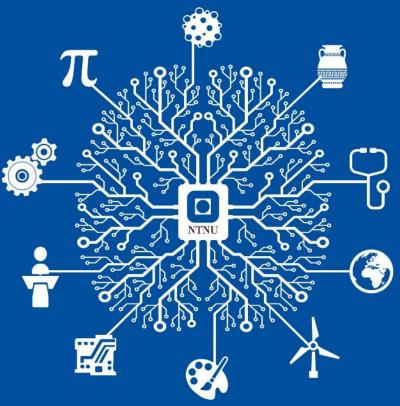
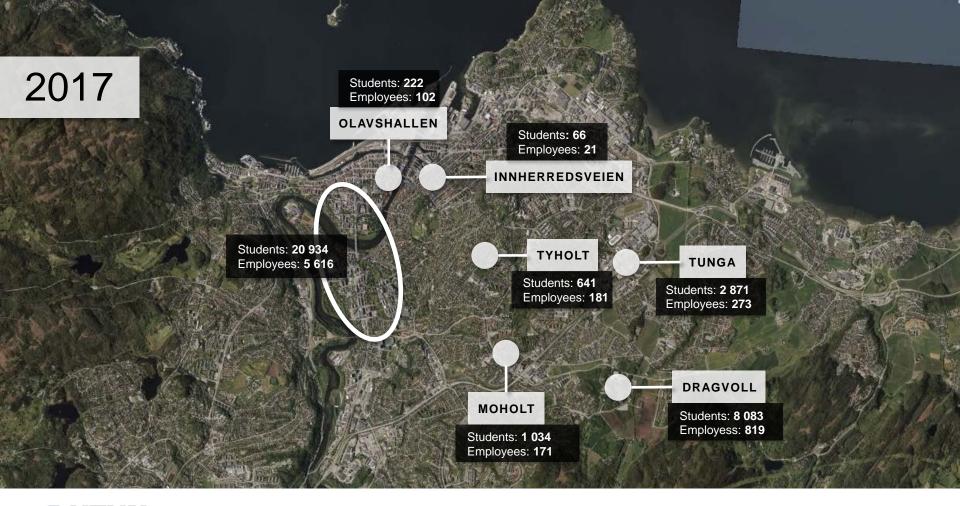
NTNU's Campus development

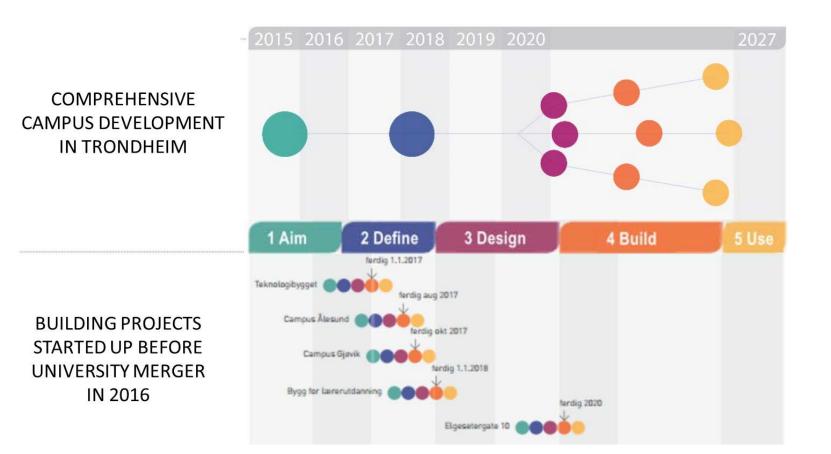
NUAS August 2018







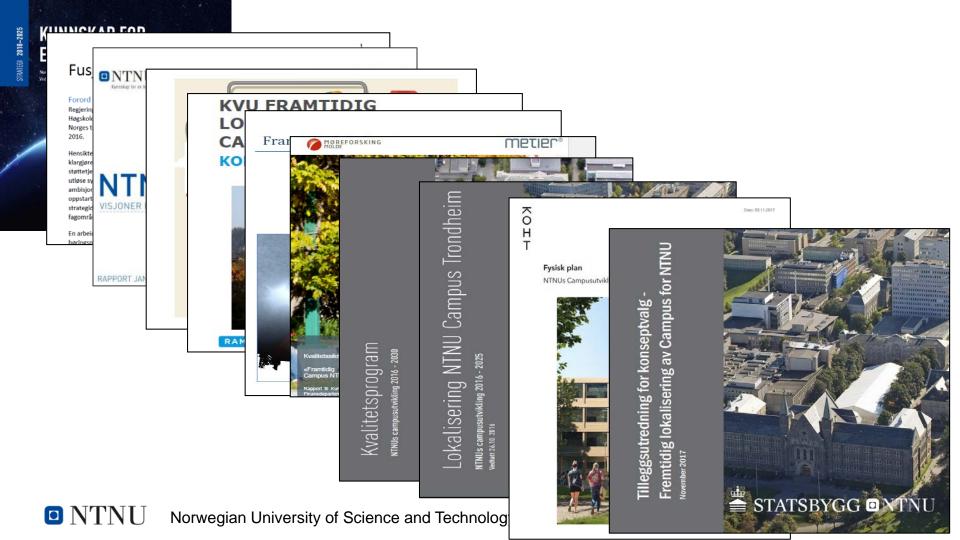


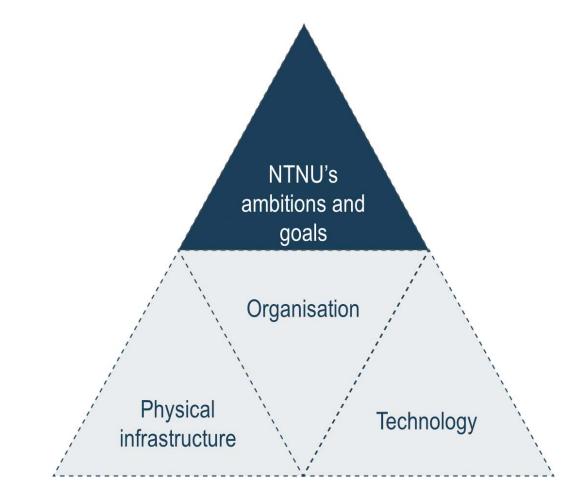


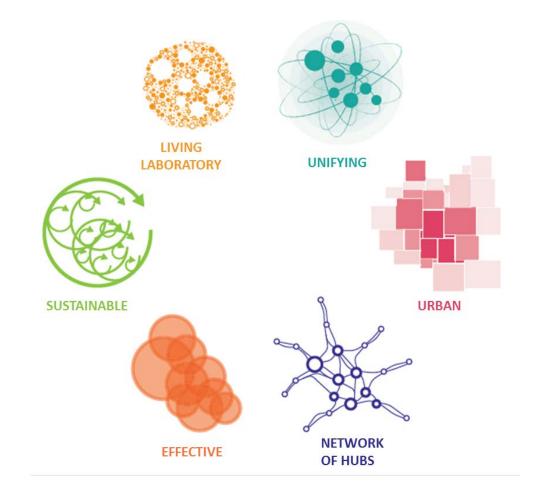
Knowledge for a better world

- NTNU's campus is to be the physical frames for international outstanding learning, research, innovation and outreach
- NTNU's campus attracts the best students, employees and partners





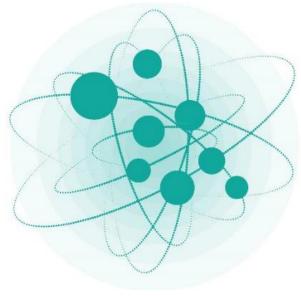




UNIFYING

CAMPUS CONTRIBUTES TO COMMUNITY

- Campus gathers relevant disciplines
- Campus is concentrated
- Campus has visible and easily accessible meeting places

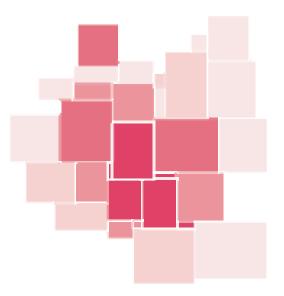




URBAN

AN URBAN CAMPUS IS ATTRACTIVE, OPEN AND FULL OF LIFE

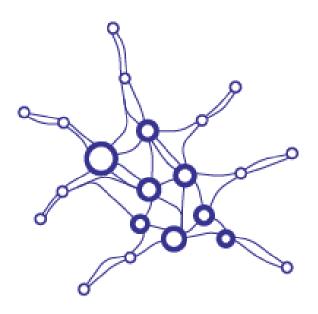
- Campus is open and inviting
- Campus and the city share facilities
- Campus has urban features



NETWORK OF HUBS

CAMPUS HAS DEFINED HUBS WHICH ARE TIGHTLY CONNECTED TO EACH OTHER AND THE CITY

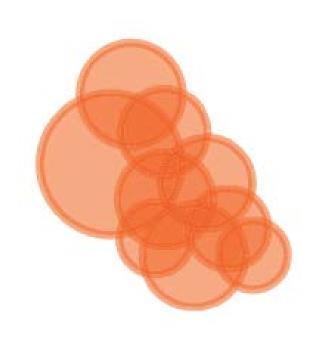
- Campus has profiled and outwardly directed hubs
- Campus has walkable distances between hubs
- The network is part of the city's public structure and system for transportation



EFFECTIVE

USABLE AND EFFICIENT AREAS CONTRIBUTE TO GOOD WORK PROCESSES

- Campus has high usability
- Campus has efficient area use
- Campus has flexibility in area design and use





SUSTAINABLE

CAMPUS IS LEADING IN ENVIRONMENTAL OUTSTANDING SOLUTIONS

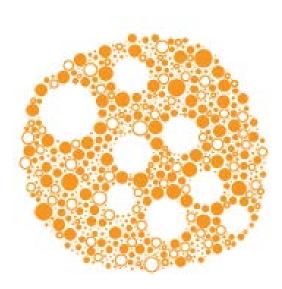
- Campus is energy effective and has a low carbon footprint
- Campus has effective and «green» transport and mobility
- Campus is durable and ecological in its entire lifecycle



LIVING LAB

CAMPUS IS THE PLACE FOR EXPLORATION

- Campus is an experimental arena
- Campus has attractive arenas for innovation, entrepreneurship and the eagerness to create
- Campus has easily accessible experimental infrastructure





2016: Overall location

STIPULERT AREALBEHOV

Stipulert arealbehov ihht, kunnskapsdepartementets tillegsutredning 23.02.2015

AREALFUNKSJON	STIPULERT AREALBEHOV M ²	LOKALISERING
Flytting av Dragvoll-miljøene	75 000	3 alternativer
K1 - Vitenskapsmuseet, magasiner og utstilling	20 000	Kalvskinnet
H1/H2 - KAM	25 000	Høgskolebakken
H1/H2 - Flytting av produktdesign til KAM	3 000	Høgskolebakken
E2/G4 - Innovasjonssenter	6 500	Hesthagen
Ø6 - Senter for psykiske helse	6 500	Øya
SUM NTNU	136 000	

Området bør også potensielt ha kapasitet til nytt idrettssenter for Sit på 5000 m²

Arealoverslagene er etablert som underlag for overordnet lokalisering. Det må derfor påregnes justeringer i arealbehovene når de enkelte prosjektene defineres i påfølgende faser i campusutviklingen

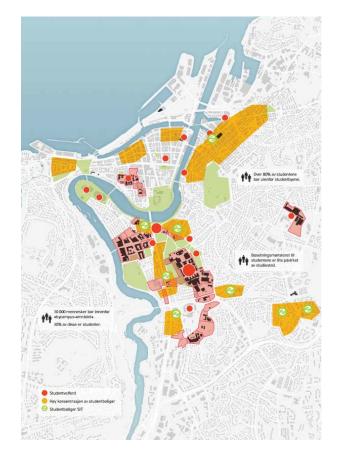
SAMLENDE		URBAN		NETTVERK AV KNUTEPUNKT	
Campus samler fagmiljø		Campus er åpen og inviterende		Campus har profilerte og utadrettede knutepunkt	
kvalitativ indikator: - Kapasitet til å	kvantitativ indikator: - Tetthet studenter/	kvalitativ indikator: - Tydelige	kvantitativ indikator: - Nærhet til	kvalitativ indikator: - Potensielle	kvantitativ indikator: - Ikke målbart
samle fagmiljø (kort tverrfaglighet)	dekar i hvert campusområde - Fordeling av studenter i hvert campusområde	ankomstpunkter til campus - Barrierer og sammenhenger	byfunksjoner - Interaksjons- mulighet mellom campusområder og bygninger i byen	knutepunkt	
Campus er konsentrert		Campus og by deler funksjoner		Campus har gangbare avstander mellom knutepunkt	
kvalitativ indikator:	kvantitativ indikator:	kvalitativ indikator:	kvantitativ indikator:	kvalitativ indikator:	kvantitativ indikator:
 Konsentrasjon av hele campus (lang tverrfaglighet) Grad av diversitet NTNU- internt og eksterne, spesielt SINTEF 	- Grad av konsentrasjon av studenter på campus som helhet	- Antall og diversitet byfunksjoner på campus/ campusfunksjoner i byen - Befolkningsgrunnlag for å tilby service / fellesfunksjoner - Nærhet mellom campus og studentbosteder	-Nærhet mellom studentbosteder og campusområder - Interaksjons- mulighet mellom campusområder og bygninger i byen	- Gangsavstander i campus - Nettverkets orienterbarhet, diversitet og grad av sammenheng med byens struktur	- Grad av konsentrasjon av studenter på campus som helhet

		Alternativ nord	Alternativ vest	Alternativ sør
Samlende	SYNLIG OG LETT TILGJENGELIGE MØTEPLASSER Antall og diversitet eksterne/ urbane sosiale arenaer	5	3	1
	CAMPUS OG BY DELER FUNKSJONER Antall og diversitet byfunksjoner på campus/ campusfunksjoner i byen	5	3	1
Urban	CAMPUS HAR BYMESSIGE EGENSKAPER Grader av bymessighet	5	4	1
Nettverk av knutepunkt	GANGBARE AVSTANDER MELLOM KNUTEPUNKT Nettverkets orienterbarhet, diversitet og grad av sammenheng med byens struktur	3	5	2

Infrastructure for laboratories, research and innovation:

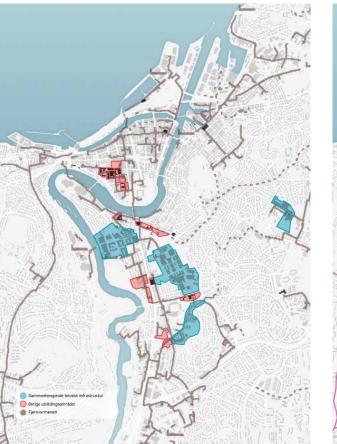


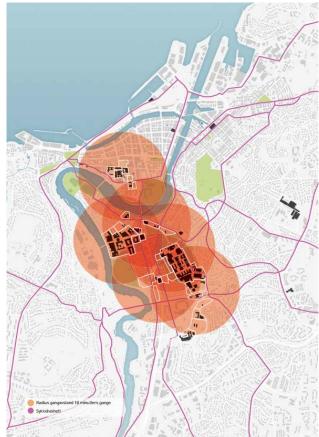
Students: living areas and facilities

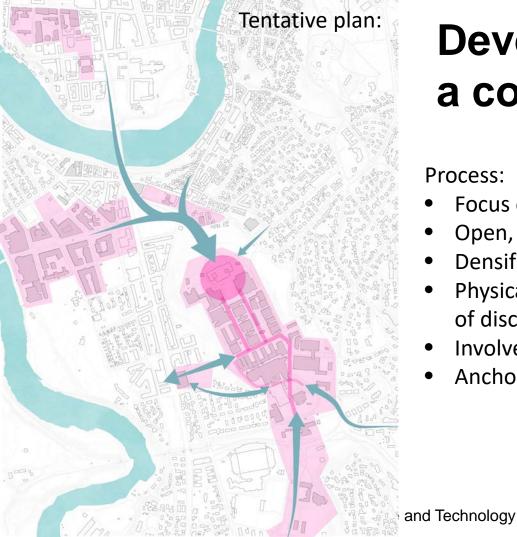


Coherent technical infrastructure:

Walking distances and cycle roads:



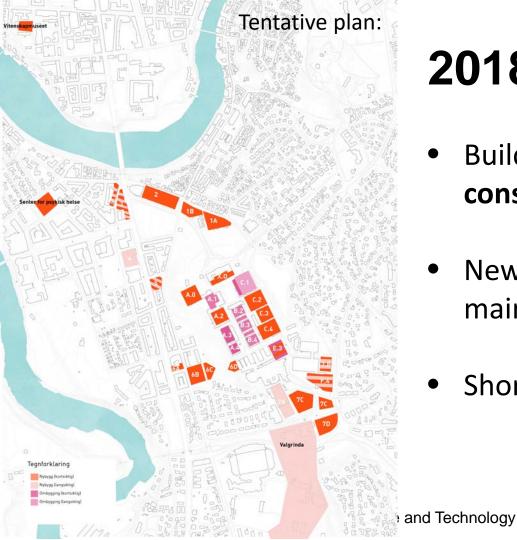




Development towards a concept for campus

Process:

- Focus on core business
- Open, public and internal discussion
- Densification \rightarrow discussion of land use and park
- Physical plan, concepts for areas and localization of disciplines \rightarrow input towards concept
- Involvement and communications
- Anchoring decisions



2018:

- Building plots under current consideration
- New buildings, reconstruction, • maintenance
- Short term and long term \bullet

Area plan and planning program

Planning program

- Close collaboration between NTNU and the City of Trondheim
- Accounts for overall societal conditions and solutions
- Program for multiple zoning plans within a larger area

Area plan

- Description of alternatives
- Overall study in order to choose among building plots
- Basis for zoning plans coming up



MASTERPLAN

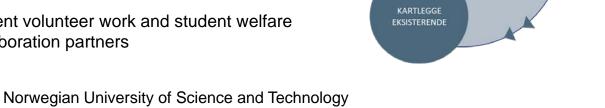
Main physical plan

Concepts for areas

Locating disciplines

Concept for areas

- Survey activity, work patterns and use of premises today
- Develop concepts which describe:
 - Overall function (use) and area (design) _
 - Organisational and technological requirements for suggested area concepts
- Area assessments:
 - Top down
 - Bottom up
- Work groups within:
 - Arenas for learning
 - Work place _
 - Hubs _
 - Student volunteer work and student welfare
 - Collaboration partners



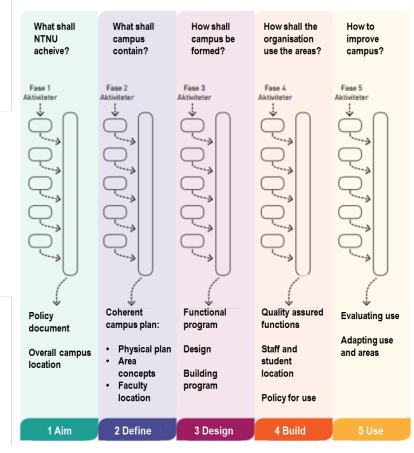
UTFORSKE MULIGHETER DEFINERE OG ANALYSERE BESKRIVE MÅLSETTE

Concept for areas:

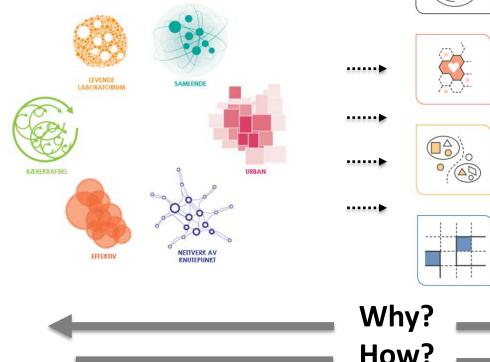
- To conceptualize the knowledge about uses of areas and the knowledge about new types of areas for the future university
- The concepts are general, It describes different overall categories of areas and the distribution between them
- Concepts for three main categories/purposes:
 - Learning
 - workplaces
 - hubs

Involvement program





Main concept?





Campus:

Open and inviting for everyone



Hubs:

One main central hub, at NTNU

Learning area:

Concentrated varied areas for multiple use

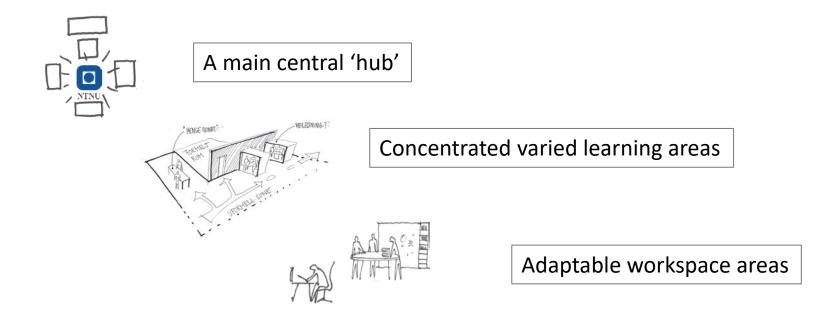
Workplaces:

Adaptable and flexible



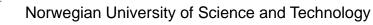
Main concept?

- flexible and clustered areas



Locating disciplines:

- Which disciplines should be close to each other
 - November 2017: Principles and criteria for locating
 - May 2018: Considerations of partners and need of proximity
 - December 2018: Alternatives for locating disciplines
- Where are the hubs in a unified campus, considering
 - students
 - research collaboration
 - innovation
 - outreach and dissemination of knowledge
 - external collaboration partners
- Internal committee
 - The Deans act as board appointed by rector



PEOPLE

GATEKONSERT

ntnu.edu/campusdevelopment