

MANAGEMENT SUMMARY

Impact of national and international developments on UT and housing

Changing circumstances, internationalisation and knowledge safety

UT is currently dealing with changing circumstances. The LTSH-2032 was based on a higher baseline scenario. However, this has now been adjusted to a defensive scenario. The eventual scenario will be influenced by national discussions on internationalisation and knowledge security take a turn. With unchanged budgets and firmly increased costs, stronger choices have to be made.

Sustainability

Sustainability is one of the focal points in UT's new strategy. The SEE programme is now a good operational forum. The real estate roadmap has produced a detailed document as a basis for plans for a CO₂ campus. The goals of the roadmap are 49% CO₂ reduction by 2030 compared to 2018 and achieving 95% CO₂ neutrality by 2050. Particularly for the existing buildings that fall within the scope of LTSH, it is important to implement the no-regret sustainability measures in order to achieve the sectoral ambitions as well as our own. It is uncertain whether UT will have sufficient financial resources to achieve all the goals and to cover the costs after 2030.

Urban developments

In 2023, we started developing a new campus vision with the municipality of Enschede. A new 'campus vision 2050' is required for the following reasons:

- Developments on campus require a clear assessment framework.
- The projects were assessed as distinct projects and not from an urban development context.
- Some of the buildings now qualify for post-war heritage and it is important to map this out. If desired, protection can be provided.
- It is important to be able to make campus choices on a no-regret basis.

Because many disciplines were involved in the development of the plan, it has a much broader foundation. A much more sustainable approach has been chosen in which soil, water and people have become more central. This vision also fits more logically with Kennispark and the Spoorzone. The Spoorzone is a collaboration between Enschede and Hengelo to put the region on the national and international map in a more metropolitan way. UT is strategically located in the middle.

Student housing

In 2021 it became clear that the student housing stock on campus and in Enschede and Hengelo must be increased. Even though we have a relatively balanced housing market in Twente, it remains important to add supply. To achieve this, we are working closely with housing associations De Veste and Domijn. Additional housing possibilities for small households (1 or 2 people) is also important for new, international employees.

Project portfolio 2024-2028

Due to changing circumstances, the LTSH project portfolio has been drastically adjusted. This is in line with measures that have been agreed on in the LTSH policy in case of declining influx:

- cancel/put on hold projects that provide for expansion of square metres;
- complete ongoing projects in the implementation phase;

- aim for a target budget of €XXX million (initial plan was €XXX million) for the next 5 years (2024-2028);
- Focus on existing real estate and focus on quality and efficient use of square metres.

For the 2024-2028 period, UT has 19 allocated real estate projects and a few more flexible budgets for transformation of existing real estate, mainly for labs. The UT projects are divided into five categories:

1. Development of own real estate
2. Infrastructure
3. Third-party property developments
4. Investments in maintenance
5. Budgets to be allocated

Most developments are in the first category such as: the Cube, Kop Langezijds, Boerderij Bosch/Stall/Blokhutten, Cubicus renovations, Horst, Paviljoen, Zilverling, lecture rooms Spiegel and the Watersport complex. An amount has also been included with further elaboration to solve bottlenecks within Sports and Culture. In the coming years, in line with a defensive strategy, UT's primary real estate portfolio will not grow further after finishing the Kop Langezijds and the Cube.

Finance

The total amount of investments for the years 2024-2028 adds up to €XXX, including the indexation of 4% yearly and a realisation factor. The initial amount, based on the LTSH 2032, was €XXX. The index was adjusted downwards because the tendency is that the inflation and price increases are flattening. The entire plan has been calculated and fits within the financial parameters of UT. The pressure on liquidity can be solved with short- or long-term loans.

Table 1: Ratios 2024-2028

Ratio	Requirement	2024	2025	2026	2027	2028
Solvency II	$30\% < x < 40\%$					
Current ratio	$0,50 < x < 1,50$					
Profitability (1 year)	$> -/-10\%$					
Housing ratio	$< 0,15$					

In the financial assessment framework for decision-making, we consider the cash flow of the relevant calendar year, as well as the total budget of the Annual Plan and a maximum of XX% housing ratio.

Risks and uncertainties

The LTSH largely uses assumptions. Although the risks and uncertainties have been estimated as accurately as possible, several will be highlighted:

- UT has still low capacity in FTE for planning and managing the real estate projects.
 - This might cause a risk in planning and level of quality.
- A slower-than-expected hiring or even a decrease in staff and students.
 - We already take a decrease in student numbers into account. If the decrease becomes too high, this will cause an excess in square metres.

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1. INTRODUCTION

1.1 General

The objective of the Annual Plan, titled 'Development of housing and real estate', is to further elaborate on the programme that is being implemented within the framework of the long-term strategy for housing (hereafter 'LTSH'). This Annual Plan relates to UT's budget and contains an update of the financial situation, updates of the ongoing projects within the programme, and an overview of the detailed choices and prioritisation for projects implemented by UT. For our projects and goals, we always look five years into the future. This plan also outlines current national and regional developments affecting real estate and housing, and the campus as a whole. The status of UT on-campus real estate projects is also specified. A total indexed amount of €XXX is included in this Annual Plan for 2024-2028.

The Annual Plan is updated every year and fits within the LTSH framework. In 2022 a new 10-year LTSH was developed, titled LTSH 2032, and adopted in the beginning of 2023 by the Executive Board, Supervisory Board and University Council. LTSH 2032 is a 10-year strategic document and is subject to review every three years. It contains a housing strategy where the UT strategy 'Shaping2030' has been translated into housing frameworks and principles that take national and regional developments into consideration. All the UT housing initiatives are listed, including future maintenance processes necessary to maintain existing housing quality levels. The projects included in the LTSH have a careful decision-making process before a project is executed. In 2022 we reviewed the university's financial situation as well as the real estate investment potential for the years ahead. In 2025 the 10-year LTSH will be updated for 2026-2035.

Major projects

In the present Annual Plan 2024 (for 2024-2028), four larger real estate projects with a budget of more than €XXX are foreseen: (1) The realisation of the Cube (a new workshop for ET) at the Horst Building; (2) Adaptation of the Sports & Culture building to solve current problems; and The renovation of two large existing buildings, (3) Cubicus and (4) Horst.

The scope of these major projects restricts our opportunities to make additional large investments in housing in the coming five years. This is also why, subject to financial, project management capacity and planning constraints, necessary new initiatives which are desirable under the UT strategy have been determined on an annual basis since 2016. As agreed when adopting the LTSH, the real estate initiatives are compiled into a programme of projects to be updated annually in the 'Development of housing and real estate' Annual Plan, which has been integrated into the annual UT budget.

1.2 Review and results 2023

Strategic/general issues

- Global conditions in 2023 are still unstable. The war in Ukraine continues and inflation has surged in 2023. This has become apparent in tenders and estimates for future projects. For instance, a new building project as an extension of the Horst has been put on hold for the time being. At the time of writing, there are signs that inflation is moderating.
- At the start of the 2023-2024 academic year, UT is facing a flattening influx for the second year in a row. Due to concerns about excessive internationalisation from The Hague, the

outlook is that this flattening will continue for a few more years. This has major implications for UT's operations and will force it to make clear choices, including in real estate.

- UT has adopted a new educational vision. This guides not only education itself but also the facilities needed.
- In the last year it has also become clear that sustainability has become an increasingly important issue. It is a strategic focal point of UT. It is also a necessity given the increased energy prices.
- As a result of the 'new way of working' after COVID-19, a clear change is visible in workplace requirements and also workplace usage, strengthened by changing financial conditions, a flex factor is being used. This should be <1.0 (at the moment the real factor is approx. 1.3).

Current real estate projects

- The new accommodation for ITC in Langezijds building has been successfully commissioned. The former building on Hengelosestraat has been sold and delivered to the RijksVastgoedBedrijf (RVB). The Kop Langezijds is still under construction.
- The Contact Centre in building the Boerderij has been completed and successfully in use.
- The new construction of the Cube for the ET faculty has started. Construction will continue through 2024.
- For both the ET and TNW faculties, various plans have been explored with the help of external support, which should lead to a programme of requirements for the future.

1.3 Preview of 2024

Strategic/general issues

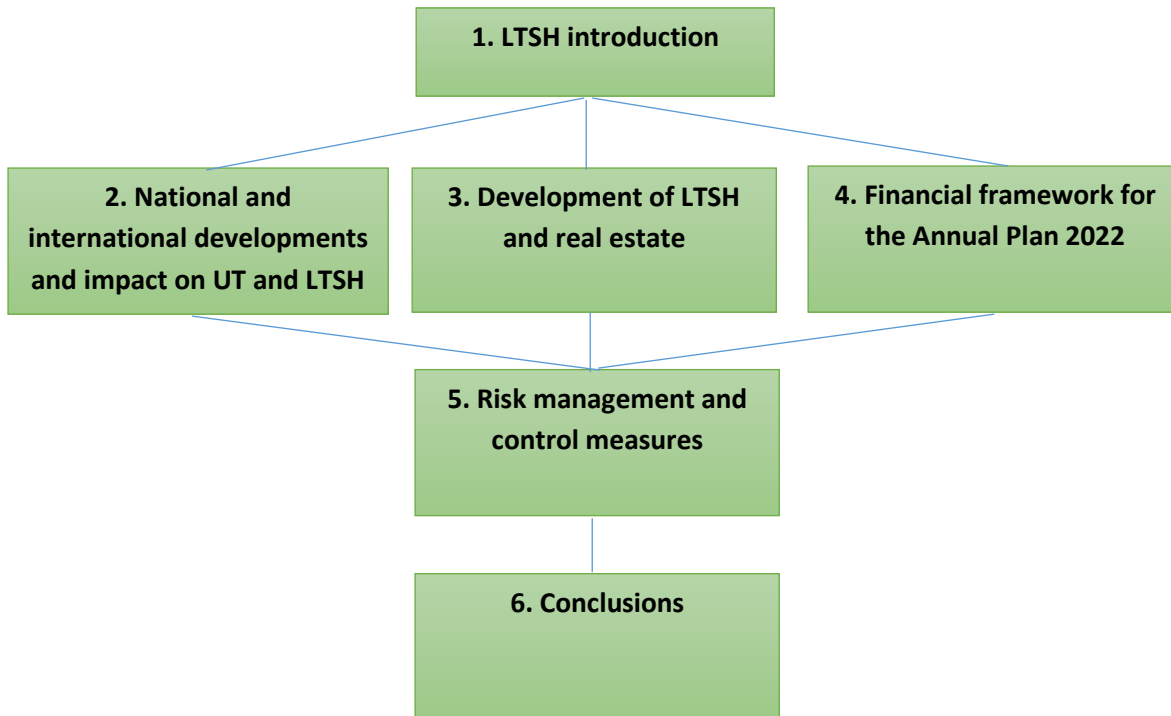
- UT's financial position is not expected to improve quickly before 2024. This, combined with the high price level, means that new and different strategic choices have to be made, including in real estate. For the LTSH, it is important that the organisation clearly states where its priorities lie in terms of accommodation.
- From 2024, the new campus vision will be used as a framework for developments on campus. At the time of writing this is still being finalised. The campus and the real estate of UT have cultural-historical value. This too will be taken into account for future plans.
- There will be ongoing improvement of the LTSH programme to further enhance the portfolio and real estate management.

Real estate projects

- Finalising the Kop Langezijds, the Cube, Stall/Boerderij Bosch and the expansion of the Koelgebouw 2.
- The renovation of the Cubicus will take place in mid-2024. This is the first of three larger renovations in the LTSH.
- The Pavilion will be renovated and expanded. The intended user is CES.
- In 2024 it will become increasingly clear how the Sports & Culture facilities will take shape.

1.4 Reading guide

Chapter 2 of this plan describes the internal and external developments relevant to the LTSH and examines whether these developments necessitate any changes to the chosen strategy for the LTSH. Chapter 3 provides insight into the real estate projects for the next five years. In Chapter 4 the financial framework of the current programme is explained and calculated. The identified risks for this programme are listed in Chapter 5. The Annual Plan ends with the conclusions in Chapter 6.



2. NATIONAL AND INTERNATIONAL DEVELOPMENTS AND IMPACT ON UT AND LTSH

To further elaborate on the LTSH, it is important to list any developments, whether major or minor, relating to the number of users to be housed or to their needs. Regional, national or international developments that could affect the financial or spatial frameworks of the LTSH are also important. Section 2.1 discusses some key developments at the national and international level. Section 2.2 describes the impact of the key developments on UT and the strategic issues at stake. Section 2.3 describes important partnerships for UT. Section 2.4 discusses urban planning and the UT and Kennispark zoning plan. Lastly, section 2.5 addresses the developments in student housing.

2.1 National and international developments

Current external circumstances

There are several external factors that need to be taken into account under the LTSH, as they lead to various risks. There is currently scarcity in the labour market, the property market is overstrained, there is scarcity of materials and raw materials, (financing) interest rates are rising (causing property developers to pull out of projects as they cannot break even) and there are rising energy and fuel costs. Uncertainty also remains surrounding nitrogen deposition and its influence on building permits. These factors are causing price increases, longer delivery times and delays in the delivery of projects. The university's revenues are currently not rising as fast as costs. This affects the overall operations of the university and may put the feasibility of the LTSH under pressure.

Internationalisation and knowledge safety

In 2023, Minister Dijkgraaf indicated that he wanted to prevent further internationalisation. For bachelor's programmes, this means that from 2025, specific approval must be requested if they are offered in another language. In addition, a maximum of 1/3 of the number of credits may be taken in English. The measures were mainly introduced to help overburdened universities.

Another point that related to the international influx is knowledge security. There are an increasing number of countries including the Netherlands that they will no longer accept students from a country such as China. That would have a major impact.

Alternative public funding

Over the past few years, the government has set up several funds intended for knowledge institutions and to stimulate the economy. These are often funds for which extensive proposals must be submitted, and whether they will be awarded remains to be seen. This demands flexibility.

(1) State contributions

Dutch universities are principally financed through public funding. The size of this budget varies from year to year, and also depends on student numbers. The university receives an amount of funding for each student set by government, the so-called 'state contribution' (Rijksbijdrage). This per-student funding has fallen sharply in recent years; it was about €XXX in 2002 but had dropped to €XXX by 2021. Several studies are currently taking place in the field of education funding. Among others, capacity funding and a study concerning the cost price of education are currently being conducted. The implications for UT are not yet clear at this point.

(2) National Growth Fund (Nationaal Groeifonds)

The National Growth Fund, which was introduced by the government in 2020, allows the Cabinet to invest in projects by public-private consortia that contribute towards future economic growth. Alongside innovation, the Fund supports educational renewal and lifelong learning. UT is well represented in the Fund's proposals, but which projects will be granted funding is as yet unknown. The same applies to the conditions that will apply to this funding. The formation of a new cabinet (new elections on 22 November 2023) may affect the level of these funds.

(3) Sector Plans

The government introduced Sector Plans with a view to strengthening the country's knowledge foundations by profiling universities in a balanced and mutually agreed way, so as to retain the Netherlands' academic excellence. UT receives about XXX through the Sector Plans. This has had an upward effect on staff numbers and also on investment capacity in terms of equipment and infrastructure. Funding which used to be devoted entirely to research can now also include indirect costs.

Sustainability

The latest IPCC report (2023¹) shows the impact of human induced global warming is more widespread and severe than expected. Global CO₂ emissions must stop growing and decrease from 2025 at the latest to stay aligned with the 1.5°C scenario as committed to in the Paris agreement (2015). Deep CO₂ emission reductions are needed. Rapidly moving away from fossil fuels is required as it is the number one cause of climate change. For LTSH, working towards future-proof resilient infrastructure by decarbonising buildings is a first step.

The European Green Deal², a roadmap for a climate-neutral Europe, has strengthened the CO₂ reduction targets. The EU Climate Law (2021) ensures it is a legally binding target of reducing emissions by 55% by 2030.

A package of legislation (called Fit for 55) was proposed to reach this target. One part is the EU Circular Economy Action Plan. Circularity refers to smarter use of resources, collaboration across the entire value chain, reducing waste streams and CO₂ emissions. This translates into reducing pressure on natural resources, ensuring materials in buildings are mapped to aid the reuse when a building is end-of-life and re-using materials as well as choosing lower impact materials.

Another part of the Fit for 55 package is the EU Biodiversity Strategy for 2030. Concerning biodiversity, wildlife nesting opportunities can be included in a building's design (nesting stones, nesting boxes) and walls can be greened.

As of 1 December 2023, universities will have to comply with the 'informatieplicht' (obligation to provide information) on energy saving, and report to RVO (Netherlands Enterprise Agency). The goal of this plan is to create an overview of the current situation in order to identify cost-effective, energy saving and CO₂ reducing measures. A Recognised Measures list (EML) of measures which lead to energy saving with a return on investment of maximum five years will be compared to the current

¹ <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>

² https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

situation. Unfortunately, a sector specific plan was not realised, which would have provided more encouragement throughout the educational sector.

To reach the Paris goals, more is needed. The Dutch Green Building Council (DGBC) developed a Sustainable Renovation Delta Plan. The aim of this organisation – which was initiated by request from the building and real estate sector - is to work towards future-proof buildings by making the built environment Paris Proof by 2040. This means energy consumption of the built environment should be reduced by two thirds. This reduction is based on the predicted availability of renewable energy in 2040. The energy consumption has to go down for us to be able to function on purely renewable energy.

Thus, a building is Paris Proof when its energy consumption is aligned with the goal of keeping global warming limited to 2°C and pursuing efforts to limit the global warming to 1.5°C. Energy consumption is influenced by the sustainable measures present in buildings that improve energy efficiency as well as by the behaviour of the users. For Paris Proof office buildings the energy consumption should not exceed 70kWh/m²/year. Translated to energy labels, this means that from 2040, office buildings should have a A+++ label.

A real estate roadmap for the sector table 'built environment' (part of the Dutch climate agreement) required universities to make an inventory of what is needed to achieve CO₂-neutral real estate. The goals of the roadmap were initially a 49% CO₂ reduction by 2030 (now a 55% reduction) compared to 2018 and achieving 95% CO₂ neutrality by 2050. This requires a lot from the sector in terms of effort and investment. The roadmap is recalibrated annually³ to monitor UT's progress. More specific consequences for UT are described in section 2.2.

2.2 Impact on UT and LTSH

Effects of external circumstances, internationalisation and alternative funding on growth and decline of UT numbers

External circumstances have not made real estate developments at UT any easier. With unchanged budgets and increased costs, stronger choices have to be made. Postponing or putting projects on hold are among the possibilities. Specifically, one project has already been put on hold. At the time of writing this Annual Plan, the trend is still unclear. However, it does seem that extreme price increases are a thing of the past.

The alternative funding (especially the Sector Plans) have had, and are still having, an effect on the numbers of staff and students. This is also the case for the discussion regarding internationalisation. Since UT's growth is strongly influenced by international inflows, a policy change by the government as outlined in the previous paragraph will have a direct impact. UT has taken this change into account in its projections.

³ <https://www.utwente.nl/en/sustainability/sustainability-on-campus/themes/buildings/#roadmap-towards-2050>

At the same time, it should be noted that the alternative funding is uncertain money and its effects on real estate and numbers of employees and students are also uncertain. It is good to assess where UT stands now in relation to LTSH 2032. While writing the LTSH 2032, it was already known that the 2023-2024 college year might result in some adjustments being needed to the LTSH. The flattened influx of students shows that UT will have to be critical in the short term in terms of operations and also in real estate investments. Especially when it involves expansion in square metres. The LTSH also allows for this, as it is a flexible framework which can be adapted well to a new reality.

In LTSH 2032, the real estate capacity was based on a higher scenario of students, academic staff and support staff than current predictions. In the employee scenario a growth deriving from the sector plans and the other alternative funding was taken into account. Due to the developments outlined, a more defensive scenario below the LTSH 2032 baseline scenario is provisionally assumed in the new Annual Plan LTSH 2024. With a declined FTE in OBP the OBP-WP ratio will be improved.

Currently, the vacancy rate in UT real estate is still very low, at less than XXX%. From a financial perspective this is a positive development, yet it limits the flexibility to accommodate growth and organisational changes of groups within the university. We strive for a vacancy rate of XXX%. Further inquiry and analysis are needed to decide whether these requirements for educational/research areas and secondary areas will lead to major quantitative or qualitative changes in our real estate portfolio.

Long-term vision on LTSH 2032 real estate and new way of working

In the LTSH 2032, the frameworks for real estate developments have been described and tightened. This is mostly the result of the policies put in place as a result of the 'new way of working and studying' after the COVID-19 pandemic. This policy is proving increasingly important, especially as space is becoming scarcer and financial resources more limited. The Annual Plan 2024 will follow up on the following components in this context:

- An overall flex factor of < 1.0 for working places has been set as a target. Several occupancy studies will be carried out to determine whether this value can be tightened further. Some of these have already been initiated in 2023. These indicate values of less than 30%.
- From CFM, a guide will be developed that will help further set up a working environment centred around 'activity-based working'.
- Several small-scale projects aimed at redesigning the working environment will be initiated.
- A digital workplace engagement tool indicating the availability of workstations will be implemented in co-operation with LISA. It will also allow staff to easily reserve workplaces and the first tests are hopeful.
- The faculties indicate an urgent need for labs. Various studies will be carried out into: occupancy rates, possibilities for dual use and conversion options in current buildings.

Sustainability at UT

Sustainability is one of the key focal points of the UT strategy, Shaping2030, and is an integral aspect of UT's operational management⁴, including the management of the terrain and buildings on campus. The LTSH's role in contributing to becoming a sustainable university includes: a reduction in CO₂ emissions through lower energy usage (top priority); disconnecting buildings from gas; a reduction in the use of resources through circular use of materials and climate-adaptation measures (for example reducing heat islands); combined with reducing water usage and strengthening biodiversity.

All aspects of realising a sustainable operational management are monitored by the SEE programme, which assesses the performance of UT on Sustainability, Energy and Environment. The sustainability [policy](#), focusing on 10 themes, describes subgoals leading to the overarching goals of becoming CO₂ negative and circular. The programme includes a steering group, a programme team and a working group. The steering group consists of a member of the board, a faculty dean and directors of CFM, FIN, and a faculty member. The programme team consists of an energy co-ordinator, two policy advisors for environment & sustainability, a communications advisor, and a supporting staff member. The working group will consist of colleagues from procurement, real estate and IT, VGM co-ordinators for the supporting departments and faculties, as well as the members of the programme team. These colleagues take the lead in becoming a sustainable university where everyone integrates sustainability in their daily work and considers sustainability when making decisions.

As of 1 December 2023, UT will have to comply with the 'informatieplicht' (obligation to provide information) on energy saving, and report to RVO (Netherlands Enterprise Agency). A Recognised Measures list (EML) which lead to energy saving with a return on investment of maximum five years will be compared to the current situation.

UT is already doing more than this EML requirement, having set the return on investment to 7 years. With high energy prices and an ambitious climate goal, return on investment of more than 7 years also make sense when buildings last 30 years and installations have a lifespan of 15 years. Initial investments in order to save money during the lifespan of a building or installation is needed (assessing Total Cost of Ownership instead of only looking at initial investment costs) and sometimes forms a hurdle. As the ultimate goal is to save CO₂ and energy, setting the right priorities will allow this hurdle to be overcome.

In 2020, UT developed a roadmap (see section 2.1) detailing how to achieve CO₂-neutral real estate. All characteristics of 41 buildings (such as roof, floor, wall conditions) were analysed and measures were suggested that optimise energy usage in the building. This has led to a list of 30 measures that can be implemented. Due to fast developments in the sustainability field, this plan will be reviewed and updated annually. The current budget estimate is based on current best practices. The required budget for this surpasses the maximum percentage of the UT budget of XXX% that is reserved for

⁴ <https://www.utwente.nl/en/sustainability/attachments-forms/sustainability-policy-ut-operational-management-digitaaltoegankelijk.pdf>

real estate (i.e., the Housing Ratio). In order to achieve CO₂-neutral real estate, financial involvement of the national government is needed. Lobbying will be required to achieve this.

2.3 Partnerships

UT has several important partnerships at both the regional and national levels related to the development of our campus. Five partnerships are mentioned in this context: Toplocaties Twente, VU Amsterdam, Apeldoorn, Zwolle and Navitas IFY.

At the regional level, UT is a partner in the development of Toplocaties Twente, which consists of Kennispark, High Tech Systems Park in Hengelo and the Techbase in Enschede. The nearest and most important location is Kennispark, where UT closely collaborates with the municipality of Enschede and businesses in the area. Together we are working on the strategic development of the Kennispark area.

At the national level, UT has a partnership with VU Amsterdam. The two universities have jointly formulated a number of ambitions through 2030 and a new work programme has been launched to continue through 2025. This work programme includes our ambitions:

- to offer four UT- bachelors (Creative Technology and Mechanical Engineering among others) in Amsterdam;
- to work towards impact programmes on the themes of Resilience, Circularity and Smart Cities.

During the Bachelor programmes in Amsterdam, students will also regularly visit and stay at our campus. This will have consequences for the housing facilities on campus.

In Apeldoorn, in 2022 the Centre for Security and Digitalisation (Centrum voor Veiligheid en Digitalisering, CVD), a unique partnership between the Saxion knowledge institute, the Police Academy, the University of Twente, Apeldoorn City Council, and others was opened. The Centre is housed at a prominent site near Apeldoorn's railway station and offers a modern and inspiring location for 'lifelong learning' (LLL).

The plans for education in Zwolle are still under construction. Several UT entities operate in the Zwolle ecosystem, and we are now assessing whether more convergence could contribute to increased effectiveness and efficiency. If so, the next plan will assess what this could mean for housing.

At the international level, a collaboration has been started with Navitas IFY, which provides a pre-Bachelor's programme. This may have consequences for real estate in the long run because certain Collective Educational Facilities (CEF) spaces are occupied and cannot be used for UT.

2.4 Urban planning and zoning plan

Campus vision 2050

In 2023, we started developing a new campus vision with the municipality of Enschede. The last urban development vision, *Beeldkwaliteitsplan*, dates from 2019 and was drawn up by the supervisor of UT. A new 'campus vision 2050' is required for the following reasons:

- Developments on campus require a clear assessment framework.

- The projects were judged as distinct projects and not from an urban development context.
- Some of the buildings now qualify for post-war heritage and it is important to map this out. If desired, protection can be provided.
- It is important to be able to make campus choices on a no-regret basis.

Because many disciplines were involved in the development of the vision, it has a much broader foundation. The vision includes important principles including:

- Water and soil are guiding factors
- Green and sustainability are central
- People are central
- Aim for a low-car zone in the long term, with room for slow traffic and public transport
- Recognisable building ensembles/clusters on the campus
- Include the Kennispark 1 area
- Mix of education, research, sports, culture, housing, entrepreneurship
- Limited space for new buildings
- A clear heart of the area
- Spoorzone development

In previous versions of the LTSH, attention was already paid to the zoning of the campus. In this vision this is even more clearly defined and the Knowledge Park has also been added. The common green of the campus has therefore naturally become the heart of the area. The so-called 'Twente Villages' are located around the common green.

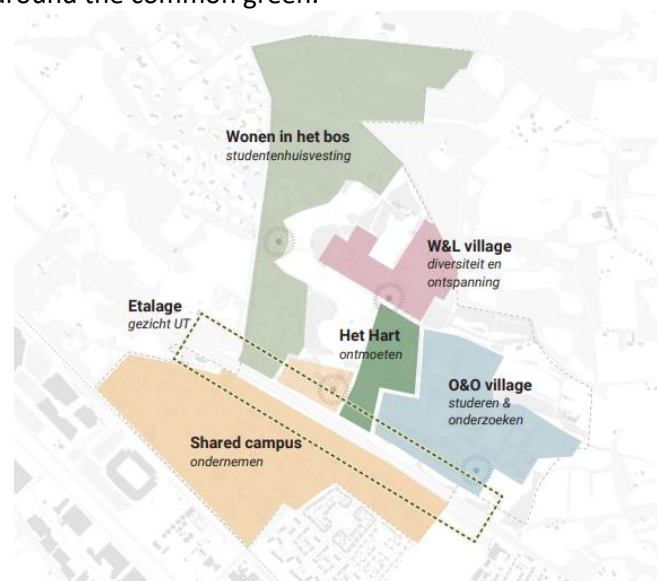


Figure 1: Twente Villages

Within the Villages, attention will be paid to a clear network with recognisable points. Currently, the campus area is still focused on the car. In the future, this should shift to slow traffic and some car-free zones. Parking will then shift more to the edges. The latter is a long-term transition that is not yet feasible.

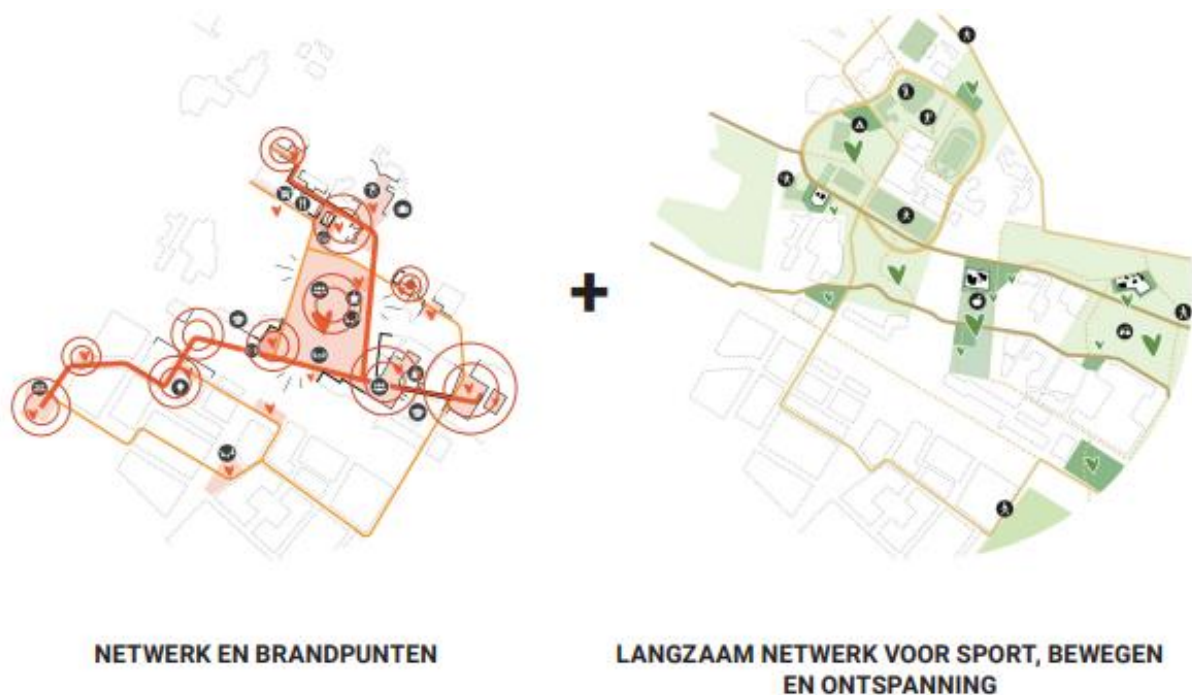


Figure 2: Networks at UT

The map below shows the overall vision. In addition to the different structures, it is also important to mention that there is room for expansion in some targeted places. New buildings can be added as UT continues to grow. The most important places are:

- Cubicus 2.0 in the parking lot next to the Cubicus
- Pinetum next to The Gallery
- Pavilion zone for Sports and Culture
- Around the Sports Centre
- Between the Spiegel and the Hengelosestraat in collaboration with an institutional investor (ASR Dutch Science Park Fund)



Figure 3: Campus Vision 2050 overall map

Kennispark

Since the zoning plan of Kennispark was re-established in 2022, UT's strategic partners have continued with their developments. For example, ASR is developing a scale-up building and housing association Domijn is working on plans for a residential building with approximately 200 residential units directly opposite the campus. The plans are expected to be in an advanced stage by 2024. As part of the 'merger' of UT, a pedestrian/cyclist crossing will be realised in 2023 at the Spiegel.

Spoorzone Hengelo Enschede

In addition to Kennispark, a larger development will be further developed in 2023: the Spoorzone Hengelo Enschede (SHE). This is based on further co-operation between the two largest municipalities in Twente and has been established by both municipal councils. The collaboration repositions the resulting '5th city in the Netherlands'. UT fulfils an important position here, not least because it is located in the middle. The vision is based on four important pillars:

- From Braindrain to Braingain
- Top technological companies
- International top technological region
- City life with Twents quality of life

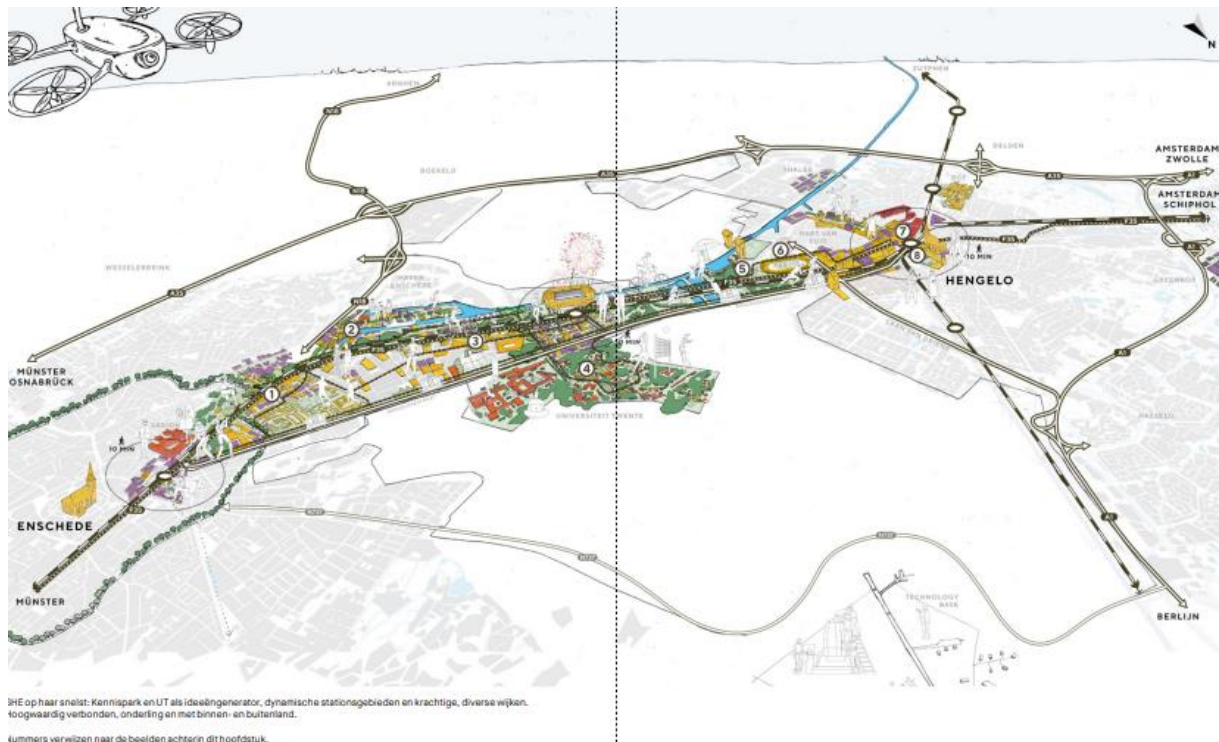


Figure 4: Spoorzone Hengelo Enschede (SHE)

2.5 Housing for international students and staff

Available, adequate and affordable housing for new international students, employees and guests is emphasised in UT's Shaping2030. Satisfactory, professional and flexible assistance in finding suitable accommodations is crucial to attract international talent. In addition, UT is profiling itself as the 'Most Welcoming University' for students, employees and guests.

The co-operation agreement concluded in 2021 between UT, housing associations Domijn and De Veste, and the municipality of Enschede is increasingly being implemented. This concerns the following developments:

- The realisation of 117 units on the Boulevard UT in 2024.
- The realisation of approximately 200 units on Hengelosestraat in 2024-2025.
- The planning of approximately 350 units on the Verre Veld.
- The further development of the 'Young City Concept' in what is now the ITC Hotel. The ITC Hotel will become available when new housing is available on campus.

In addition, Domijn is also working on various other developments in the city aimed at Young Professionals under the name Keeping Talent in Twente.

3. DEVELOPMENT OF LTSH AND REAL ESTATE

The previous chapter focused on the developments around UT. In Chapter 3 this is translated into an updated project plan. First, section 3.1 describes developments in the programme that lead to improvements in portfolio management. Sections 3.2 to 3.4 discuss the adjusted project programme based on LTSH 2030 and the developments concerning real estate. Lastly, section 3.5 describes how the communication around the projects works.

3.1 Further improvements to the LTSH programme

LTSH is a solid programme with clear governance and decision-making. The portfolio management is now well-organised (see **Appendix I**). The programme is experiencing continuous monitoring for improvement, although most things are now working at the appropriate level.

Project management tool

The project managers currently work extensively with Excel-based solutions. This makes steering the projects and budgets not only error-prone but also unnecessarily laborious. Led by FIN's controller, a new software package has been purchased to process the projects. This is the package Reasult and has been operational since mid-2023.

Co-operation with faculties

Recent years have shown that having a permanent contact person for real estate projects in faculties is of great value. This is of great importance for both the programme of requirements phase and also later in the design and construction process. For the faculties that have projects running, we have managed to organise this permanent contact person. Since then, these projects have been running much more smoothly.

Flexibility LTSH

The LTSH has been working with different scenarios in recent years taking into account the state of affairs at UT. This agility enables the LTSH to keep up with UT's growth or decline. Now that we are in a more conservative phase, this adjustment will be downward.

3.2 Overview and general frameworks

The LTSH 2032 works with five categories of developments:

1. Development of own real estate
2. Infrastructure
3. Third-party property developments
4. Investments in maintenance
5. Budgets to be allocated

Especially in the first category, a high budget was included aimed at a growing UT. In total, the square footage was planned to increase by 16,100m² FNO. A total budget of €XXX was included for the period 2024-2028. Based on the current forecasts for UT and the financial consequences this entails, a drastic adjustment has been made. The amount for the next 5 years now amounts to €XXX.

This adjustment is based on the following frameworks:

General measures

- In accordance with LTSH policy, expansions will be put on hold where possible if figures are disappointing.
- Focus on existing real estate, i.e., allow major renovations (Horst, Zilverling, Cubicus) to continue so that they can be optimised. Focus on quality and efficient use of square metres.
- In case of expansion, take a critical look at specific wishes from the community.
- Current (awarded) projects will be completed as planned.

Spatial frameworks

As mentioned in Chapter 2, full effort will be made to make optimal use of the current building stock. Because the Es will not continue in its current form, there is an urgent need for additional labs and a solution will need to be found. This leads to the following points:

- Based on the low occupancy rate of offices of approximately 30% in buildings, a sharper flex factor should be achieved. This will lead to a different way of working.
- Carrying out a study into the occupancy and utilisation of the current labs.
- Mapping lab needs at the faculties.
- Convert spaces suitable for labs where possible, in line with user wishes.

The community has also clearly indicated that there is a need for a solution to the bottlenecks in Sports and Cultural Facilities. Here too, the focus will be on what is possible within the current building stock.

Financial framework

The LTSH budget is based on a number of parameters. The most important are the building index and the realisation rate. In addition, it has been indicated that the total budget for the 2024-2028 driving period should be in the order of €XXX.

- Amounts are indexed 4% per year. This was higher, but we are now seeing a levelling off.
- A realisation rate of 85% has been assumed instead of the previous 90%. Past experiences indicate that this tightening is realistic.

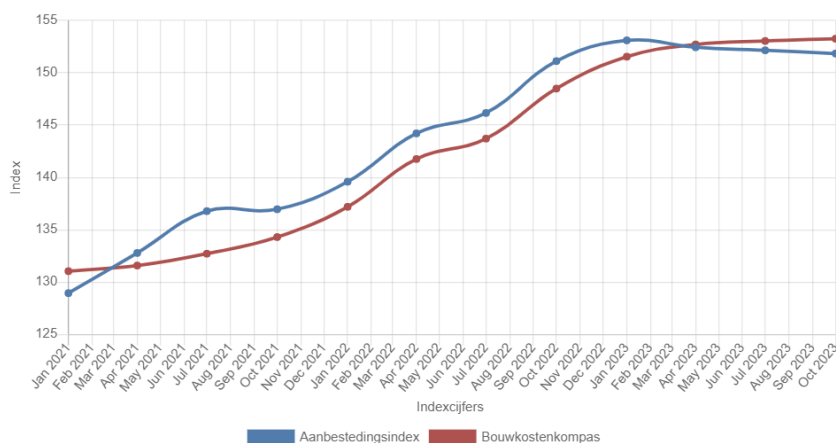


Figure 5: Flattening curve building index

3.3 Projects budgeted for 2024-2028

Over the next five years, UT is planning 19 concrete allocated projects and some general budgets to be determined. The project and financial planning was also examined with the project managers and the real estate controller of FIN. This has resulted in an update of the LTSH project overview plotted in time with related expenditures (see **section 4.2** for the overview). The projects within the five categories mentioned in **section 3.2** are briefly explained below.

The **first category** contains the majority of projects. This list projects consist of three parts: 1) new buildings, 2) renovation of existing buildings, 3) Sports and Culture. A number of projects aimed at new construction are already in progress. These are the Cube, Kop Langezijds and two additional Blokhutten. In terms of sustainability, the renovation of the Pavilion and the Boerderij Bosch/ Stall is underway. The current projects are being carried out in accordance with the decisions that already have been made. The planned renovations of the Cubicus, Horst and Zilverling will also be carried out, but with an adjusted target budget. The order of Zilverling and Horst have been changed. The Horst will be renovated earlier due to legal issues. Projects that have been put on hold for now concern the expansion of the Es and expansions for Sports and Culture. However, an amount has been included for the labs (see the fifth category) and Sports and Culture to solve the current bottlenecks. The Spiegel lecture rooms will be effectively renovated.

The **second category** of projects mainly involves infrastructure, often as a result of a real estate development. The most prominent infrastructural projects in the realisation phase are the square at the Kop Langezijds and the Koelgebouw 2. Because of the relative affordable costs and the high impact that can be achieved, the adaptation of the Oude Drienerloweg is still planned. For the larger renovations of the Horst and the Zilverling we also need a budget for temporary housing.

The **third category** is mainly budgeted to make the plans for the Veste possible. Housing corporation the Veste is investing in the development of the Boulevard and new housing for ITC students at the Verre Veld. The Veste is also investing in its existing portfolio.

The **fourth category** concerns major maintenance investments that must be capitalised. An important difference with previous plans is that an index is now also applied to these.

The **fifth and final category** consists of more general budgets. These are unforeseen costs and resources that can be used for projects that we do not yet know about. Two important budgets are added: a budget for activity-based working, as well as a budget for investing in labs in existing buildings. The latter will also be used for robotics when the Cube is finished and there is room available in the Westhorst.

3.4 Internal and external communications on housing and real estate development

Internal and external communications on the development of real estate and housing at UT is essential and deserves attention. The basic principle for communications is the chosen strategy in the LTSH of 2016 and its elaboration in the present Annual Plan. The following applies to the website of Campus & Facility Management as an information platform for real estate and housing developments, www.utwente.nl/ltsh. This website focuses primarily on the internal target groups of UT and secondarily on external target groups. A real estate webpage is also available, in order to share the innovative real estate projects with the external public.

Communication principles

- The main language of communication is English. All the information on the website will be available in English. Mailings and news items will be published in Dutch and English.
- For targeted communications, the first order of business is to define who is connected to the various housing developments that will be included in the present plan and to what extent. A distinction is made here between most involved, involved, and other/more generally involved stakeholders. Those who are the most involved should be approached in the most personal manner, as the impact will be greatest for them.
- Internal communication takes place before external communication, in order of priority from the most involved people first, then the involved group, and lastly the more generally involved group. U-Today coverage will be grouped under external communications.
- As well as the intensive involvement of the general and line organisation and user groups within UT, timely inclusion of participants and supervisors is essential (also to include the students' perspectives). Frequent moments for testing and consulting prior to the formal decision-making (through various advisory bodies) can also be important for support purposes and early identification of risks or situations that require adjustment.
- Communications with media about housing issues will be carried out via or in co-ordination with a representative of the Executive Board.
- All communications about student housing on and nearby the campus will take place in close co-ordination with the relevant housing partner on campus, mostly De Veste.

Target group

- **Appendix II** gives a list of the internal and external target groups we define. Per project it will be predetermined which target group's involvement is relevant to the communications approach.

Project-oriented communication

- The scope of several upcoming housing activities arising from the LTSH, and the ways in which they are interrelated, require project-oriented communication. According to the present communications plan, a secondary communications plan is to be prepared for every project. The communication advisors who are connected to the relevant department or faculty will support the required communication approach.

Projects that require an explicit communication approach

For the year 2024, this involves communications plans for the following projects:

- Finalising the renovation of Kop Langezijds in 2024.
- Renovation of the current Cubicus building and therefore temporarily housing a subset of BMS staff in Capitoel 15.
- Cube workplace.
- Expansion of student housing on campus.
- Renovation of the Stall and Boerderij Bosch.
- Development of the Paviljoen Zone: relocation of CES to the renovated Paviljoen.
- The developments around Sports & Culture.

Points of attention in our communication

Important points of attention in our communications regarding real estate developments are:

- We are still confronted with relative high building costs that may lead to additional costs and delays in the planning of our real estate projects.
- Our number of students (and staff) is still decreasing, and for the coming years we don't expect these numbers to automatically increase. This is important when taking into account the functional need for housing and study spaces, plus in our communication with prospective students about what they can expect in terms of finding living accommodation in or near Enschede.
- We are collaborating with the municipality of Enschede and social housing associations in further developing the Kennispark area. This is an important message to our community and to the region, to emphasise that we are collaborating on housing issues, for staff and students as well as for industry.
- Since the pandemic, we are now working in a different way, focusing on remote or hybrid work. The focus on existing real estate will require a different working and studying culture when it comes to the use of space. Rooms, lecture halls and work stations will be used more flexibly. This culture shift requires careful communication.
- Sustainability in real estate is an important topic to draw attention to. We can communicate more explicitly what our goals are, how we try to accomplish these goals, what the results are, and above all, what we're already implementing with regard to this theme. In connection with the SEE programme, the involved communications advisor will be invited to the communications working group.

4. FINANCIAL FRAMEWORK FOR THE ANNUAL PLAN 2024

LTSH 2032 was established at the beginning of 2023. When calculating the plans, a growth scenario was assumed with a higher baseline scenario in 10 years. A major adjustment has been made to this scenario in the present Annual Plan for the period 2024-2028 from a cumulative investment of € XXX to € XXX, as is also evident from previous chapters.

4.1 Financial assessment

The Annual Plan 2024-2028 has been prepared and the result is presented in section 4.3. However, as real estate plans and budgets are always subject to change, it is important to set up a solid financial assessment. Each project proposal will be judged on three levels:

1. First, the project will be assessed on a project level. If it fits within the contained budget and planning for the Annual Plan, the project can proceed. If it deviates, the project will be assessed on two more levels.
2. Second, if the project deviates from planning or budget, whether the change can be absorbed in the cash flow in the year(s) concerned will be checked. If not, additional decision-making will be necessary.
3. Third, concerns the budget for the Annual Plan as a whole. The intended investments need a financial scope of €XXX from 2024 through 2028 (indexed amount). Changes in a project budget need to be absorbed within this budget and within the XX% housing ratio (internal target XX%). That means that other projects may need to scale down or be postponed.

Because UT assumes a levelling off and possibly declining influx of students, the LTSH has been adjusted accordingly. Because the focus is on existing real estate, several more flexible budgets have been included in the Annual Plan 2024-2028 so that demand-driven transformation can take place. The increase in construction costs is expected to level off in the coming years. This has a positive effect.

Along with every Marap, the financial key figures will be calculated. The latest project forecasts will be processed in that calculation. Together with the points above, a solid financial assessment will be set up.

4.2 Project planning and investments overview

Most projects in the Annual Plan 2024 were also part of LTSH 2032. Exceptions are mentioned in section 4.2. The next page lists all the projects. The projects in yellow are new compared to the LTSH 2032. Projects indicated in green have undergone a change. This change can be in budget as well as in planning.

Table 2: Annual Plan 2024-2028

Annual Plan 2024-2028				Bouwkostenindex: 104% 104% 104% 104% 104%						
		geel = nieuw tov LTSH groen = aangepast tov Origineel	UNIVERSITY OF TWENTE.							
Project	Budget 2024-2028 Looptijd AP	Forecast Totaal project	Geïndexeerde bedragen						Looptijd AP	
			Expenditure t/m 2022	Forecast 2023 total	Forecast 2024	Forecast 2025	Forecast 2026	Forecast 2027		Forecast 2028
1. Developments own real estate										
● A. Duurzame nieuwbouw/Groei										
■ Kop Langezijds			X	X	X					X
■ Cube			X	X	X					X
■ Blokhutten (2 extra)				X	X					X
■ Uitbreiding De Es onderwijs en onderzoek Robotica (Westhorst)			X	X						X
● B. Renovatie/Verduurzaming bestaand bezit										
■ Paviljoen renovatie			X	X	X	X				X
■ Stall + Boerderij Bosch			X	X	X					X
■ Vrijhof renovatie (restant budget)				X	X					X
■ Spiegel bgg collegezalen							X			X
■ Aanpassing in gebouwen na inhuizing De Es								X		X
■ Cubicus renovatie				X	X	X	X			X
■ Horsttoren en -ring renovatie							X	X	X	X
■ Zilverling renovatie									X	X
● C. Sport en cultuur										
■ Masterplan sport & cultuur										
■ Tijdelijke huisvesting: danszaal				X						X
■ Tijdelijke huisvesting: krachtsport				X						X
■ Vernieuwing binnen zwembad					X					X
■ NOC NSF hal incl upgrade bestaande zalen										
■ Body & mind centrum (Paviljoen zone)										
■ Oplossen knelpunten sport & cultuur						X	X			X
■ Watersportcomplex renovation full										X
■ Total			X	X	X	X	X	X	X	X
2. Infrastructure										
■ Uitbreiding koelgebouw 2			X	X	X					X
■ Plein Kop Langezijds			X		X					X
■ Tijdelijke huisvesting t.b.v. renovaties							X			X
■ Parkeren de Es										
■ Plein De Es										
■ Omgeving Boulevard / Oude Drienerloweg						X	X			X
■ Total			X	X	X	X	X			X
3. Developments real estate third parties										
■ Studentenhuisvesting Boulevard			X	X	X					X
■ Renovatie studentenwoningen Veste (infra)										
■ Studentenhuisvesting Verre Veld						X	X			X
■ Total			X	X	X	X	X			X
4. Investments in maintenance										
■ Investments in maintenance			X	X	X	X	X	X	X	X
■ Total			X	X	X	X	X	X	X	X
5. Work out in further detail										
■ Activiteit gericht werken					X	X	X	X	X	X
■ Robotica / maatwerk labs						X	X	X	X	X
■ General unforeseen			X	X	X	X	X	X	X	X
■ Projects to be decided			X	X	X	X	X	X	X	X
■ Total			X	X	X	X	X	X	X	X
TOTAL										
Total incl. realisatie factor										

A total indexed amount of €XXX is included in the Annual Plan for 2024-2028. Most of the planned investments concern renovation in the real estate portfolio.

Projects from the Renovation, Infrastructure, Sport and Maintenance categories, with just a few exceptions, do not generate extra income from usage fees. The category 'work out in further detail' contains amounts for Activity-based working, Robotics/transitions labs, Projects to be decided and General unforeseen projects.

4.3 Financial framework

The projects from the Annual Plan are calculated by Finance. The financial ratios and the housing rate are calculated.

Financial ratios

The Education Inspectorate sets a number of financial guidelines for the university, within which the university must operate. UT also has its own internal standards, which are within the limits of the externally imposed standards. This means that investments in buildings must also fit within these financial parameters.

Solvency II, which is calculated by dividing the size of the equity plus provisions by total assets, must be at least 30%, in accordance with the requirements of the Education Inspectorate. The University of Twente strives for a value between XX% and XX%, with a target value of XX%. At the end of 2023 solvency II is expected to be XX%, right within the required standard. In the years 2024-2028, for the duration of the Annual Plan, the solvency is expected to fall slightly, but remain above the lower limit of 30%.

We use the current ratio to measure liquidity. This ratio indicates the extent to which an organisation is able to cover its debts in the short term. To calculate this, the value of current assets is divided by the value of loan capital. The Education Inspectorate specifies a maximum of 50% to this end. The University of Twente aims for a current ratio of XX%, using a XX-XX% margin. At the end of 2023 the university's current ratio is expected to be XX%. This will decrease over the years but is expected to be still just above the lower limit in 2028.

The third financial ratio that is relevant is the profitability. This is currently negative, but should be heading towards zero. At the end of 2023, it is still expected to be XX%, but due to all savings in the coming years, it will grow to XX% in 2026 and beyond.

Lastly, the housing ratio is applied. This ratio indicates what percentage of the university's total costs is spent on housing costs. The Education Inspectorate specifies a maximum of 15% to this end. At the University of Twente this percentage has been around XX% to XX% for years. This has proven to be a realistic percentage and will therefore continue to apply as a guideline for the university. Increased housing costs will reduce the financial leeway that exists for the university's primary process. The housing ratio is expected to be XX% over 2023 and XX% over 2024 but will fall to XX% thereafter due to all the interventions in real estate plans.

The above financial ratios form part of a broader financial framework. This shows the limits of the financial possibilities within which investments in the LTSH programme also need to fit.

The investment programme for 2024-2028 has been calculated based on the budget for 2024-2028.

Table 3: Ratios 2024-2028

Ratio	Requirement	2024	2025	2026	2027	2028
Solvency II	30% < x < 40%					
Current ratio	0,50 < x < 1,50					
Profitability (1 year)	> -/-10%					
Housing ratio	< 0,15					

The table above shows that the investment programme fits within the financial ratios. However, it is important that prior to each investment decision a check on financial standards be performed, as described in section 4.1.

4.4 Vacancy rates

A vacancy rate of XX% is preferable, in order to be flexible during relocations or major maintenance. The Capitool 15 has been rented to create sufficient moving space for the renovation. Including Capitool 15, the vacancy rate is XX % (without it's XX%). ET will get extra square metres when the Cube and the Kop Langezijds are finished. There is also a lot of potential, as there is a low occupancy rate in offices, which is the bulk of the square metres at UT.

4.5 Conclusion

As mentioned before in this Annual Plan the financial circumstances of UT have changed considerably. The new LTSH investments with a total of € XXX fits within the boundaries of the recent drafted scenarios as well as the goal for UT's results in 2024 (-/- XX% of 1st money stream), 2025 (-/- XX% of 1st money stream) and 2026 and further (balanced budget). The lowering of the expenditures in the 5-year period has a positive effect on UT's liquidity and from 2025 onwards also on the interest costs. Therefore, this also has a positive effect on UT's solvency ratio. In addition, all other ratios are 'green' based on the latest UT budget. In LTSH 2023 – 2032 it was calculated that UT needed additional and external funding from 2024 onwards. With the alterations in this Annual Plan, it is expected that additional loans are not needed before 2026 and for a smaller amount.

With the current knowledge of the prognosis result 2023 and the amounts in this LTSH Annual Plan, it can be concluded that UT will stay within the boundaries set by the Education Inspectorate.

5. RISK MANAGEMENT AND POSSIBLE CONTROL MEASURES

In the current Annual Plan, a number of important risks have been identified (Table 4). In the second column of the table below, the impact is mentioned. In the last column, possible control measures to be further elaborated are mentioned. Some of these are already in progress, the remainder are suggestions.

Table 4: Assessment of risks, impact and possible control measures

Uncertainty / Risk	Impact	Possible control measures
Market forces in the construction industry cause price increases and time delays	Major impact on the total budget	<ul style="list-style-type: none"> - Review of the scope and amounts for financial investment (the investment potential) has taken place - A budget is reserved for setbacks due to market forces and price increases at UT and programme levels
Scarcity of materials	<ul style="list-style-type: none"> - Projects are delayed - Price increases - Problems with the operations of UT 	<ul style="list-style-type: none"> - Timely procurement - Purchasing contracts with regular suppliers - Purchasing at risk - Strengthening our purchasing department
Shortage in sufficient technical staff and project managers internally due to the labour market	Projects are not carried out or have a longer duration, with the renovations of Cubicus, Zilverling and Horst being the first to fall behind	<ul style="list-style-type: none"> - Increase recruitment efforts of qualified OBP for projects - Remain attractive as employer - Educate (internal) people
Uncertainty about the remaining budget for other/new initiatives	This results in limited implementation of additional projects in coming years and potentially in non-allocation of resources	<ul style="list-style-type: none"> - Accurate monitoring by LTSH programme - Expectations of management: do not make premature commitments and keep stakeholders informed
Delay in decision-making processes; decisions are often too broad and repeatedly discussed	Within this market situation, every delay costs extra and therefore affects the budget	Tight scheduling and strict compliance with deadlines, or rescheduling projects
A higher-than-expected growth of students and/or staff	Lack of fast housing for research and education (labs/offices/lecture rooms)	<ul style="list-style-type: none"> - More existing properties hired off campus - Consider regulatory influx measures for staff/students - Adapt use of space through e.g., longer opening hours, no fixed workplaces, etc. - Search for creative solutions together with the UT community
A slower-than-expected hiring or even decrease in staff and students	A surplus of housing for research and education (labs/offices/lecture rooms)	<ul style="list-style-type: none"> - Put expansion plans on hold - Temporary letting of premises - Demolition or disposal of old property - Termination of lease contracts flexible shell
The adjustments to the existing property as a result of the many additions (functional, technical, including ventilation and sustainability) lead to a higher estimate than the standard budgeted estimate included	The budget is not sufficient	Budget adjustment and possibly other choices in the quality fitting within the planning and the portfolio

6. CONCLUSIONS

As a result of the changing circumstances of UT, the LTSH has been re-examined. While the LTSH 2032 was based on a baseline scenario of XXX students, the new framework is based on a scenario between XXX and XXX students. Policy has been formulated in the LTSH that provides certain measures that can be taken in case of flattening influx in student numbers. Mainly based on this, the LTSH was re-examined with the following framework:

- Cancelling/putting on hold projects that provide for expansion of square metres.
- Completing ongoing projects in the implementation phase.
- A target budget of €XXX for the next 5 years (2024-2028).
- Focusing on existing real estate and on quality and efficient use of square metres.

When focusing on existing assets, it is good to note that theoretically there is a lot of potential for optimisation. There are currently 5,000 workplaces at 3,500 FTE and the occupancy rate is often no higher than 30%. Given developments, it is not assumed that the number of staff will grow on balance in five years. There is a great need for labs, now that there is no expansion, this will have to be expanded. This will mean that offices may become labs and the occupancy and utilisation of the current labs will also have to be examined. In the near future, a process will have to be initiated with the UT community to arrive at the best way of working with the available space.

Based on the new principles, discussions were held with the various bodies of the UT community to inventory the needs. This led to a minimum scenario without any expansion with a budget of € XXX with the following plan (in broad strokes) for 2024 (see **Table 2 in section 4.2** for total project overview):

- Based on the reasoning that major expansions are not obvious with low growth, the plans of De Es, parking De Es and square De Es for the faculties TNW en EEMCS will be put on hold.
- NOC NSF hall and Body & Mind will be put on hold.
- Robotics: use budget to convert more labs. From 2025, allocate €XXX annually for Robotics and other labs.
- Educational facilities: renovation of light lecture rooms de Spiegel for next few years (buy time); €XXX.
- Renovation of Zilverling, Horst and Cubicus: XX% budget cut to previously budget; (“task setting”)
- Change in sequence of renovations. The Horst has to be renovated earlier due to legal regulations.
- Indoor swimming pool renovation for €XXX (necessary work).
- Sports & Culture: include M€10 to solve bottlenecks in Sports & Culture.
- General: realisation factor 85% instead of 90%, indexation adjusted downwards to 4% based on most recent figures showing flattening indexation in the building sector.

APPENDIX I

LTSH PORTFOLIO MANAGEMENT

To monitor and fine-tune the development of on-campus housing and real estate, a process has been devised that closely matches the existing P&C cycle. As previously indicated, LTSH forms the wider framework. Every year it is important to consider and prioritise all the projects in relation to one another due to:

- the necessity to balance UT’s strategic interests as against the interests of specific user groups;
- the limited scope of annual financial investments;
- the need to find possible solutions for individual initiatives;
- reconciliation of overarching issues such as insurance, zoning, contract formation, AV specification and calls for tender;
- closely aligning new projects with maintenance and/or energy projects;
- staff scheduling (size and capacity) at strategic, tactical and operational levels;
- management of temporary, transitional situations and inconveniences.

Portfolio management and Governance

Portfolio management at the university was professionalised during the implementation of LTSH 2016. The LTSH programme is managed by a real estate portfolio manager who considers real estate issues strategically, tactically and operationally at the various levels. The CFM department is responsible for the operational aspects of realising and maintaining university real estate. The university’s urban development supervisor ensures that spatial aspects are incorporated into the portfolio plan and applies an assessment framework to this end. Figure 7 below provides a schematic representation of the university’s portfolio management:

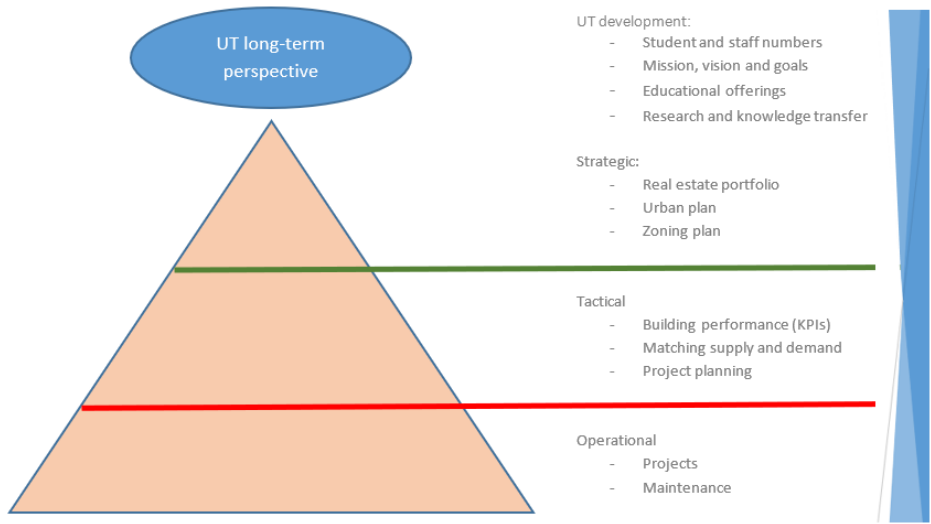


Figure 6: Diagram showing portfolio management at the university

As a specific project moves from the initiative phase to the design phase and then to realisation, the procedure is as follows:

- Every organisational unit of the university that wishes to make changes to its buildings draws up a business case, with support from the university service departments. This business case provides insight into:
 - The (joint) substantive ownership, based on which the requirement for buildings is formulated.
 - The policy on the use of space and a description of the intended working, educational and research concepts.
 - A substantiation of the long-term spatial requirements and a study into the options for facility-sharing.
 - A usage forecast, including a substantiation of future numbers of students and employees.
 - Provision for future accommodation costs in its own budget (based on the accommodation rates).
- For each real estate initiative, an integrated assessment is conducted at the campus level within the LTSH programme and by the Executive Board, including a specific focus on the supply of real estate available. Various solutions for the implementation of the project and general and financial impact are then explored. On the basis of integrated (spatial, organisational, financial) considerations, a substantiated preference will be expressed by the LTSH programme team with input from the user team (the five faculties) and the LTSH steering group. This is then submitted to the Executive Board for a decision.
- The real estate initiative is evaluated against the strategic principles set out in Shaping2030.
- The real estate initiative is evaluated by the spatial planning supervisor for the spatial framework for the campus.
- At the institutional level, a project must be feasible in its entirety, in terms of both planning and the capacity of the relevant organisation. Individual building projects are effective and should cater to the identified real estate requirement.
- The entire decision-making process for projects is shown in the flow chart below:

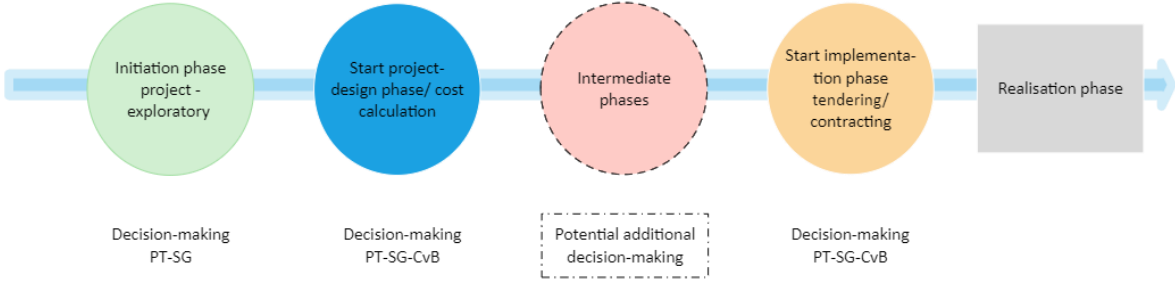


Figure 7: Flow chart showing decision-making process for projects

LTSH 2030 forms part of the university’s budget and requires the approval of both the University Council and the Supervisory Board. This applies to the totality of real estate investments. The same approval is required if the LTSH is amended in the interim. Real estate projects involving an investment of more than €XXX require approval from the University Council. In the context of

additional risk management, any deviations from the budget greater than 10% for each of these two projects must be approved by the Supervisory Board and the University Council at specific points in the process. The University Council has the right of assent on budget deviations from those projects that exceed 10%. In addition, the LTSH is updated annually in the 'Annual Real Estate Plan' and further details are set out. This is part of the P&C cycle. This means that the financial situation and a budget forecast will be included in periodic management reports. Major real estate projects are set out separately in these reports. This applies, for example, to the ITC project.

Involvement of General and Line Organisations

Both the LTSH 10-year plan as well as the LTSH Annual Plans will be submitted for advice from the UCB and CvB-D before being presented to the Executive Board.

The objective in the coming years remains to discuss the various fora developments every spring and shed light on the issues facing housing, to start gathering input for amendments to the Annual Plan for the following year. In this way, major developments can be included in the long-term frameworks in a timely fashion ('Spring Memorandum'), which may lead to a revision of the LTSH itself.

Communication with target groups

Regarding real estate topics we can define the following internal and external target groups, which should be further segmented per housing project:

- Faculty Boards (staff and students) ET, EEMCS, ITC, TNW, BMS
- CFM staff members
- All parties involved in realising the Contact Centre and Paviljoen (Zone)
- Fraunhofer Innovation Platform for Advanced Manufacturing at the University of Twente
- All parties involved in the Robotics Centre
- Steering Committee, programme team, advisory board, project teams
- Bodies in the decision-making process: UCB, CvB-D, CvB, University Council (FPB committee) and RvT
- Student union
- General community of UT (faculty, administrative and support staff, and students)

External target groups

- Ministry of Education, Culture and Science: via information provided to the General Chamber of Audit that was commissioned by the Ministry of Education, Culture and Science.
- Website to make information on housing developments publicly available, except for business-sensitive information.
- Chamber of Audit: 'Assessment of major housing investments' report; Conclusion of the General Chamber of Audit: universities in general (October 2016) and UT specifically (spring 2017) should also make information available, excluding business-sensitive information.
- Results of the investigation conducted by the Governance and Finance Steering Committee of VSNU into the university's real estate developments: refer to the explanation of necessary investments and the maintenance tasks of universities.
- Municipality of Enschede, Twente Board, Overijssel province.
- De Veste and Domijn.
- Companies in the UT area (via Kennispark).
- Residents living near the campus.
- Media (U-Today, Tubantia, RTV Oost, Enschede FM and national media).
- Consider when it may be desirable to proactively approach media about housing developments. This is risky, given the current political discussion on the real estate investment activities of Dutch universities.
- Partner institutions.
- Agreements with tenants, collaboration between external parties on housing (such as HogeKamp BV), maintaining good relations with retail, hospitality and service operators. Whenever it proves interesting, making optimal use of joint PR opportunities.

LTSH Principles

➤ **Aiming for quality and flexibility**

With the development and redevelopment of real estate, as well as quality considerations adaptive capacity is also a top priority. Its core elements include:

- Facility-sharing (largely for educational and office spaces, and to a lesser extent for research labs).
- Building generality: buildings have the same provisions or 'equipment level'.
- Every type of space will be generically realised, so that its identity can be established by the different users (spatial appearance and experience).
- LTSH has a limited focus on expanding its real estate portfolio. Any expansion should be flexible, such as semi-permanent housing or rent received from third parties.

➤ **A focus on efficient use of space and optimal deployment of the current real estate portfolio**

- The guideline stipulates a 3% vacancy rate for the total space that can be leased.
- The guideline for the use of office space is a bandwidth of up to 10 m² functional net area per FTE (for future housing initiatives).
- All educational areas (except for rooms with very specific facilities) are part of the Central Educational Facilities (COV).
- The guideline for educational areas is a minimum 60-70% occupancy rate.
- UT only leases space off campus if there is no adequate space available on campus, temporarily or structurally.

➤ **Secondary facilities**

- Sports and cultural facilities are primarily aimed at students.
- Sports (especially campus-wide) and culture are also intended for university employees and are thus important pillars for local and international community-building at UT.
- The retail, catering and service facilities reflect UT's image and objectives; they are diverse enough, offer sufficient quality, and are managed by third parties.

➤ **The real estate matches UT's strategic focal points**

- The campus is an international learning and working environment. Housing is geared towards meeting and access, as well as raising the university's profile and generating attention for its strategic themes.