EXAMINATION OF THE CITY OF YORK LOCAL PLAN 2017-2033

PHASE 3 HEARINGS

MATTER 2: UNIVERSITIES AND COLLEGES

APPENDIX 1: TECHINCAL APPENDIX PROVIDING FOR UNIVERSITY OF YORK'S NEEDS

CITY OF YORK COUNCIL STATEMENT

Providing for University of York's Needs

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A. THE UNIVERSITY'S NEEDS

The University of York (UoY) has presented a number of papers to explain the relationship between student growth, floorspace needs and land take. This includes papers presented in 2018 and updated for 2019. Following questions asked, the UoY presented further corrected data on 30 June 2022 and then a fuller explanation paper on 4 July 2022.

- **UoY Position on Student Growth, Floorspace Need and Land Take**

1. UoY has presented 6 scenarios for full time equivalent (FTE) student growth ranging from 0.50% growth pa. up to 4% growth pa. for the period up to 2038.

2. The 4% pa. growth aligns with the stated average growth rate over the last 10 years.

3. UoY state that: Scenario 3 (1.25% pa.) and Scenario 4 (1.50% pa) are "likely"; and that Scenario 5 (2% pa.) is a "possibility"; and that Scenario 6 (4% p.a) is "less likely than Scenario 4".

4. The University extrapolates from these Student FTE growth figures to derive land take requirements. As above, the data was first presented in 2018 and was updated in 2019 to reflect changes in the base number of students. Following queries from CYC, the University submitted revised and corrected figures (received 30 June 2022). Then a fuller explanatory paper was received on 4 July 2022.

5. Given the fuller explanation, we have focused here on figures as provided on 4 July 2022.

6. UoY identify 3 types of space need:

    - Academic and support needs (teaching spaces, offices, library, sport, etc.)
    - Student accommodation needs
    - Business and knowledge exchange uses

7. In summary, the analysis presented works as follows:

    - Student numbers by 2038 are estimated based on pa. growth estimates
    - These estimates are used to derive future need for academic and support space
    - Similarly there is an estimate provided for future student beds and their space impacts
    - The analysis recognises capacity remaining at Campus East and estimates future floorspace need (against the different scenarios)

- Floorspace need is converted into land take by taking assumptions for building footprints and then overall site coverage by buildings
- There is no specific estimate of the need for business and knowledge exchange uses

8. The summary analysis from the paper received on 4 July is as follows.

Table 1: Analysis presented by UoY 4 July 2022 (as their Table 4)

Table 4: Simple model to assess UoY space and land needs by 2038 – based on 2018 paper from UoY [(1)]						
Scenario	1	2	3	4	5	6
Annual growth rate	0.50%	1.00%	1.25%	1.50%	2.00%	4.00%
(A) Extra academic and supporting space needed by 2038 [(2)]	24,220	50,974	65,378	80,512	113,109	280,491
(B) less capacity at Campus East north of lakes [(2)]	(6,780)	19,974	34,378	49,512	82,109	249,491
(C) Extra space for student beds/colleges	55,499	116,805	149,812	184,490	259,184	642,734
(D) Total space needed sqm GIA	**48,719**	**136,779**	**184,191**	**234,003**	**341,293**	**892,225**
(E) Footplate (@32%) sqm	15,465	43,416	58,466	74,277	108,333	283,210
(F) Area (@21%) sqm	67,237	188,767	254,199	322,944	471,014	1,231,349
(G) Hectares	**6.7**	**18.9**	**25.4**	**32.3**	**47.1**	**123.1**
(H) % of 26 hectares	26%	73%	98%	124%	181%	474%
(I) % of 21.5 hectares	31%	88%	118%	150%	219%	573%
NOTE extra space by ha required as per UoY evidence 2019	**10**	**22**	**27**	**33**	**40**	**112**
Notes: (1) figures different from those previously provided by UoC as methodology differs slightly; (2)* excludes space for ANY future business and knowledge exchange uses						

9. We provide below our assessment of the approach taken by the University. It should be noted that there are some discrepancies between the latest analysis above and previous analysis submitted by UoY.

10. In addition to this analysis, the University also present a masterplan for land "south of the lake". This shows development on 26 ha within an overall suggested 55ha green belt release. It indicates capacity for a total of 177,303 sqm of floorspace.

- **Student Growth Rates**

11. UoY acknowledges the challenges of projecting student growth over the long term. It is not clear what UoY's base growth rate figure is for the future planning of its estate. 4% pa. is an historic figure and there is no guarantee that this rate will continue. UoY acknowledge 1.25% pa. and 1.50% pa. to be "likely".

12. There are a number of factors impacting student growth. These include demographics and government policy (comments on factors influencing growth are provided at Annex B).

13. There are questions regarding the continuing growth and participation rates in UK Higher Education (HE) and the government is currently consulting[1] (following its response to the "Augar Review") on matters such as: a cap on student numbers, either at sector level or individual institution level; discontinuing courses not considered to lead to employment opportunities; an increase in academic thresholds for entry into HE; and a greater focus on vocational training provided through Further Education Colleges.

14. Similarly, there are uncertainties about the continued rates of growth in overseas students. Across the sector, in recent years, the reduction in EU students (following Brexit) has been covered by an increase in students from China, South Asia and the Middle East. However, geopolitical factors and the developing university ecosystems in some of these geographies mean that rates of overseas student growth over the medium and longer term is uncertain (see Annex B).

15. The summary point on potential student number scenarios is that the level of growth in FTE students is uncertain over the relatively short term and furthermore should be considered as very speculative over a 15-20 year period. It follows that the 4% pa. growth of recent years may not be sustainable and is not an appropriate starting point for an assessment of the University's future space needs. As discussed, the University itself sees 1.25% and 1.50% pa. as "likely".

- **Growth in Commercial and Collaborative Space**

16. The University identifies a need for land to accommodate university-business collaborations (in some instances, this is referred to as "business and knowledge exchanges uses"). Such collaborations are an important way in which universities contribute to economic growth, nationally, regionally and locally.

17. Collaborations between universities and businesses will vary in scale from a university researcher working with a start-up business (of just a few people) or indeed with the university itself creating start-up enterprises. The parties may be sharing laboratory or office space. Here, additional space demands are limited.

18. A small proportion of start-up businesses will grow to become viable established companies and only a further proportion will develop at scale.

19. In addition, universities often have some strategic relations with large commercial businesses/corporates. In this scenario, the need for co-location is reduced, not least as technology improves means of communication and collaboration.

[1] https://www.gov.uk/government/speeches/higher-and-further-education-minister-michelle-donelan-speech-on-the-augar-review

20. It is widely recognised that the aim in economic development terms is to create more broadly based and geographically spread "innovation districts[2]" including university and business communities.

21. The impact of the University in driving innovation and driving economic growth is recognised and important to CYC. However, it does not of itself drive a need exclusively for space on campus but rather for business space provision across the City and, indeed, the wider sub-region.

22. At the Science Park in York, the University itself is taking over some land to develop its new Physics, Engineering and Technology Building. The Park was established in 1995 and has grown to provide 13,000 sqm of space. In terms of the indicative masterplannining commissioned by the UoY, it is suggested that a further 14,850 sqm of "business/collaboration" floorspace can be provided on land remaining on Campus East, with a further 39,900 sqm capable of being provided on the UoY's proposed extension – a total of 54,750 sqm.

23. On the UoY's analysis and its indicative masterplan, the site proposed for expansion by CYC, can itself accommodate 19,200 sqm of "business/collaboration" space. With the space remaining on Campus East, this provides a total of 34,040 sqm which is over 2.5 times the size of the existing Science Park, even if the Science Park and Campus was the only location in York or the wider region where university-business collaboration could thrive.

- **Translation of growth to floorspace and land take**

24. The University has translated Student FTE growth into a floorspace need and land take requirement (Table 1 above). There are some questions about this analysis.

    - **Need for academic and support space.**

    UoY have applied a figure for the "average space per student" on the current campus and applied this to future growth. It is worth noting that the UoY does not have a current Estate Strategy, which would be expected to analyse future space needs in more detail.

    It applies a figure of 10.6 sqm NIA per student and 12.4 sqm GIA per student.
    The approach of extrapolating from the current position is flawed. It does not take account of the utilisation of current space and the potential to accommodate activity within existing floorspace. UoY has not presented any data on existing space utilisation.

    It is not the case that growth in students will, of itself, generate a need for spaces like a library or sports centre, for example, at the same pro rata level. Similarly, management office space and general office space would not be expected to expand exactly in line with student growth numbers.

[2] See "The rise of innovation districts", Brookings Institute 2014

On the UoY figures 6.4 sqm of the 12.4 sqm GIA requirement identified is for "central support (including library and central support services)"(52% of the total).

This approach, and the use of current space per student figures to simply extrapolate into the future has the effect of over-estimating future space needs, particularly for "support" space.

- **Need for Residences**

UoY has presented analysis on the need for future student accommodation on campus. This generates the floorspace figures in Row C in Table 1 (Table 4) above.

The analysis recognises the capacity to provide further accommodation on the existing Campus East. It estimates that 8,110 beds can be provided on existing campuses (current beds and the capacity for future beds north of the lake).

From the forecast of student growth and the need/uptake of residential halls, the future need for beds is estimated.

For example, in Scenario 1, this is 726 beds.

UoY then estimate that each bed requires 29 sqm of GIA. This figure is a generous and the UoY have not explained what range of facilities are included. We thing 25 sqm GIA per bed would be a more reasonable figure.

Here we believe there is an error in the UoY calculations at Table 1 (Table 4 in the UoY document). In Scenario 1, 726 beds at 29 sq m per bed is 21,054sqm but Row C in the table has 55,499 sqm.

Similarly for Scenario 4, additional beds are 2,768, which would require 80,272 sqm but the Table has 184,490 sqm (Row C).

This miscalculation is apparent in all scenarios. For Scenario 6 (4% pa. growth), the forecast need for student residences is 642,734 sqm. To provide context, this is over 150% of ALL current floorspace (including residences) of UoY and nearly 5 times the current amount of residential floorspace in the UoY estate. The growth in student FTE numbers under Scenario 6 is from around 17,000 (in 2017) to 39,000 in 2038.

- **Land take**

25. UoY takes the total floorspace need for academic/support and residential space and translates this into building footprint and then into a building density to calculate a land take.

26. The data provided on 4 July 2022 better explains the calculation. There were some areas of analysis not fully explained in the previous formal submissions by UoY. For example

(see Annex A, Table A), whilst the forecast GIA demand for Scenario 4 is 80,512 sqm, the lines which follow reference 48,000 sqm for "academic space south of the lake" and 36,000 sqm for "knowledge exchange space south of the lake". It is not clear how these relate.

27. For Scenario 4, the land requirement is presented as 30 ha (for 2018 (Table A)), increased to 33 ha for 2019 base (Table B)) but it was not explained how this estimate has been derived. The 4 July 2022 data helps this understanding.

28. Elsewhere, there is reference to the rate of 3.5 ha pa., being the rate of build out of Campus East. As with student growth, it is not considered that historic rates are a valid reference point for future need.

- **Indicative Masterplan**

29. UoY has produced an indicative masterplan with an accompanying schedule of accommodation. This is not an evidence based exercise. Nor does it appear to be supported by an estate strategy approach. It does not take forecast space need and relate it to a development requirement. Rather, its starting point is the 55 ha Green Belt expansion sought by the University and it looks at that area's capacity and what buildings can be designed on the area concerned.

30. The schedule of accommodation identifies 177,030 sqm to be developed within the UoY proposed extension area south of the lake. The schedule breaks down as follows:

Table 2: Floorspace provision in UoY indicative masterplan – 26 ha development area

Type of space	Floorspace (sqm)	Percentage of total
Residential	49,380	28%
Academic	51,650	29%
Social/Hub	16,000	9%
Business/collaboration	39,900	23%
Research	15,200	9%
Multi-storey car park	4,900	3%
TOTAL	**177,030**	

B. MEETING THE UNIVERSITY OF YORK'S NEEDS

31. Need for land for UoY is driven by a number of factors. These include:

a) Student numbers and growth rates – and consequent demand for accommodation
b) Growth in research and commercial activities and business collaborations and demand for space
c) How space is used in future
d) How efficiently space is utilised
e) The capacity of the existing campuses and buildings
f) The location of future activities

32. UoY has not sufficiently tested all of these variables to enable an expansion of its physical footprint which requires less land and is more sustainable.

33. We have questioned above the growth projections and need for the level of business and collaborative spaces on campus identified by UoY. We have also questioned the assessment of need in terms of how student growth is translated to land take.

34. In addition, UoY has not considered potential changes to teaching practices (especially remote and online teaching); the scope to improve the utilisation of existing facilities; and the opportunity to use the existing campuses more intensively and efficiently.

- **Role of online learning**

35. There is an on-going debate about the role of online teaching at universities and this has come into further focus as a result of the pandemic. Most universities – and their students – now have experience of the delivery and receipt of online teaching. Universities are considering online platforms as having some role in future provision. We understand that UoY is looking at its digital strategy currently and this will become a factor is assessing its future estate strategy and any potential future physical space requirements. Research has recently identified preference from students for some online engagement with their universities (see Annex C)

36. Greater use of online teaching will have limits but could become common for example for lectures to large groups of students and so will reduce the level of demand for larger lecture spaces and seminar rooms. This would allow them to be used and/or re-purposed for alternative activities.

37. More on-line teaching has scope to reduce some of the UoY's space needs.

- **How effectively space is utilised**

38. The University sector collects and publishes data across a range of estate management performance indicators. This data can be used to assess how well the University uses its space compared to its peer group.

39. University estates are complex and diverse and so it can be difficult to generalise or extrapolate from the examples of others. However, we have assessed total space per student FTE for UoY and a peer group of institutions (see Annex D).

40. The data for 2019/20 suggests that York is at the top on this indicator amongst its peer group. It recorded total GIA floorspace of 419,464 sqm for a total student FTE population of 16,916 equating to 24.8 sqm per FTE.

41. The peer group average was 21.8 sqm GIA per FTE. UoY was at a similar level to Warwick in the peer group (also 24.8 sqm) and the Universities of Essex and East Anglia were at 19.8 sqm and 18.1 sqm respectively. The UoY figure is 13% above the sector average.

42. If the floorspace for residencies is removed, we can look at sqm per student FTE for "non-residential" space. Again, York is at the upper end for the peer group at 17.0 sqm (alongside Warwick) , against a peer group average of 14.2 sqm. The lowest in the peer group was Lancaster University at 11.3 sqm GIA per student FTE. The UoY figure is 20% above the sector average.

43. The above figures suggest scope for the University to use its space more efficiently. Even modest improvements would materially reduce the overall floorspace occupied by UoY. If total space per FTE was at the average for the peer group, the UoY space need reduces by some 50,000 sqm or 12% of the current total (Annex D).

44. Universities are also asked to submit data on space utilisation. In the HESA survey, not all data fields are mandatory and UoY did not submit the relevant figures for 2018-19 and 2019-20. This data would provide a further indication of current levels of utilisation and scope to use space more efficiently.

45. In setting out the case for expansion, it would be valuable if the UoY could present current levels of space usage and space utilisation, both for teaching space and office space. This would then provide part of the evidence base for any additional land requirement.

The capacity of the existing campuses and buildings

46. A further driver of future campus space need is the capacity of the existing campuses and buildings. It is recognised that there are some particular challenges for the UoY. These include the extent of listed buildings, including an extensive area of CLASP[3] buildings dating from the 1960s. A further constraint is the landscape protection and limits on building heights.

[3] CLASP (Consortium of Local Authorities Special Programme) building programme ran from the 1950s until the 1980s.

47. However, the listing does not cover all of the CLASP buildings. In total, only some 8.3% of the UoY estate is listed (based on HESA data – see Annex D).

48. There are locations on Campus West where there are buildings nearing the end of their economic life which would not be cost effective to refurbish (notably the "non-listed " CLASP buildings) and, ultimately, these will need to be redeveloped. Their footprints can potentially be extended to accommodate larger footplates together with some additional height. This provides scope to increase the amount of floorspace provided on Campus West.

49. To illustrate, a 4,500 sqm building over 3 storeys (1,500 sqm per floor), could accommodate 6,900 sqm, with a 15% increase in footprint and an additional storey, a 53 % increase in overall floorspace. With modern construction techniques net: gross floorspace ratios should also be improved.

50. The scope to increase heights on Campus West was recognised by the Inspector in the 2007 planning inquiry decision (APP/C2741/V/05/1189972); with the reference to a *"realistic scenario …. to maximise the amount of development that can take place on the campus by using multi storey car parking and demolishing existing low rise buildings and replacing them with 4 storey buildings*" (paragraph 653).

51. The inspector went on to say that: "*However, in my view, the more realistic an acceptable scenario would be to develop the sites identified at an average of 3.5 storeys while retaining the 20% footprint*."(paragraph 654)

52. With further Green Belt release proposed, there is a question about whether, given that Campus East has now come forward, on balance 4 storeys would now be considered "acceptable".

53. The impact of intensification of use at Campus West is accepted as being relatively modest but is one tool at the University's disposal to use its land more efficiently.

54. In summary, whilst recognising the constraints of the campus, there remains scope to intensify the use of Campus West and this needs consideration when the UoY contemplates the size of a campus extension and further use of Green Belt land.

- **The location of future activities**

55. There are a number of similarly well-performing Russell Group universities within the UK which operate under what is known as a "city" model, in which buildings are spread across a locality rather than a singular central campus, and often with satellite campuses/ buildings in other cities and a "multi-campus" model, in which clusters of buildings are formed across different areas within a city.

56. Such examples of strong performing universities which operate under a “city” model are the University of Bristol and the University of Edinburgh. The University of Bristol is currently building a new campus at Temple Quarter which is 1.3 miles walk from its main Clifton Campus and the Veterinary School is a further 13 miles away outside Bristol. Some of its major student accommodation is 2 miles from the main campus.

57. The University of Edinburgh estate spans across the City, with 11 key university locations including central locations in addition to buildings located on the periphery of Edinburgh. For example, the Kings Buildings located south of Blackford on the periphery of Edinburgh is based over 2 miles from Holyrood (Moray House) and the Central Area buildings.

58. An example of a strongly performing university which operates under a “multi-campus” model is the University of Nottingham, which has a number of campuses across different locations with University Park, Kings Meadow and the Jubilee Campus located within 1-2 miles of one another and the Sutton Bonington Sports Campus located over 10 miles outside of the City and away from the other campus locations.

59. The point here is that there are well-established Russell Group universities of similar scale and performance to that of UoY which successfully function without immediate proximity across their estate which a typical “campus” model brings. Successful universities can operate on a dispersed campus model.

60. It is also the case that not all of the University’s current activities take place either at Campus East or Campus West. For example, the University has occupied the Guildhall, previous an office base for the Council and located in the heart of York City Centre. UoY uses this “stunning building” for collaborative working and as a “physical representation of the University of York’s vision for growth in community partnerships”.

61. The University also occupies the Kings Manor Grade I listed building (on the north side of York City Centre and two miles from the main UoY campus), albeit there is a close alignment to the curriculum offer in Archaeology, Medieval Studies and Eighteenth Century Studies.

- **How Student Growth Could Be Accommodated**

62. It is recognised that forecasting future student growth is challenging. The University has submitted evidence that under its “likely” scenario 4 of 1.5% pa growth in student FTEs to 2038, creates a requirement for 80,512 sqm of further academic floorspace, additional beds/college and an additional 33 ha of land.

63. UoY has not considered other factors that may impact its need for land and the range of variables that drive land take up:

i. Student growth may be lower than this "likely" figure due to policy and other external factors

ii. Greater use of online learning may reduce need for large-scale teaching and lecture spaces allowing them to be re-purposed or redeveloped.

iii. The UoY could consider utilising its space more efficiently. Even a 5% improvement in overall total space per FTE would reduce its 2038 space need by some 22,500 sqm

iv. There is scope to intensify the use of the current campuses. Assuming 25,000 sqm of current poor condition estate[4] is redeveloped with scope to increase footprint and height, this would add approximately 12,500 sqm of floorspace on existing campuses

v. The above analysis suggests that new ways of working and approaching estate development could reduce future need by an aggregate of 35,000 sqm (22,500 sqm from modest improved utilisation and 12,500 sqm for modest intensification).

Conclusions

64. UoY has not fully considered ways that it could accommodate future growth needs within the allocation proposed by CYC. The analysis presented has some errors and makes an over-generous calculation of future space needs. It does not fully acknowledge new ways of working and merely extrapolates from current practice into the future.

65. The following presents an alternative estimate of future space needs.

[4] Some 28% of the UoY estate is assessed as being in Condition C (operational but needing major repair or replacement) and Condition D (inoperable) (HESA data 2019-20)(see Annex D), equivalent to over 115,000 sqm. A significant proportion of this space will reach the end of its viable life over the period to 2038.

Table 3: Alternative Approach to Space Requirements – Based on UoY Scenario 4 1.5% pa. growth in student FTEs

Factor	UoY position	Alternative approach	Justification of alternative approach/Comments
Additional Student FTEs	6,318	6,318	
Extra academic space sqm GIA	80,512	78,343	Alternative approach reduced and based on 12.4 sqm per FTE as UoY themselves suggest
Extra space for student beds sqm GIA	184,490	69,225	Alternative based on 2,769 additional beds at 25 sqm GIA per bed. UoY position appears mis-calculated and based on 29 sqm GIA per bed
Existing Campus Capacity	31,000	66,000	Alternative takes UoY capacity at Campus East north of lake but also assumes improvement in space utilisation reduces demand for new space by 22,500 sqm and intensification at Campus West adds 12,500 sqm of new space there
Total space needed sqm GIA	234,003	81,568	
Floorplate sqm (@32%)	74,227	26,102	
Area (@21%) sqm	322,944	124,294	
Hectares	32.3	12.4	
% of 21.5 hectares	150%	58%	

On this alternative view, under the "likely" scenario of Scenario 4, student growth can be accommodated within 12.4 ha, well with the CYC allocation. This is with relatively modest action on space utilisation and intensification of use.

Annex A: UoY Student Growth and Space and Land Take Assumptions

The University has presented several analyses of student growth projections and scenarios and the need of floorspace and land. The following presents the analyses from 2018, 2019 and June 2022.

This is superseded by a paper presented on 4 July 2022 which is referenced in the main body of the text.

Table A: Presented 2018 (amended June 2022 – see Table C)

Summary Table taken from Space Modelling in 2018 Growth Report

Scenario	1	2	3	4	5	6
Growth						
Growth Assumption	0.50%	1.00%	1.25%	1.50%	2.00%	4.00%
Student Nos at 2038 (fte)[1]	19,114	21,213	22,344	23,531	26,089	39,224
Additional total student numbers (fte)	1,901	4,000	5,131	6,318	8,876	22,011
Residential Demand vs Supply						
Student Beds needed	8,836	9,807	10,329	10,878	12,061	18,133
Supply to a maximum of 10760 beds on Campus East	8,760	9,760	10,760	10,760	10,760	10,760
No of Colleges needed (each of 600 - 1000 beds)	14	15	16	16	18	25
No of additional Colleges needed	3	4	5	5	7	14
Academic and Supporting Space						
Additional space required for staff to support increase in Student Numbers (NIA meters squared)	1,901	4,000	5,131	6,318	8,876	22,011
Additional teaching space required for increase in Student Numbers (NIA meters squared)	1,855	3,905	5,008	6,167	8,664	21,486
Additional space for central support (Library and central support services)	3,862	8,129	10,426	12,840	18,038	44,731
Additional space for catering	10,379	21,845	28,018	34,503	48,473	120,204
Additional space for commercial/retail	552	1,162	1,490	1,835	2,578	6,394
Additional research space not offices	1,266	2,663	3,416	4,207	5,910	14,656
Additional Lab space not research	2,120	4,462	5,723	7,048	9,901	24,552
NIA	20,587	43,328	55,572	68,435	2,578	238,417
GIA (85% gross to net)	**24,220**	**50,974**	**65,378**	**80,512**	**96,142**	**280,491**
Academic space (sqm) south of lake	0	18,500	31,750	48,000	63,700	248,000
Knowledge exchange space (sqm) south of lake	0	10,800	23,900	36,000[3]	47,000[3]	185,000[3]
Knowledge exchange land area (ha) south of lake	0	1.2	3.4	5.1[3]	6.7[3]	26.4[3]
Knowledge exchange land area (%) south of lake[2]	0%	5%	13%	17%	17%	24%
Percentage of 26 ha required	**13%**	**56%**	**92%**	**115%**	**150%**	**420%**
Ha required	3.5	14.7	23.9	30.0	39.5	110.0

Footnotes

1. Overall student FTE projections (excluding visiting students, students in the initial year of the IPC, and Centre for Lifelong Learning)

2. i.e. 5% of the available 26ha, not 5% of 56;

3. N.B. this is taking the assumption that we can create a 'what if' situation, where there is an infinite amount of land to expand into, and the masterplan philosophy of mixed use neighbourhoods can be continued

The table above looks at different growth scenarios to 2038. It estimates total numbers of students and additional students from the 2018 position.

This is translated to need for student residences and the need for new colleges, being the model that UoY uses for accommodation.

It then sets out space needs for different types of space, although it is not clear how additional student FTEs are translated into additional academic and support space.

The analysis translates NIA to GIA and then translates to overall floorspace needs.

Here, it is not clear how the GIA is related to “academic space south of lake” and “knowledge exchange space south of lake”

Further, there is no explanation of how the floorspace need is translated to “Ha required” or how the space still available at Campus East (north of the lake) is accounted for.

Some errors in the tables led to a revised table being presented in June 2022 (Table C).

Table B: Presented 2019

Table 2 – Summary of 2019 Update to Modelling

Scenario	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5	Sc 6
Growth rate to 2038+	0.5%	1.00%	1.25%	1.50%	2.00%	4.00%
Student nos. (FTEs) at 2038	20,012	22,100	23,220	24,394	26,913	39,686
Extra students (FTE) v 2017	2,799	4,887	6,007	7,181	9,700	22,473
% of 26ha of ST27 needed*	40%	85%	100%+	115%+	150%+	420%+
Ha required	10	22	27	33	40	112
Year 26ha of ST27 used up	--	2040	2036	2032	2029	2024

Estimate only, based on modelling given in evidence in appendix 6, 2018 representations, 'Campus East Development Options and Masterplan for Extension Site' MAKE March 2018

The above updates some of the data from 2018 for a 2019 base, reflecting a higher student FTE base figure. This shows an increase in students and so in land take. The breakdown into floorspace requirements as in Table A has not been presented.

For Scenario 4, the projected increase in FTE students to 2038 is 7,181.

The proposed increase in land take between the 2018 and 2019 growth assumptions is from 30 ha (2018 submission) to 33ha (2019 updated figures).

There are questions about the validity of the UoY approach. There are some illogical outcomes. For example, on a growth scenario which extrapolates from recent history and assumes 4% p.a. increase in FTE students, it is suggested that all of the 26 ha sought by UoY is taken up by 2024 (Table B above). Clearly this scenario not playing out. Buildings need to be on-site now or subject to planning applications to be brought forward by 2024. There is no evidence of pent up demand at anything like this level. Further, there would be constraints of UoY funding, resources and capacity to develop at anything like this rate.

Table C: Growth scenarios – FTEs, floorspace and land (presented June 2022)

This table from June 2022 corrects some of the errors in Table A. It does not fully explain how student FTEs are translated into space needs. It does not explore how the land remaining for development on Campus West (north of lake) has been addressed.

SUMMARY OF RESULTS CORRECTED JUNE 2022: addition of line 'Additional total student numbers' previously omitted in error						
Scenario	1	2	3	4	5	6
Growth						
Growth Assumption	0.50%	1.00%	1.25%	1.50%	2.00%	4.00%
Student Nos at 2038	19,114	21,213	22,344	23,531	26,089	39,224
Additional total student numbers	1,901	4,000	5,131	6,318	8,876	22,011
Residential Demand vs Supply						
Student Beds needed	8,836	9,807	10,329	10,878	12,061	18,133
Supply to a maximum of 10760 beds on Campus East	8,760	9,760	10,760	10,760	10,760	10,760
No of Colleges needed	14	15	15.5	16	18	25
Additional total student numbers	1,901	4,000	5,131	6,318	8,876	22,011
Academic and Supporting Space						
Additional space required for staff to support increase in Student Numbers (NIA meters squared)	1,855	3,905	5,008	6,167	8,664	21,486
Additional teaching space required for increase in Student Numbers (NIA meters squared)	3,862	8,129	10,426	12,840	18,038	44,731
Additional space for central support (Library and central support services)	10,379	21,845	28,018	34,503	48,473	120,204
Additional space for catering	552	1,162	1,490	1,835	2,578	6,394
Additional space for commercial/retail	1,266	2,663	3,416	4,207	5,910	14,656
Additional research space not offices	2,120	4,462	5,723	7,048	9,901	24,552
Additional Lab space not research	552	1,162	1,490	1,835	2,578	6,394

NIA	20,587	43,328	55,572	68,435	96,142	238,417
GIA (85% gross to net)	**24,220**	**50,974**	**65,378**	**80,512**	**113,109**	**280,491**
m2/additional student	12.7	12.7	12.7	12.7	12.7	12.7
Percentage of 26 ha required	**13%**	**56%**	**92%**	**100%+**	**100%++**	**100%+++**

Annex B: Commentary on Factors and Uncertainties Influencing Student Growth Rates

Universities deliver a range of courses to varied cohorts of students, support research activities and provide residential, social, cultural and sporting facilities. UoY provides these facilities and as a research intensive university in the Russell Group, it is sought after by undergraduate and postgraduate applicants and has a strong research focus. It is also attractive to overseas students.

Student growth is made up of undergraduate full and part-time students as well as postgraduate taught and research students. Student growth will inevitably place demands on residential accommodation and on social and leisure facilities.

The University has presented projections of the future growth in full time equivalent students (FTEs) on past, recent growth rates. They quote the past growth rate of 4% p.a. There is however no analysis of demographic trends and potential policy changes and their implications.

There are alternative scenarios to those put forward by the University.

Government policy

The last two decades has seen an expansion in the number young people going to university, with 37.9% of the UK 18 year old population starting university in September 2021, an increase of 1.5% on the previous year (UCAS, 2021). Moving forward, it is anticipated that there will be a limit to the proportion of the population that desires a full time undergraduate education or the level of participation that the country can afford.

There are a number of questions around future government policy for Higher Education (HE) and whether recent trends in HE participation will continued. The government commissioned the Augar Review in February 2018 (report published in May 2019) and provided its response in April 2022 ("The Post-18 Education and Funding Review: Government Conclusion"). A number of policy responses were explored and are to be subject to further consultation. They include: a cap on student numbers, either at sector level or individual institution level; discontinuing courses not considered to lead to employment opportunities; an increase in academic thresholds for entry to HE; and a greater focus on vocational training provided through Further Education Colleges.

The point is that the previous trend of growth in HE access may be changing.

Demographics and student demand

A report by HEPI looks at student growth rates to 2035. This considers demographics trends, with numbers of 18 year olds set to increase over the next decade but also with assumed increases in participation rates. The report concludes that student number growth in the UK could be 32.5% from 2017/18 to 2035 which is an average annual rate of 1.9% or less than half of the University's scenario of 4%.

The report also predicts higher rates of student growth from those living in London and South East, although as York is a "national" university, it would still attract these students rather than relying on a regional catchment which is expected to grow more slowly.

Overseas students

There has been significant growth in overseas students into UK universities in recent years. For example, there was a 36.8% growth in overseas students at UK universities between 2014-15 and 2020/21, with over 20% of all students now from overseas. Around 32% of all overseas students at UK Universities come from China.

The general position is that a reduction in EU students as a result of Brexit and visa restrictions has been more than covered by growth in students from other locations, especially from China, South Asia and the Middle East. The question is whether this recent rate of growth will continue, especially as the source countries develop and improve their own university systems. There is also a geopolitical question over the continued growth in students from China.

There is an additional consideration with regards to overseas students and distance learning. Whilst HESA data published for 2020/21 showed an overall increase in overseas students enrolling at UK universities, with 3.6% and 4.0% increase in YoY figures for non-EU and EU student enrolment respectively (with fluctuations dependent on specific countries/ regions), there was a 21% decline in student visa issuances over 2020. The gap between visa issuances and student enrolments shows that a substantial number of students were studying UK HE programmes online for at least the first part of the academic year.

International student numbers may well continue to grow at a significant rate. The point is that there is sizeable uncertainty that recent trends will continue and furthermore as to whether overseas student enrolment will, at all times, translate to physical presence on campus.

Annex C: Potential for Continuing and Increased Online Learning

The Office for Students (OfS) has recently published survey data which has canvassed student and staff experience of digital and online teaching and learning during the Covid-19 pandemic (https://www.officeforstudents.org.uk/publications/gravity-assist-propelling-higher-education-towards-a-brighter-future/executive-summary/). In November 2020, 93% of undergraduates were receiving all or mostly digital teaching and learning, and this was similar for postgraduate students (89%). Digital teaching and learning is not new, but this is the first time it has been used so extensively and at such scale.

It is acknowledged that student experience of online learning over the course of the pandemic has been mixed, with the National Student Survey and subsequent focussed surveys undertaken by the OfS reflective of this split in experiences. The "Propelling Higher Education Toward a Brighter Future" report seeks to recommend how digital platforms across UK universities can be better utilised and enhanced going forward. The report presents survey data from a sample of 52 interviews with digital teaching and learning experts and HE professionals from around the world, and received 145 responses in a call for evidence in addition to surveying 1,285 students and 567 teachers, across a sample of UK universities, to understand their attitude toward online teaching and learning over the course of the pandemic. Survey data showed that 67% of students were content with their digital teaching during the pandemic. A similar proportion (61%) said teaching was in line with their expectations, although 29% said it was worse than expected.

The report concludes that : *"dialogue had with students, staff, leaders and others in the sector has been marked by two features – the exciting and creative ways digital approaches are being used to ensure learning continues and is enhanced, and the warm enthusiasm with which these ideas are discussed"* and as a result *"[whilst we] do not predict that higher education will ever be fully online, nor should it be. The pandemic has changed the situation forever. It may not have taken the form expected, but a disruptive avalanche has arrived. We should all work together to rise to the occasion and seize the opportunity".*

Many universities across the country have pushed toward greater digital accessibility for their course offering, following positive virtual teaching and learning experiences as a result of the pandemic. Institutions such as The University of Aberdeen have recently made a strong push toward a more inclusive digital platform including lecture recording and captioning support, which illustrates a shift in how courses will be delivered moving forward, with a general acceptance that going back to previous methods of teaching pre-pandemic is neither desirable nor feasible.

Furthermore, a recent joint research paper undertaken by researchers at the University of Strathclyde and University of Manchester (https://stuc.org.uk/files/Policy/Research-papers/WFH_Preliminary%20Findings.pdf) titled "Covid-19 and Working from Home Survey" has undertaken a cross-analysis of university staff and their attitude toward working from home. The survey was undertaken UK-wide and initial findings have shown significant preference toward some element of working remotely (or working from home).

Preliminary analysis of the 'Covid-19 and Working from Home Survey', shows that 78% of respondents said they would prefer to work in the office for only two days or less. Almost a third – 31% - said they would prefer not to spend any time at all in the office.

In summary, initial research undertaken to date on attitudes toward learning and working remotely suggests staff and students have some preference toward spending less time on campus which will potentially impact the way in which universities operate their estate on a national scale, in years to come.

The point here is that the pandemic has resulted in online teaching and learning becoming a necessity within university institutions but survey data of staff and students suggest that some element of this learning will continue and even become more enhanced as a result of positive experiences and opportunities realised over the course of lockdown. Therefore, the future of physical space within UK universities will need to be modelled and adapted in consideration of this trend.

Annex D: Peer Group Institutions – Estates Performance

Peer group includes universities in the upper end of league tables and/or those that saw first major campus development from the 1960s, including Warwick, UEA, Essex, Bristol, Lancaster, Loughborough University

Estates Indicator	UoY	Peer Group Average	Peer Group Lowest	Peer Group Highest
Total Floorspace GIA (sqm)	419,464	387,702	283,183	562,787
Total Students FTE	16,916	17,708	14,121	24,907
Total GIA per Student FTE (sqm)	24.80	21.72	18.11	24.80
Non-Residential GIA (sqm)	287,517	257,598	159,860	391,890
Non-Residential GIA per Student FTE (sqm)	17.00	14.21	11.32	17.00
Percentage Estate in Condition C-D (%)	28.4	25.33	5.2	60.8
Percentage Estate Listed (%)	8.29	7.47	0.06	23.98

*Data capture from 18/19 and 19/20 HESA Data – for student and staff numbers and GIA estate, latest 19/20 figures analysed and presented in the above table

** Analysis undertaken between peer group universities; University of Bristol; University of East Anglia; University of Essex; University of Lancaster; Loughborough University; University of Warwick and University of York

***Unable to analyse estate utilisation due to missing data from UoY with regards to utilisation of estate

Annex E: University indicative masterplan (PDF Supplied)

Campus East
Extension proposal

23.02.2022 / Rev 05

Campus East (existing - north of lake)				
Building	Use	Floorplate area GIA (sqm)	Floors	Total building GIA (sqm)
1	Residential	438	4	1752
2	Residential	438	4	1752
3	Residential	1044	4	4050
4	Residential	673	4	2659
5	Residential	685	3	2055
6	Residential	1688	3	4208
7	Residential	673	4	2018
8	Residential	635	3	1905
9	Residential	438	4	1752
10	Academic	1050	3	3275
11	Residential	750	3	2250
12	Residential	900	3	2700
13	Residential	900	3	2700
14	Residential	500	4	2000
15	Residential	1150	4	5200
16	Residential	900	3	2700
17	Residential	1150	4	5400
18	Residential	500	3	1500
19	Business / collaboration	1100	3	3100
20	Business / collaboration	1300	3	3900
21	Business / collaboration	1350	3	4050
22	Business / collaboration	1200	3	3600
23	Academic	1200	2	2400
24	Academic	1000	3	3000
25	Academic	900	3	2700
26	Academic	1000	2	2000
27	Academic	900	2	1800
28	Social / hub	1200	1	1200
	TOTAL			78466

Campus East (existing - north of lake)		
Use	Total building GIA (sqm)	% total
Residential	47241	60%
Academic	15175	19%
Social / hub	1200	2%
Business / collaboration	14850	19%
TOTAL	78466	

Campus East (extension - south of lake)		
Use	Total building GIA (sqm)	% total
Residential	49380	28%
Academic	51650	29%
Social / hub	16000	9%
Business / collaboration	39600	23%
Research	15200	9%
Multi-storey car park	4600	3%
TOTAL	177030	

Campus East (extension - south of lake)				
	Building	Use	Floorplate area GIA (sqm)	Floors	Total building GIA (sqm)
UoY Proposed Additional Area	29	Residential	960	3	2880
	30	Residential	450	4	1800
	31	Residential	400	4	1600
	32	Residential	800	3	2400
	33	Residential	1000	4	4000
	34	Business / collaboration	1200	3	3600
	35	Business / collaboration	1200	3	3600
	36	Business / collaboration	800	3	2400
	37	Business / collaboration	800	3	2400
	38	Business / collaboration	1200	3	3600
	39	Business / collaboration	1200	3	3600
	40	Residential	900	3	2700
	41	Residential	600	3	1800
	42	Residential	600	4	2400
	43	Residential	650	4	2600
	44	Academic	950	3	2850
	45	Academic	800	4	3200
	46	Academic	2450	3	7350
	47	Social / hub	2300	4	9800
	48	Academic	1000	3	3000
	49	Academic	1000	4	4000
	50	Academic	2400	3	7200
	79	Social / hub	1000	1	1000
		UoY Proposed Additional Area Total			77580
Campus East Extension Under S727	51	Social / hub	1200	4	4800
	52	Academic	950	4	3800
	53	Academic	1650	3	4950
	54	Business / collaboration	1050	4	4200
	55	Business / collaboration	800	3	2400
	56	Residential	750	3	2250
	57	Residential	400	4	1600
	58	Residential	400	4	1600
	59	Academic	1000	4	4000
	60	Academic	1000	4	4000
	61	Academic	1000	4	4000
	62	Residential	650	3	1950
	63	Residential	1050	3	3150
	64	Residential	300	3	900
	65	Residential	600	3	1800
	66	Residential	900	4	3600
	67	Academic	1100	3	3300
	68	Business / collaboration	2100	3	6300
	69	Residential	850	3	2550
	70	Residential	450	4	1800
	71	Residential	450	4	1800
	72	Business / collaboration	2600	3	7800
	73	Residential	900	3	2700
	74	Residential	900	3	2700
	75	Research	2000	2	4000
	76	Research	2000	2	4000
	77	Research	3600	2	7200
	78	Multi-storey car park	2450	2	4900
		S727 Total			98050
Buffer	80	Social / hub	600	1	600
	81	Social / hub	300	1	300
	82	Social / hub	500	1	500
		Landscape Buffer Total			1400
		TOTAL			177030