South Tyneside Local Plan Growth Scenarios and Site Option Implications – Projected Alternative Housing and Employment Land Needs and Requirements

	Population	Non-Household Communal/Institutional Population	Households	Average Household Size	Vacancy Rate	Total Dwellings
Census 2001 (ONS)	152,785	1,423	66,097	2.29	2.8%	67,992
Census 2011 (ONS)	148,127	1,398 (1,446 in 2012-based household projections)	67,167	2.18	3.3%	69,448

Vacant/Empty Homes 2007-2011
Decreased from 2,692 to 2,281 (or 2,212 to 1,553)
= 3.2%-3.6% vacancy rate
(av. 2,042-2,482 or 2.95-3.58% vacancy rate)
Long-term vacant increased from 869 to 1,108
(av. 985 or 1.42% long-term vacancy rate)
= 0.6%-2.6% non long-term vacant
(av. 1.53-2.16% non long-term vacant)
but about 600-700 once exemptions taken into account

Housebuilding Rate Trends
Average annual completions over last 25 years: 205 net / 315 gross
Average annual completions over last 10 years: 280 net / 400 gross
Average annual completions over last 5 years: 298 net / 394 gross

- 2015/16 = 447 net / 495 gross
- 2014/15 = 430 net / 471 gross
- 2013/14 = 165 net / 291 gross
- 2012/13 = 177 net / 354 gross
- 2011/12 = 275 net / 357 gross

Housebuilding net additional completions
2011-2016 = 1,491 homes net (1,968 gross)
[1,738 brownfield (88%) + 230 greenfield (12%)]
= 70,942 total housing stock as at end March 2016

Homes - Objectively Assessed Needs Scenarios (plan period to 2036) [Housebuilding rate trends are not objectively-assessed needs, but can inform realistic deliverability – average 10yr trend would suggest an achievable 5,600 net additional homes 2016-2036]

	Population	Non-Household Communal/Institutional Population	Households	Average Household Size	Vacancy Rate Allowance	Total Dwellings	2011-2036 Net Additional Housing Requirement	2011-2036 Average Net Additional Dwellings per Annum	* 2016-2036 Net Additional 20yr Housing Requirement (over-and-above existing planning permissions)	2016-2036 Average Net Additional Dwellings per Annum Residual Requirement	** 2011-2036 Additional Housing Land Requirement from Green Belt: Dwellings	Land @ 40-30 dwellings/ha
No Green Belt Housing Development (baseline option)	~151,750	~1,800	~73,846	~2.03	3.0%	76,130	+6,682 incl. ~450 institutional bedspaces	267pa	+5,191 (residual urban area capacity from permissions + Strategic Land Review)	260pa	None (few brownfield Green Belt sites)	None
TWRI Option 4 (2014) 2012-based population projection with 2011-based household projection	153,177	2,021 (extrapolated beyond 2021)	74,431	2.03	3.0%	76,756	+7,308 plus ~550 institutional bedspaces	292pa	+5,817 (require additional +4,250)	291pa	626 +~550 institutional bedspaces	17-21ha net 23-28ha gross @ 75% net developable area
SHMA Update (2015) 2012-based population projection with 2012-based household projection	~154,450	~2,200	~75,000	2.03	3.0%	~77,598	+7,850 (81% open market dwellings +13% affordable +6% intermediate) plus ~800 institutional bedspaces	314pa plus 30 institutional bedspaces	+6,359 (require additional +4,792)	318pa	1,168 +~800 institutional bedspaces	29-39ha net 39-52ha gross @ 75% net developable area
TWRI Option 4 (2014/15) 2012-based population projection with 2012-based household projection	153,177	~2,000	~75,300	2.01	3.0%	~77,650	~+8,200 plus ~550 institutional bedspaces	328pa	+6,709 (require additional +5,142)	335pa	1,518 +~550 institutional bedspaces	38-51ha net 51-68ha gross @ 75% net developable area
ONS/DCLG (2014/15) 2012-based projections (ONS population projection May 2014 / DCLG household projection Feb. 2015)	156,337	2,008	75,884	2.03	3.0%	78,235	+8,787 plus ~550 institutional bedspaces	365pa	+7,296 (require additional +5,729)	365pa	2,105 +~550 institutional bedspaces	53-70ha net 71-93ha gross @ 75% net developable area
ONS/DCLG (2014) ONS 2012-based population projection (2014) with DCLG 2011 Census-based 'interim' household projection (2013)	156,337	2,021 (extrapolated beyond 2021)	77,002 (extrapolated beyond 2021)	2.03 (extrapolated beyond 2021)	3.0%	79,384 (extrapolated beyond 2021)	+9,936 plus ~550 institutional bedspaces	397pa	+8,445 (require additional +6,878)	422pa	3,254 +~550 institutional bedspaces	81-108ha net 108-144ha gross @ 75% net developable area
South Tyneside SHMA (July 2013) (Based on ONS 2011 Census-based 'interim' population projections to 2021 and DCLG 2008-based household projections) [* comparable to What Homes Where? data (Mar. 2013)]	161,659 (extrapolated beyond 2021) *[58% 18-67 working age = ~93,750]*	2,021 (extrapolated beyond 2021)	79,769 (extrapolated beyond 2021) [What Homes Where?: 11,239 extra households 2011-33 = pro rata total 79,939 by 2036]	2.00 (extrapolated beyond 2021)	3.0%	82,236 (extrapolated beyond 2021)	+12,788 (64% open market dwellings + 36% affordable/intermediate) plus ~550 institutional bedspaces [NB. South Tyneside Vision 2011-2031 suggested around 12,000 additional new homes] [What Homes Where?: pro rata +13,155 extra homes 2011-36]	512pa [What Homes Where?: av. 511 new households per annum 2011-33 (range 403-536pa if apply lower net migration and lower life expectancy variants) = pro rata 526pa new homes required 2011-36]	+11,297 (require additional +9,730)	565pa	6,106 +~550 institutional bedspaces	153-204ha net 204-272ha gross @ 75% net developable area
IAMP Growth Impact (Arup impact study Sept. 2015) [Proportion of ~5,228 IAMP workers moving into the area through in-migration – suggests likely to be largely within migration projections rather than much additional over-and-above them]							IAMP housing scenarios (based on % of IAMP workers moving to NE and % already resident in the NE, @ 1 IAMP worker per dwelling): A (50%/50%) = +2,614 B (25%/75%) = +1,307 **C** (10%/90%) = +523 D (5%/95%) = +261 [Study suggests Scenario C most likely to reflect dwelling requirements for the IAMP]		~50 within S.Tyneside IAMP scenarios for S.Tyneside: A (50%/50%) = +279 B (25%/75%) = +140 **C** (10%/90%) = +56 D (5%/95%) = +28 [Study suggests ~558 (10.7%) of IAMP workers living within S.Tyneside, incl.167 SOC1-3 knowledge workers (incl. 19 SOC1 managers)]		~56 within S.Tyneside [For option C: if 20% live in S.Tyneside = ~111 / if 30% live in S.Tyneside = ~167]	up to 2ha within S.Tyneside [For option C: if 20% live in S.Tyneside = up to 4ha / if 30% live in S.Tyneside = up to 6ha]

* Planning Permissions (residual to build out Apr. 2016 onwards) = 1,567 homes net (1,639 gross) – 1,229 brownfield (75%) + 410 greenfield (25%)
LDF Site Allocations (residual to be developed Apr. 2016 onwards) = ~1,525 homes (net indicative capacity)
Total residual potential from planning permission and LDF allocations = ~3,092 homes (net indicative capacity)

** **Strategic Land Review (draft) urban area sites housing capacity** = ~3,624 homes indicative potential capacity within the current urban area over-and-above current permissions (44% brownfield + 28% mixed + 28% greenfield) – ie. ~532 homes potential capacity over-and-above permissions and LDF site allocations

	Population	Children (0-15)	Working Age (16-64)	Elderly (65+)	Economically Active (16-74)	Employment (16-74)	Unemployment (16-74)	Full-time Students (16-74)	Total Jobs in S.Tyneside (all sectors)	B-Class Jobs in S.Tyneside
Census 2001 (ONS)	152,785	30,934 20%	94,533 62% (109,308 age 16-74)	27,326 18%	66,193 (70% of work age) (61% of 16-74)	56,991 (60% of working age / 52% of 16-74) (86% of econ. active)	6,834 (10.3% of econ. active)	2,368 (3.5% of econ. active)	ONS = 46,176 jobs (NOMIS = ~47,000) [56% (~33,300) work in S.Tyneside, 44% (~25,700) out-commuting, with ~12,900 in-commuting into S.Tyneside]	
Census 2011 (ONS and NOMIS)	148,127	25,844 17%	95,369 64% (108,981 age 16-74)	26,951 18%	72,645 (76% of work age) (67% of 16-74)	64,867 (68% of working age / 60% of 16-74) (89% of econ. active)	7,145 (9.8% of econ. active)	3,234 (4.5% of econ. active)	ONS = 50,867 jobs (NOMIS = ~48,000) [36,160 (56%) work in S.Tyneside, 28,707 (44%) out-commuting, with 14,407 in-commuting into S.Tyneside]	
2014 mid-year estimate (ONS and NOMIS as at Employment Land Review Update 2014)	149,007	25,674 17%	94,579 63% (109,675 age 16-74)	28,754 19%	~72,300 (76% of work age) (66% of 16-74)	~64,500 (68% of working age / 59% of 16-74) (89% of econ. active)	~7,600 (10.5% of econ. active)	~4,400 (6.1% of econ. active)	NOMIS (2014) = ~51,000 (54% of working age) NLP/Experian = 49,440 / NLP/TWRI = 41,358 [~36,000(56%) work in S.Tyneside ~28,500 (44%) out-commuting, with ~14,500 in-commuting into S.Tyneside]	NLP/Experian = 15,755 (32%) NLP/TWRI = 13,180 (32%) Manufacturing (B2) = 43% Distribution (B8) = 22% Office (B1a/b) = 35%

Land:Floorspace Plot Ratios
Average 4,000sqm/ha
[except for B1a/b Offices:
80% @ 0.4 (4,000sqm/ha)
+ 20% @ 2.0 (20,000sqm/ha) to reflect typical higher density central locations]

Jobs:Floorspace Density Ratios
B1 Offices @ 1 job/12.5sqm
B2 Industrial @ 1 job/43sqm
B8 Distribution @ 1 job/65-74sqm
(80% general small-scale @ 1/65sqm
+ 20% large-scale @ 1/74sqm)

Scenarios equate to ~17.0 jobs/ha

Employment - Objectively Assessed Needs Scenarios (plan period to 2036) [NB. Past take-up rate trends do not represent objectively-assessed needs, but can inform the scale of potential realistic deliverability]

	Population	Children (0-17)	Working Age (18-67)	Elderly (68+)	Economically Active
TWRI Option 4 (2014) 2012-based population projection	153,177	26,965 18%	89,495 58% (2029 = 92,065)	36,717 23%	~90,000 work age: ~70% = 63,000 ~75% = 67,500 ~80% = 72,000 *[ie. ~80% of work age required to maintain economic activity numbers]*
ONS (2014) ONS 2012-based population projection	156,337	29,155 19%	90,477 58% (2029 = 92,541)	36,744 23%	

B-Class Average Annual Take-up Completion Rate Trends 2000-2014
+54.48ha - 30.84ha = +3.89ha pa gross / +1.69ha pa net
Manufacturing (B1b/c/B2) = +1.55ha pa gross (40%) / -0.41ha pa net *(6,200sqm gross pa)*
Distribution (B8) = +1.16ha pa gross (30%) / +0.93ha pa net (3,720sqm net pa)
Offices (B1a) = +1.19ha pa gross (31%) / +1.17ha pa net (4,680sqm net pa)

[Average take-up rates pa: past 5yrs = 0.31ha / 10yrs = 2.51ha / 15yrs = 3.22ha / 25yrs = 3.63ha]

** Past Take-up Development Rates growth scenario 4 applies gross Manufacturing take-up rate rather than the negative net figure to ensure a choice of B2 land and reflect positive local circumstances – ie. overall average annual +3.65ha pa completion rate (instead of +1.69ha pa)*

Employment Land Availability 2014
~30-35ha gross general employment land (~3.7ha mixed-use S.Shields Riverside)
[2015: 36.0ha gross within existing urban area (PIA + allocations) (incl. ~1ha from vacant units)]
~17-22ha net available/developable (~6yrs supply, with ~11.7ha readily available/deliverable)
allowing for potential housing development of former Siemens/Trench UK site and possibly (~66% of) Hawthorne Leslie site, plus sales of 3 small sites – NLP recommend maintain a 5yr ED land supply
~17.6ha additional Port of Tyne land availability (for port-related uses only)
[NB. Former Wardley Colliery Disposal Point since granted planning permission for sui generis 'brownfield' redevelopment (12.3ha), incl.Tamar Energy anaerobic digestion plant (2.77ha site)]
[NB. Dow Group (Rohm & Haas) closure (~50 job losses) = 9.7ha available for employment use only]

Employment Land Review Scenarios (NLP/Storeys June 2014)	2029 - Total Jobs in S.Tyneside (all sectors)	2029 - B-Class Jobs in S.Tyneside	2014-2029 Net Additional Jobs in S.Tyneside (all sectors)	2014-2029 Net Additional B-Class Jobs in S.Tyneside	2014-2029 Net Additional B-Class Floorspace/Land Requirement	2014-2029 B-Class Gross Space Requirement (* incl. 2yrs Take-up 'Safety Margin' Allowance + 66% Replacement Rate to provide margin for choice)	2014-2036 B-Class Net Additional General Employment Land: Total Requirement	2014-2036 B-Class Net Additional General Employment Land: ** Green Belt
2. Labour Supply – Population Change / Sectoral Change (Experian sectoral change with TWRI Option 4 population projection 2013)	40,393 (44% of working age TWRI projection) *[~44,000 if apply latest NOMIS data with circa -200 jobs = 49% of working age]*	12,054 30% Manufacturing (B2) = 36% Distribution (B8) = 23% Office (B1a/b) = 41%	-965 *[NLP consider this job change figure is influenced by the lower working age population under TWRI Option 4, high unemployment and significant out-commuting]*	-1,125	-29,271sqm Manufacturing (B1c/B2) = -30,105sqm Distribution (B8) = -4,162sqm Offices (B1a/b) = +4,996sqm	+87,168sqm / 21.2ha Manufacturing (B1c/B2) = +59,654sqm / 14.9ha Distribution (B8) = +12,277sqm / 3.1ha Offices (B1a/b) = +15,237sqm / 3.2ha	31.1ha (pro rata @ 1.4ha pa) [+ IAMP = 20.1-42.0ha]	None [~7.0ha with IAMP] (~36ha in urban area)
3. Labour Supply – Population Change / Sectoral Distribution (TWRI Option 4 population projection 2013 with Experian econometric modelling disaggregated by % shares)	40,402 (44% of working age TWRI projection) *[~44,000 if apply latest NOMIS data with circa -200 jobs = 49% of working age]*	12,895 30%	-956 Manufacturing (B2) = 36% Distribution (B8) = 23% Office (B1a/b) = 41% *[NLP similarly consider this job change figure to be inappropriate and inconsistent with growth vision]*	-285 (-290) *[takes the overall jobs reduction forecast in the Sectoral Change Scenario 2 and applies the Experian 30% B-Class proportionate shares to that and for each sector]*	-5,117sqm Manufacturing (B1c/B2) = -2,215sqm Distribution (B8) = -2,171sqm Offices (B1a/b) = -731sqm	+111,162sqm / 27.4ha Manufacturing (B1c/B2) = +87,542sqm / 21.9ha Distribution (B8) = +14,112sqm / 3.5ha Offices (B1a/b) = +9,508sqm / 2.0ha	40.2ha (pro rata @ 1.8ha pa) [+ IAMP = 29.2-51.1ha]	~4.2ha [~15.1ha with IAMP] (~36ha in urban area)
1. Labour Demand – Experian Baseline Jobs Growth (Experian econometric forecast 2013)	54,750 (59% of working age ONS projection)	16,285 30% Manufacturing (B2) = 36% Distribution (B8) = 23% Office (B1a/b) = 41%	+5,130 [2014-2036 pro rata = +7,524]	+530 [Displacement + multiplier effects in S.Tyneside = +464-716 net with IAMP]	+12,730sqm Manufacturing (B1c/B2) = -21,422sqm Distribution (B8) = +18,541sqm Offices (B1a/b) = +15,611sqm	+129,169sqm / 31.2ha Manufacturing (B1c/B2) = +68,337sqm / 17.1ha Distribution (B8) = +34,980sqm / 8.7ha Offices (B1a/b) = +25,852sqm / 5.4ha	45.8ha (pro rata @ 2.1ha pa) [+ IAMP = 34.8-56.7ha]	~9.8ha [~20.7ha with IAMP] (~36ha in urban area)
ELR Recommended Growth Scenario (Scenario 1+ with IAMP)	55,067-55,350 [+2,091 IAMP + 101-431 net benefit]	16,520-16,605 30% [+2,091 IAMP + -63-+186]	+5,667-5,950 [2014-36 pro rata = +8,312-8,727] [+2,091 IAMP + 101-431 net benefit]	+765-850 (pro rata of Scenario 1 ha:jobs ratio) [+2,091 IAMP + -63-+186 net benefit]	*[2011 ELR previously suggested 42ha needed by 2026]*	~45-50ha Industrial Use (B1b/c/B2/B8) = 25-30ha Offices (B1a) = ~20ha	~66-73ha (pro rata @ 3.0-3.3ha pa) [+ IAMP = 55.0-83.9ha]	~30-37ha [~19-48ha with IAMP] (~36ha in urban area)
4. Past Take-up Development Rates (Based on historic trends in past take-up rates *)	56,177 (62% of working age ONS projection)	16,853 30%	+6,777 [2014-2036 pro rata = +9,940]	+1,098 (pro rata of Scenario 1 ha:jobs ratio)	+219,000sqm / +54.75ha * Manufacturing (B1b/c/B2) = +93,000sqm / +23.25ha Distribution (B8) = +55,800sqm / +13.95ha Offices (B1a) = +70,200sqm / +17.55ha	+256,800sqm / +64.6ha * Manufacturing (B1b/c/B2) = +105,600sqm / +26.4ha Distribution (B8) = +70,800sqm / +18.1ha Offices (B1a) = +80,400sqm / +20.1ha	94.7ha (pro rata @ 4.3ha pa) [+ IAMP = 83.7-105.6ha]	~58.7ha [~47-70ha with IAMP] (~36ha in urban area)
International Advanced Manufacturing Park (PwC economic demand scenarios 2013, and Arup impact study Sept. 2015) #			+659-989 within S.Tyneside *[15-25% displacement = -186-310 jobs, net benefit incl. multiplier = +101-431 jobs]*	+2,091 (~40%) within S.Tyneside (City Deal total = ~5,228 jobs, ~73% B2/B8 jobs + ~27% office jobs) *[15-25% displacement = -186-310 jobs, net benefit incl. multiplier = -63-+186]*	Automotive = -55.0ha / 105.5ha / 200ha Advanced Manufacturing = 5.5ha / 13.4ha / 23ha Distribution and Logistics = 0.0ha / 23.5ha / 60ha *Offshore Renewable Energy* = 4.75ha / 8.8ha / 26.5ha [# see below for corresponding floorspace figures]	**Pessimistic** = -198,000sqm / -49.5ha **Moderate** = 569,600sqm / 142.4ha **Very Optimistic** = 1,132,000sqm / 283.0ha [circa 90% B2/B8 + 10% offices – phased 2018-27]	City Deal = ~98ha (potential up to ~150ha for Moderate growth) (~40% within S.Tyneside) [Total ~261,250sqm]	~40ha within S.Tyneside (up to ~60ha for Moderate growth)

* 2 years 'safety margin' allowance plus 66% replacement rate applied to take account of the need to replace some future losses of B-Class employment land, but no margin of choice applied for Manufacturing B1b/a/B2 as choice is built-in by applying the gross take-up rate assumption (otherwise double-counting).
NB. Simply projecting forward past trends *may* under-estimate future demand (eg. if IAMP leads to significant demand for new manufacturing and supply chain businesses). [IAMP longer-term potential growth up to 10,000 jobs.]

 # IAMP B-Class Sub-Regional Net Additional Floorspace growth scenarios: Automotive = -220,000sqm / 422,000sqm / 800,000sqm / **Advanced Manufacturing** = 22,000sqm / 53,600sqm / 92,000sqm / **Distribution and Logistics** = 0sqm / 94,000sqm / 240,000sqm / ***Offshore Renewable Energy*** *= 19,000sqm / 35,200sqm / 106,000sqm*