフン	77	J 31	1003		7 VV I UU			











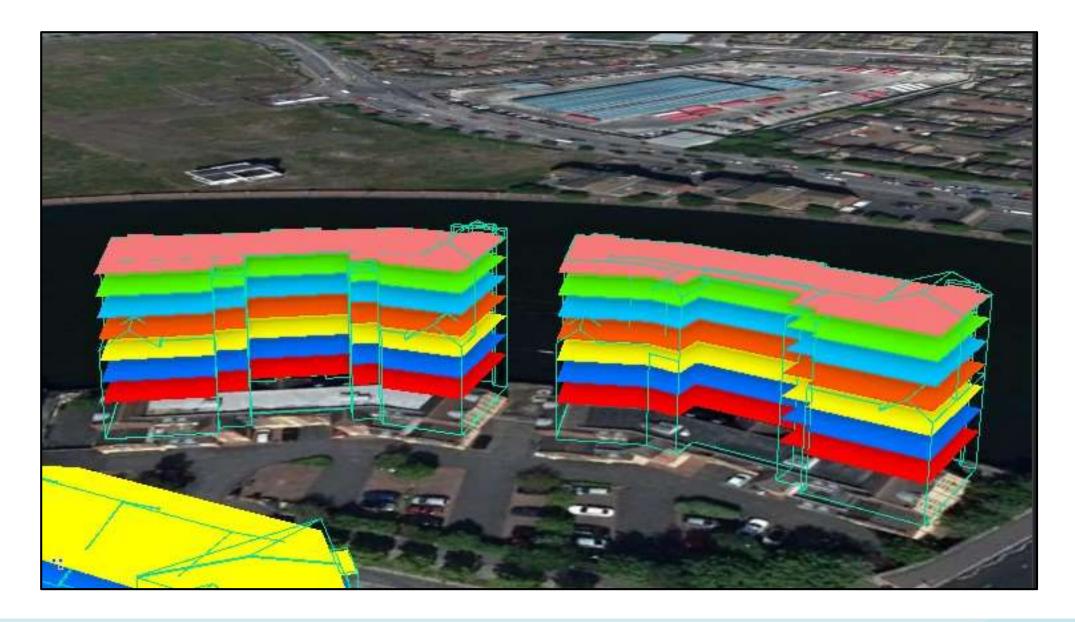






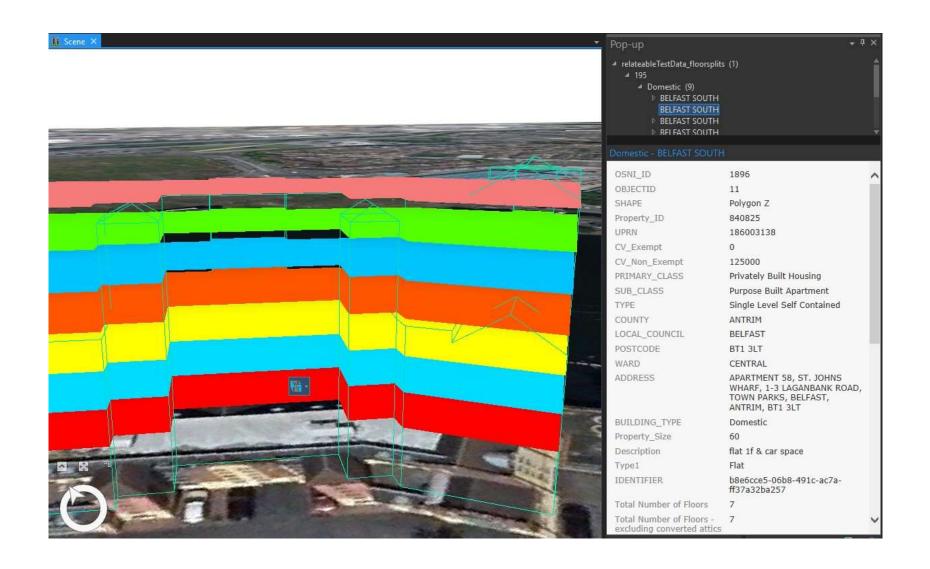


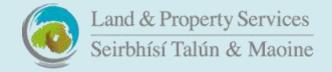




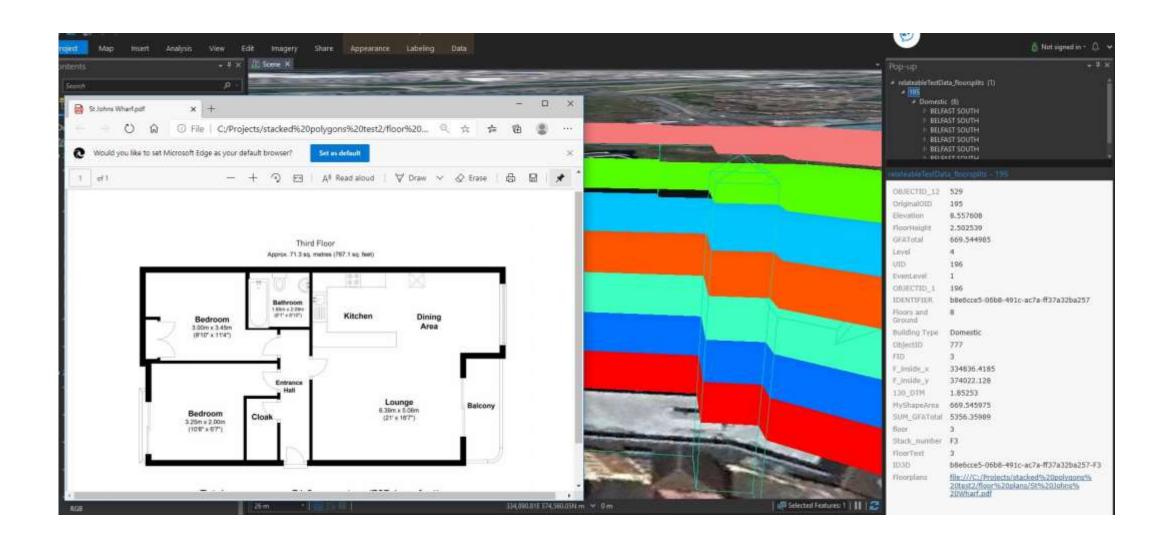


















"The 3D mapping will give us a much clearer indication of the makeup of a building. This looks fantastic and will streamline business processes in valuation. I hope this is rolled out across the board."

"3D would literally add an extra dimension to LPS data."





Benefits

OSNI believes that this type of 3D building modelling will bring enormous benefits to LPS

It will provide a real world view of land and property data in Northern Ireland for the first time





"The Integrated Mapping Application has given LPS staff access to a single view of land and property information for the first time. Having accurate and relevant data available at their fingertips has helped create efficiencies internally while also improving the level of service we are able to provide to our customers.

The Integrated Map Application and other innovative mapping products including the future 3D view of this information is helping LPS understand the value that linking our data to geographic information can bring and will greatly assist the LPS digital transformation journey and the visualisation of our land and property data in the years to come."

Ian Snowden
LPS Chief Executive







