





Report

# Universal design as a municipal strategy

Experience and results from the  
pilot municipality project 2005-2008



MILJØVERNDEPARTEMENTET

Since 2005, 17 Norwegian municipalities have been involved in a national development project under the auspices of the Ministry of the Environment. The municipalities have been systematically working to translate the principles of universal design into clearly defined actions. They have been exploring universal design as a strategy for building local communities characterised by adequate accessibility, equality, participation and free choice for all. They have made active use of the planning system in their efforts. They have tested out various working methods and practical solutions for buildings and outdoor areas.

This report is designed to provide insight into the activities carried out in these 17 municipalities during the project period. It contains information about their individual experiences and the examples cover all the phases of the process from generating focus on universal design, via integration into plans through implementation of measures.

The Ministry of the Environment wishes to thank the pilot municipalities Båtsfjord and Berlevåg, Tromsø, Sortland, Verdal, Trondheim, Stord, Time and Klepp, Risør, Porsgrunn, Gjøvik and Vestre Toten, Kongsvinger, Eidskog and Ullensaker for their cooperation in these efforts. Special thanks go to Kristiansand, which has served as an important resource during this period. Both the ministry and the pilot municipalities have benefitted greatly from the professional assistance of Tore Askim from *novus vita as/insam as*, who has coordinated the initiative.

The information in this report has been provided by the various pilot municipalities. Astrid Larsen from Stord, Hilde Nygaard from Kongsvinger and Wenche Lindberg from Eidskog have assisted in an editorial role. Journalist Geir Magnusson from Vikann has helped to adapt the material. Kristi Ringard in the Ministry of the Environment has coordinated the production effort with the help of Olav Rand Bringa.

The municipalities have submitted final reports for the period from 2006 to 2008. These reports provide a more comprehensive overview of the local activities, and have been published on the national website for universal design.

Ministry of the Environment  
Oslo, January 2009 <sup>1</sup>

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<sup>1</sup> This July 2009 English version is edited and abridged from the original Norwegian version of report T-1472. The complete Norwegian report T-1472 is available at <http://www.twm.no/md/>

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<sup>2</sup> *This chapter is compiled and abridged from the content of the original Norwegian version of report T-1472.*

<sup>3</sup> *See text box on page 8.*

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### **Measure BU 31: “Increased emphasis on the application of universal design principles in municipal activities” was carried out from 2005-2008.**

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This report sums up the efforts under the pilot project. In addition, it provides information about the results of a national initiative in which these municipalities themselves have taken full advantage of their latitude for action and played a role as the locomotives for development and change. The Ministry of the Environment hopes that other municipalities and users can benefit from these insights.

This report provides the following types of information:

- A summary of the shared experience of the pilot municipalities and some helpful tips for others following in their footsteps.
- Concrete examples in relation to the seven unified goals that have governed the activities of the pilot municipalities. Identified by municipality.
- Presentation of some of the universal design efforts in each municipality. Those that worked together as partners provide insights into their experience with inter-municipal cooperation.

The pilot municipalities were selected from different parts of Norway and are highly differentiated in

terms of their geography, populations, resources, administrative organisation and political platforms. Thus, they represent a wide cross-section of types of Norwegian municipalities. Each of them has achieved new results, and all wish to share what they have learned with others. Norwegian municipalities ranging from the far north to the south, and from west to east, can now provide ideas and inspiration to their sister municipalities in Norway.

Universal design was introduced as a planning concept in Norway in 1997. Universal design principles are incorporated into the objects clause and a number of provisions of Norway’s new Planning and Building Act. The efforts of pilot municipalities under Measure BU 31 have helped to clarify how the concept of universal design can be translated into tangible actions, and have confirmed that development initiatives of this type are a useful method for implementing national objectives at the municipal level.

It is hoped that this report will be of value to all those responsible for planning activities as well as the design, management and performance of municipal projects. We hope that it will facilitate their efforts to integrate inclusive work methods at the municipal level in keeping with the intentions of the new Planning and Building Act

**The Planning and Building Act  
is a tool for municipalities.  
Make it work for you!**

# Pilot municipality initiative – pilot municipalities as a resource in national development efforts

## Universal design – from nonessential to key objective in municipal planning activities in just 10 years

Accessibility for persons with disabilities has been on the agenda in Norway for more than 30 years. For much of that time, efforts were rooted in an overall vision constructed within the framework of health and social policy, with measures designed for individual users provided via the welfare system. Many municipalities were taking active steps to create a satisfactory framework for disabled individuals, but the results they obtained were seldom of a fundamental or lasting nature. The problem was there was no cohesive, systematic integration of accessibility principles into municipal activities. Accessibility issues were not incorporated into the municipalities' most basic steering document, the municipal plan.

## The Ministry of the Environment's development programme – "Planning for All"

In 1998 the Ministry of the Environment launched a development programme to bring accessibility for persons with disabilities into municipal planning processes. "Planning for All" utilised a number of instruments, two of which proved to be especially important: the designation of planning guidelines and the implementation of development projects in cooperation with municipal and county administrations. In addition, the ministry chose to move away from the traditional view of accessibility for individuals with disabilities, structuring the initiative instead around the broad-based strategy of universal design. The circular "T-5/99 Accessibility for All" issued in 1999 recommended that municipalities apply universal design principles in their planning activities. Twenty municipalities and counties took part in the development programme, working to incorporate universal design into planning efforts in various sectors. Some of them even sought to integrate universal design into the municipal planning activities at the overall level. The Norwegian Institute for Urban and Regional Research (NIBR)

conducted an evaluation of the municipal activities and concluded that the number of municipalities that had integrated accessibility issues into municipal plans increased significantly during the programme period.<sup>4</sup>

## Universal design as a strategy – new national initiative targeted toward municipalities

In November 2004, the Minister of the Environment and the Minister of Labour and Social Affairs presented the Government Action Plan for increased accessibility for persons with disabilities, a plan for universal design in key areas of society. The action plan was implemented in the beginning of 2005, with a planned duration through the end of 2009.

Under the new action plan the "Planning for All" programme was developed into the pilot municipality initiative, referred to as *Measure BU 31: Increased emphasis on the application of universal design principles in municipal activities*, under the auspices of the Ministry of the Environment.<sup>5</sup>

In March 2005 the two ministers sent out a joint letter inviting all interested Norwegian municipalities to apply to take part in the pilot project for the implementation of universal design in municipal planning activities.

By the time the deadline had expired, 36 municipalities had indicated that they wished to take part in the project. Of these, 25 were selected to comprise a start-up group to discuss the framework for a pilot municipality initiative. Importance was attached to ensuring wide variation in terms of the size and location of the participating municipalities, as well as in terms of their experience. A kick-off gathering was held in Gardermoen on 8-9 June 2005.

<sup>4</sup> NIBR Report 2002:19, *The Disabled in Planning: An assessment of the programme "Planning for all"*

<sup>5</sup> "BU" here is the abbreviation for the Norwegian *Bygg og uteområder* ("Buildings and outdoor areas"), and is part of a code used to classify the various measures listed in the Government Action Plan 2005-2009. The other codes used are "T": Transport (Transport), "IKT": IKT (ICT - Information) and "A": Annet (Other spheres of society).

### Measure BU 31 start-up

A letter was sent out from the ministry on 24 June 2005 to the 25 municipalities that took part in the kick-off gathering inviting them to seek status as pilot municipalities. The letter outlined the ministry's expectations and indicated how the follow-up for the pilot project would be carried out. Twenty-one municipalities submitted applications, some of them jointly with neighbouring municipalities. A total of 16 municipalities were selected for the pilot project. Of these, six would be paired together as partners with a common project organisation and management. Kristiansand municipality was designated as a special role model and resource provider due to its long-standing effort to apply universal design strategies systematically over time. As from 2006, each municipality has been allocated NOK 250,000 each year for Measure BU 31 activities. Partner municipalities have received a total of NOK 400,000 annually.



From Baneheia in Kristiansand, group meeting of the pilot municipalities in September 2006. Photo: Ministry of the Environment

**„ We wanted to be used as a resource for universal design thinking because we felt we understood the ambitions expressed by the Ministry of the Environment. They were very similar to our own.**

*Municipal technical director Ragnar Evensen, Kristiansand municipality.*

### Common vision and seven unified goals

In collaboration with the pilot municipalities, the Ministry of the Environment drew up a project description for Measure BU 31. A draft was completed on 1 March 2006, and a final revision was carried out in December 2007. The project description contains a common vision and seven unified goals for the efforts of the pilot municipalities.

Measure BU 31 was designed to be a collaborative project with participation from other public agencies and selected municipalities based on reciprocity, dialogue and two-way learning.

### Working together – group meetings twice a year

The most important discussion forum for the pilot municipalities and national and regional administrations has been the bi-annual group meetings. These meetings have provided a learning arena for the municipalities and ministry alike. In addition, the project managers have taken part in a number of working seminars with representatives of the Ministry of the Environment. The programme for each bi-annual meeting has been drawn up by a planning group comprising participants from the pilot municipalities and the ministry. The focus of each meeting has revolved around matters the municipalities have wished to discuss. The municipalities have sent three to four representatives each time, but these participants have been selected from the different sectors and levels of the municipal administration depending on the topics to be discussed. A summary document has been prepared after each meeting detailing specific points to follow up for both the ministry and the pilot municipalities.

Contact at the regional level is important to promote network building, information exchange

### Vision:

The municipalities in the pilot project for universal design will give rise to local communities with adequate accessibility, equality, participation and free choice for all.

### Unified goals:

1. To raise awareness and achieve results throughout the entire municipal administration – across sectoral dividing lines and in all municipal activities.
2. To encourage local community measures through cooperation with trade and industry and other actors from the private and public domain.
3. To achieve physical solutions that are satisfactorily accessible, safe, environmentally sound and aesthetically appealing.
4. To further develop targeted collaboration with municipal councils for the disabled and other relevant user groups.
5. To increase competence among all parties responsible for planning, implementation and operation of municipal activities.
6. To serve as a role model and motivate other municipalities to implement more universal design thinking.
7. Provide input and take part in the dialogue relating to national universal design efforts.

and competence-building between the pilot municipalities and other municipalities. Administrators in the counties with pilot municipalities have also been invited to attend the group meetings. This has resulted in concrete cooperation.

The group meetings have also led to the start-up of a number of sub-projects on topics where the municipalities felt that more knowledge was warranted. These efforts have been summarised in special publications that offer valuable insights to all municipalities as well as national development efforts:

- Making the best use of municipal councils for people with disabilities
- Universal design and zoning regulations
- Universal design and municipal cooperation with external players
- Universal design – operation and maintenance of roads and outdoor areas



Mayor Rita Ottervik opened the first group meeting for the pilot municipalities on 16 February 2006. Three years later, she said: "The pilot municipalities have achieved good results with regard to accessibility in the urban environment, to public buildings, in outdoor recreations areas and at sports facilities in Trondheim. Universal design is a crucial area of focus in our ongoing urban development activities." Photo: Trondheim municipality

The national website for universal design has been actively utilised for information and dissemination of results. Municipal annual reports and plans are published on the website. The pilot municipality pages received the greatest number of hits on the website.

#### **First group meeting, Trondheim, 16-17 February 2006**

Approximately 70 participants: project managers, planning/technical personnel, representatives from municipal councils for the disabled, counties with pilot municipalities and government agencies. Topic: discussion of the project plan for Measure BU 31, vision and unified goals plus the relationship between municipal councils for the disabled and the municipality. Lines drawn up for sub-project on how to make the best use of municipal councils for the disabled.

#### **Second group meeting, Kristiansand, 25-26 September 2006**

Approximately 100 participants: politicians, project managers, planning/technical personnel, representatives from municipal councils for the disabled, counties and government agencies. Topic: political awareness, cooperation between municipality and councils for the disabled (sub-project), the role of the county administration, UD in public buildings, outdoor and recreational areas, urban and spatial design, the Planning and Building Act as a tool. Lines drawn up for the sub-project on universal design and zoning regulations.

#### **Third group meeting, Stord, 5-6 March 2007**

Approximately 75 participants: project managers, planning/technical personnel, representatives from municipal councils for the disabled and user groups, counties, government agencies. Main topic: role of user representatives in the municipal councils for the disabled, the need for expertise. More than 20 participants from municipal councils took part. Other topics: zoning plans and the application of UD principles, outdoor recreational areas and green spaces, urban and spatial design based on UD principles. Lines drawn up for sub-project on universal design and municipal cooperation with external players.

#### **Fourth group meeting, Tromsø, 1-2 October 2007**

Approximately 85 participants: project managers, planning/technical personnel, procurement and ICT personnel, counties, government agencies. Topic: operation of outdoor areas, public procurements, accessibility on websites, zoning plans and competence-building. Lines drawn up for sub-projects on universal design and the operation and maintenance of roads and outdoor areas and universal design in public procurements.

#### **Fifth group meeting, Ullensaker, 14-15 April 2008**

Approximately 100 participants: municipal administrative and political leaders, project managers, representatives of municipal councils for the disabled. Main topic: universal design as a community asset, political instruments for local efforts and universal design of housing and municipal public buildings. 13 municipal political leaders and 11 chief municipal administrators took part. Sub-projects on zoning regulations and municipal cooperation were presented.

#### **Sixth group meeting, Verdal, 4-5 December 2008**

Approximately 90 participants: project managers, planning/technical personnel. Representatives from similar positions in other municipalities (e.g. neighbouring) were specially invited by each of the pilot municipalities. Purpose: to disseminate results and experience from the pilot municipalities. Discuss challenges related to UD and cultural monuments, integration of UD into ordinary operations and ongoing projects, spatial development and transport. Presentation of sub-project on operation and maintenance. Lines drawn up for sub-project on universal design and cultural monuments.

## Summary

The efforts of the pilot municipalities have paved the way for the wider incorporation of universal design principles in Norway. The annual reports bear witness to significant insight into, and reflect considerable experience with, municipal planning efforts and the implementation of universal design measures. The system of policy instruments has improved vastly since the project commenced. Universal design has become a far more integral part of municipal and local community planning and activities, as evidenced by the broad-based participation from political and administrative municipal leaders at the group meeting in Ullensaker in the spring of 2008. This active participation from the leadership of the pilot municipalities also makes it clear that the Ministry of the Environment's development project has gained their full support.

2009 will see the entry into force of an amended Planning and Building Act that includes universal design in its objects clause and other provisions, as well as new anti-discrimination and accessibility legislation that stipulates the application of universal design strategies. National policy guidelines for universal design are being drawn up with a view to implementation in 2009. The pilot municipalities have forged a path that other municipalities can follow.



Since the autumn of 2007, the Ministry of the Environment has held meetings with the project managers in the pilot municipalities several times. This has in part been to prepare a joint summary of experience gained from the project. This photo was taken from the meeting in Berlevåg and Båtsfjord in August 2008. Photo: Astrid Larsen

## Quotes from the NIBR unpublished report of 19 February 2008: "Incentives – general experience and findings for individual measures in the Action Plan for Universal Design"



**We can view Measure BU 31 as a giant municipal laboratory in which interested municipalities, using a solid political framework, are working out how to implement universal design through good communication and participation strategies, and by developing tools that are based on the provisions of the Planning and Building Act.**



**Measure BU 31 reflects the recommendations found in the literature, leaving the pilot municipalities largely free to organise their activities themselves, with structured but limited reporting required.**

# Shared experience in the pilot municipalities

## Helpful tips to other municipalities

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### **The objects clause and provisions of the new Planning and Building Act make it necessary for Norwegian municipalities to become more proactive with regard to universal design.**

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The 17 pilot municipalities represented here have incorporated universal design as a broad-based strategy underlying their municipal activities.

The efforts of the pilot municipalities have involved more than just planning activities. They have also included raising awareness about the principles of universal design, building new expertise, and enhancing cooperation with municipal councils for the disabled as well as other community-level organisations.

The pilot municipalities have worked systematically over time to integrate universal design into political and administrative platforms, and they have followed processes from initial planning through final implementation.

Additionally, they discovered it was necessary to design concrete universal design-based procurement procedures, and have been able to see whether the solutions they selected were adequately appropriate.

Under the pilot project, the contacts between municipalities and the national authorities have facilitated the development and testing of a variety of tools for use in these efforts.

The following presents the experiences of the pilot municipalities and provides helpful tips on how universal design principles can be incorporated into planning activities in accordance with the new legislation. Important criteria for success are also presented.

**Universal design provides a wealth of opportunities.**

**Take advantage of them!**

### **Getting started**

#### **Look for the opportunity behind every challenge!**

No one would disagree that it is important to work towards an inclusive society that is accessible to everyone. The challenge lies in convincing everyone within the individual municipality that this is something each municipality needs to focus on, and that it will require a targeted, systematic effort. The key is to win understanding for the principles of universal design as an exciting and professionally inspiring area.

*A kick-off and motivational seminar* may be a good way to start off the process. Participants should comprise those departments that have relevant spheres of responsibility. Discussions should revolve around what is being done today, what is working well and areas where there is room for improvement. In some cases this may be the first time people from different departments will be gathered around the same table!

Emphasise an interdisciplinary approach:

Nobody has “ownership” of the concept of universal design. It is crucial that planners, building project administrators, procurers, engineers, occupational therapists and others all respect each others’ fundamental professional knowledge and can learn from each other. The pilot municipalities agree that universal design must be clearly highlighted as a strategy that enhances quality for everyone, not just for a limited group of people with special needs.

#### **Cultivate enthusiasts!**

To succeed in implementing universal design efforts an organisation needs people who understand what can be achieved through the application of universal design principles, and who are able to motivate others to see and think about the inherent challenges and opportunities. The organisation’s management should welcome the presence of such enthusiasts, legitimising their efforts and giving them room to take action, especially in the starting phases. The pilot municipalities have learned that more than one person is needed to take the lead and promote creative, innovative thinking, especially at first.

#### **Organisation across dividing lines a key to success**

Universal design is interdisciplinary by nature and must be integrated into the activities of the organisation as a whole. In other words, universal design does not just extend to planning or building matters, but to all municipal service areas. Each administrative unit must be given independent responsibility for coordi-

nating universal design efforts, building competence and raising awareness as well as ensuring that universal design principles are adequately integrated into its activities. Key personnel must be given enough time to learn about universal design. Under the pilot project, municipalities have discovered how crucial it is to promote work methods that involve personnel across sectoral dividing lines and different service areas. Cooperation and integration of project management across sectors and service areas adds breadth and cohesiveness to efforts, and makes the best use of everyone's knowledge.

### **Make use of ongoing processes and projects**

It is important to incorporate universal design thinking into ongoing projects, and it is not too late even if a project has already started. One good approach may be study trips to see what universal design involves and could mean for the project underway. It is wise to plan and conduct study trips of this type in cooperation with the municipal council for the disabled and other user organisations. New lines of thinking and new solutions must be encouraged.

**“ The council has been able play a meaningful role in the process, and our input has been given due consideration.**

*(Herbjørn Hansen, Sortland municipal council for the disabled, and representative on the municipal committee for technical matters, in connection with the presentation and approval of the master street plan for downtown Sortland.)*

### **The Planning and Building Act – best tool for integrating universal design principles**

The Planning and Building Act comprises the most important local-level political instrument for development of municipalities as a community.

Universal design is all about equal opportunity. It revolves around shaping the physical surroundings so that inhabitants are able to use their resources and participate actively in society. The new Planning and Building Act provides the municipalities with even stronger policy instruments in this field. No politician with plans for future re-election would dare speak out against a society for all.

Municipalities that do not have policies in this field and that lack a strategy for incorporating universal design into their activities may find themselves in violation of the new Discrimination and Accessibility Act.

The municipal master plan process – revision start-up – may be an excellent occasion to provide local politicians with an introduction to universal design and all that it entails.

More than one of the chairpersons of the pilot municipalities' municipal councils found a special topics

day with practical training to be an eye-opening experience.

**“ After today, I have come to understand that what appears to be a minor detail can have an enormous impact.**

*(Municipal Council Chair Arve Bones after a motivational seminar on universal design in Kongsvinger.)*

Local councils and user organisations are obvious partners in such activities. Experience shows that organising a joint study trip for politicians, administrators and user representatives leads to many positive ripple effects. Political guidelines and decisions that are integrated in the municipal master plan provide guiding principles both for how further planning is to take place and for how projects and measures are to be implemented. Politicians should receive regular updates and feedback on developments in relation to their adopted strategic principles and the intentions incorporated into the overall plans.

### **Political support is crucial, but it is not enough on its own!**

Political support for universal design principles is not enough. Universal design is best understood from participation in its implementation and practice. People need to see that universal design leads to effective results. A suitable demonstration project, a simple, easy-to-implement example of universal design that can serve as a source of learning for a wider audience should be devised at an early stage. Documentation relating to any (increased) costs incurred from the incorporation of universal design into the measure should be provided. Information about potential cost-sharing should also be included here.

The pilot municipalities have found that universal design does not increase the cost of new buildings if it has been included from the onset of the planning activities. When it comes to renovation and rehabilitation of existing structures, good planning gives higher quality for the money.

Overarching political guidelines, such as in the social element of the municipal master plan, must be integrated across the entire municipal management system. Managers at all levels must actively promote universal design and help to generate discernible results.

**“ Implementing the universal design project has made me more observant of all the important details that determine whether or not a building is accessible.**

*(Kari Bansal, head of the new NAV benefits office in Ullensaker municipality.)*

Cooperation with the local community is essential. Under the pilot project it became clear that initiatives vis-à-vis trade and industry and cooperation with schools can lead to political awareness and knowledge that the municipality can exploit in its efforts. School-children may come up with extremely good ideas; they can help to map things out and suggest improvements. There are advantages to ensuring that local activities incorporate both universal design and inclusion as part of their organisation. Municipal businesses, inhabitants and visitors will benefit from high accessibility for all and information about universal design will reach a wider audience. A number of municipalities have devised universal design information for businesses, and they have collaborated with trade and industry to map out needs and enhancement measures.



**Stord municipality seeks to lead the way when it comes to universal design. This provides the best basis for our inhabitants and visitors. We want universal design to be our trademark!**

*(Stord Municipal Council Chair, Liv Kari Eskeland)*

### **Competence-building – a continuous, long-term process**

Increased expertise in universal design thinking can only be achieved by building up awareness and understanding. The objective and point of universal design strategies must be clearly illuminated to grasp the true scope of this kind of thinking. This is especially important when educating politicians, and trips around local areas in wheelchairs or using simulation glasses, for example, may prove very fruitful.

Competence is needed in the hearts, minds and hands of people at all levels of the organisation – from top-level administrators to maintenance personnel.

Knowledge is needed about how best to apply the statutory framework in planning activities, in building matters, in development contracts, tender processes and procurements. And knowledge about universal design is needed at every step of the way, by those who construct buildings, those who pave the streets, or those who organise snow removal.



**You have no idea what this is like until you have tried it yourself.**

*(Representative of a local contractor in Kongsvinger municipality after trying to enter a film theatre in a wheelchair.)*

Universal design need not be synonymous with uninspiring standard solutions. Both natural elements and

artwork can be used to help people negotiate their way through their surroundings with greater ease.

Competence-building measures do not need to be time-consuming. Breakfast meetings with invited speakers can provide interesting input. Joint visits or study trips in connection with ongoing plans and projects may provide useful insights underway. Mobilising cross-sectoral participation for testing new tools results in effective learning and creates a useful foundation for planning and implementation of projects. Use of photos at meetings between project management, consultants, building contractors and building supervisors early in the process can help to establish a shared understanding among the various players involved. It is essential to assess activities, learn from mistakes, and incorporate such knowledge into future activities.

There are many good programmes available for continuing education and professional input, and it is beneficial if several staff members of the same organisation pursue these as a group.

### **Good advice may be had for free Experience and expertise add to quality**

The municipal councils for the disabled and other user organisations are in possession of experience and knowledge that can enhance the quality of projects in the planning phases as well as during implementation.

The council for the disabled should be included in the start-up and development phases, as it can provide special insights and input. The council will need some time to define its role as a promoter of development together with the municipality and its own “grassroots”, the user organisations. Concrete cooperative projects lead to constructive learning for the municipality and council alike.

The results of the pilot project show that an open dialogue with the municipal council for the disabled and user organisations can lead to many innovative, creative solutions.

At the same time, it is important that the municipality draws on the expertise that is found in other municipally appointed bodies, such as the councils for the elderly and the councils for children and young people.

**Learn from others – and share what you have learned**  
Knowledge grows through sharing and competence is enhanced through experience.

There are a number of nationally available handbooks, tools and method guides for mapping, planning, project management and cooperation. These may be very useful. It is important that such tools are tested and adapted to the local situation.

It is wise to consult other municipalities that have more experience. It may often be constructive to establish more formal lines of communication with neighbouring municipalities. The municipalities working together as partners under the pilot initiative found this to be very much the case.

Seeking information and assistance at the regional level or “stealing” methods from others is highly encouraged. Experience at the local level will enable the regional authorities to strengthen their own expertise in the respective spheres of responsibility.

### Measure BU 31 – project managers with broad-based expertise

Universal design efforts touch on many subject areas. The project managers in the pilot municipalities are a diverse, interdisciplinary group in terms of their educational backgrounds and their work experience within the municipalities. Most are engineers and occupational therapists, but there are also architects, landscape architects, nurses, pre-school teachers, physical therapists, agricultural economists, economists and anthropologists. A few have had a full-time position as designated project manager for universal design, but most have combined this task with their ordinary activities within relevant municipal technical, planning or health care sectors.

Very few of the municipalities changed project managers during the pilot project. This has facilitated continuity and created a good basis for learning and integration into the municipal organisational structure. It has also provided a stable anchorage point for national development efforts.

The project managers in the final phases were: Line Røtvold, Båtsfjord; Bjarne Mjelde, Berlevåg; Lone Høgda, Tromsø; Raina Kristensen, Sortland (replaced Kristine Røiri in May 2008); Kari Gregersen Næss, Verdal; Solveig Dale, Trondheim; Astrid Larsen, Stord; Anne Reidun Garpestad, Time/Klepp; Hilde Gulbrandsen, Kristiansand; Johnny Hommefoss, Risør; Kjersti Berg, Porsgrunn; Hans Petter Olsen, Gjøvik/Vestre Toten; Hilde Nygaard, Kongsvinger; Wenche Lindberg, Eidskog (replaced Egil Andersen in December 2007); Ingrid Rindal Øvsteng, Ullensaker.

### Criteria for success:

1. Access to enthusiasts who can generate interest.
2. Ensure top-level political and administrative support.
3. Establish a simple project early on that demonstrates the difference between universal design and accessibility.
4. Promote an active municipal council for the disabled.
5. Promote systematic, long-term competence-building through practice.

*(Loosely cited from a lecture by Jan Olav Grønland, Chief Administrative Officer, Vestre Toten municipality, Ullensaker in April 2008.)*



The project managers have held several group meetings to discuss shared challenges, among other things. From Stiklestad national cultural centre, December 2008. Photo: Olav Rand Bringa/Ministry of the Environment



Study trips can provide good inspiration and new ideas. In downtown Verdal, universal design is combined with carefully considered artistic expression. Photo: Olav Rand Bringa/Ministry of the Environment

## The municipalities and their development efforts

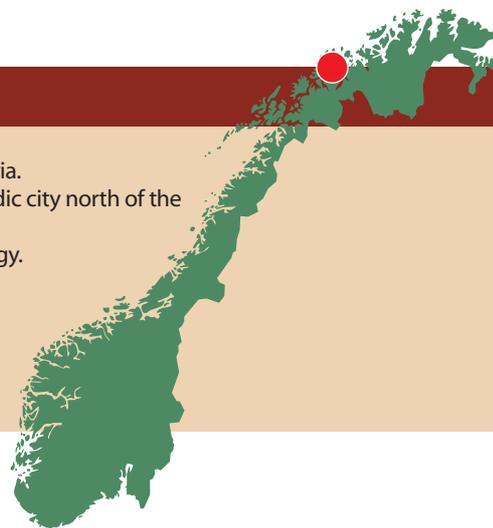
The activities and results of 17 Norwegian municipalities in relation to the seven unified goals<sup>6</sup>



<sup>6</sup> See text box on page 8

## Tromsø municipality

- Located in the middle of the Northern Lights zone, at the same latitude as Alaska and Siberia.
- City founded in 1794. Tromsø has grown from a small fishing settlement to the largest Nordic city north of the Arctic Circle, with 66,000 inhabitants.
- Key industrial activities: education, research, administration, fisheries and satellite technology. A student population of 10,000 and an active tourism and travel sector.
- Climate is moderate due to Gulf Stream current, but the winter is normally long and very snowy.



### From vision to set requirement

**Main goal 1: To raise awareness and achieve results throughout the entire municipal administration – across sectoral dividing lines and in all municipal activities.**

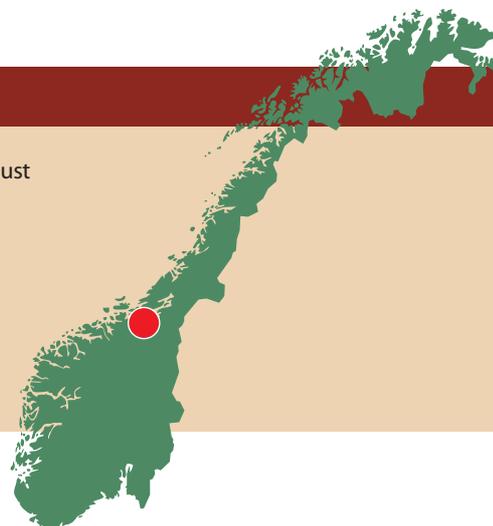
Integration of universal design principles into municipal planning documents will ensure continuity and renewed allocations to these efforts. The greater the clarity of the stipulated political focus, the more meaningful it becomes to work with universal design strategies.



In Tromsø, a breakthrough occurred when the municipal council adopted a decision to incorporate universal design into all planning issues.

# Trondheim municipality

- Located in Sør-Trøndelag county, and is Norway's third largest municipality. Population of just under 170,000, increasing by roughly 2 per cent each year.
- Has played a central role in Norwegian history for more than 1,000 years, and has several important cultural monuments.
- Home to a major Norwegian university. Student population totalling more than 30,000. A centre for maritime, technical and medical research, and venue for international conventions.



## An exemplary sports facility with user participation

**Main goal 1: To raise awareness and achieve results throughout the entire municipal administration – across sectoral dividing lines and in all municipal activities.**

**The new stadium at Øya in Trondheim features universal design and serves as a model for building of future municipal sports facilities.**

### Universal design-related features include:

- The stadium has a hidden audio induction loop system embedded in concrete above the reinforcement. The loop system covers all parts of the stands, which seat roughly 500.
- The stands are accessible from both top and bottom for individuals using wheelchairs, walkers or prams. There is a mid-level entrance as well.
- The middle row of seats is deeper than the others, providing extra space for wheelchairs and prams.
- All entrances are clearly marked by different colours and tactile bands on the outer edges.
- Stairs are clearly marked in contrasting colours painted in indentations scored into the concrete.
- The stairs are equipped with handrails of two different heights. Textural marking strips are placed at the top and bottom of the stairs to help the visually impaired.

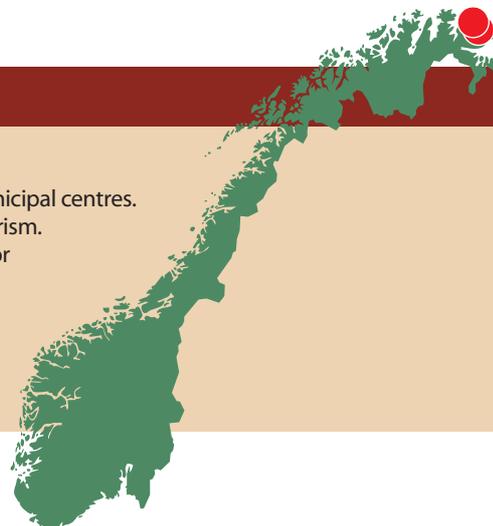


The Øya stadium. Sign for induction loops and entrances on different levels.

Photo: Solveig Dale /Trondheim municipality

## Båtsfjord and Berlevåg municipalities

- Both located both in Finnmark county, adjacent to the Barents Sea.
- Population approximately 2,100 in Båtsfjord and 1,180 in Berlevåg, mostly living in the municipal centres.
- Key industrial activities: fisheries and fish processing. Nature and culture-based activity tourism.
- Each covers an area of over 1,000 km<sup>2</sup> largely consisting of Arctic wilderness with habitat for many species of seabirds.



### Help from architects and support for adaptation of buildings

**Main goal 2: To encourage local community measures through cooperation with trade and industry and other actors from the private and public domain.**

**The offer of professional and financial assistance may make it easier to motivate business owners to initiate their own universal design measures.**

The municipalities of Båtsfjord and Berlevåg, far to the north, were partners under the pilot project, and together launched an initiative directed toward local business owners.

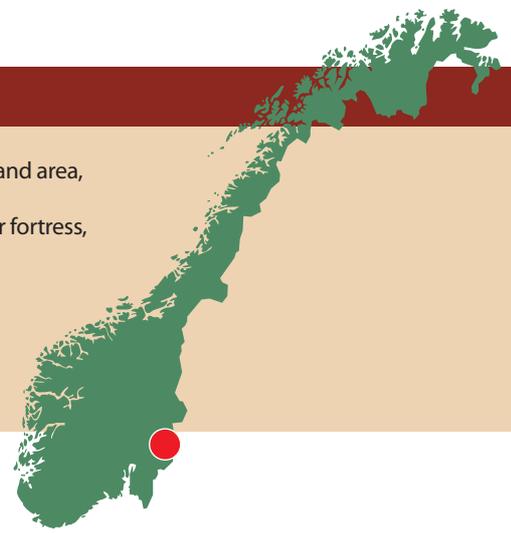


This business in Båtsfjord took advantage of the professional and financial support made available. The enlarged storefront is not only more accessible, but also more aesthetically pleasing to look at.

Photo: Line Røtvold

## Kongsvinger municipality

- Regional centre, approximately 100 km from Oslo with 17,400 inhabitants. Covers a large land area, with ample opportunity for outdoor recreation and leisure activity.
- Originated as a trading centre in the 1600s in connection with the building of Kongsvinger fortress, a well-known landmark.
- Key industrial activities: trade and service centre for the region, with about 20 per cent of the employees working in industry, building and construction.



### Never too early to start good habits

**Main goal 2: To encourage local community measures through cooperation with trade and industry and other actors from the private and public domain.**

**Kongsvinger municipality found that children from pre-school through lower secondary level are eager helpers when it comes to measuring, calculating and finding solutions.**

#### **Suggestions for municipal activities include:**

- Organising a special topics day for primary schools.
- Teaching about universal design, two-three hours per class.

- Creating games where groups of pupils test their own schools buildings and outdoor areas.
- Creating a course pupils can try to negotiate with some form of reduced functionality.
- Testing door weight, threshold height, measure pedestrian walkways, narrow halls, toilet access, elevators, stairs and checking the conditions for access paths and play areas.
- Useful equipment: wheelchairs, simulation glasses, blindfold, canes for the blind, crutches, fish scale, measuring tape, paper and writing utensils.
- Using a camera for documentation.

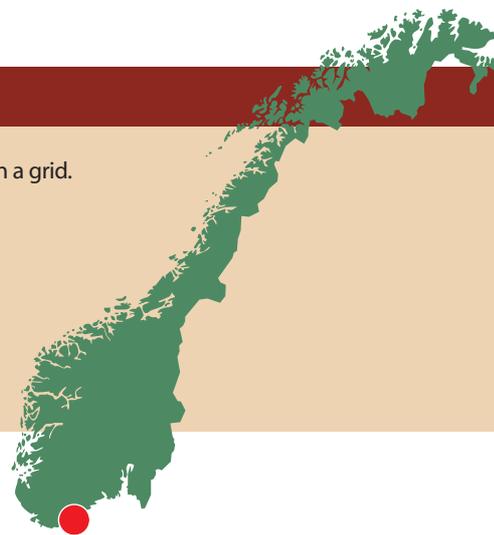


Children testing simulation glasses.

Photo: Norwegian State Housing Bank

## Kristiansand municipality

- Founded by King Christian IV in 1641 as a gate to the Continent. Historic city plan laid out in a grid.
- Population 80,000 and rising.
- Key industrial activities: technology, export of products for offshore activity.
- Location for the main campus of Agder University and a growing research community.



**Main goal 3: To achieve physical solutions that are satisfactorily accessible, safe, environmentally sound and aesthetically appealing.**

**From norms for outdoor areas in Kristiansand municipality**, approved by the city council on 19 November 2008.

- Pathways in recreational areas are dimensioned for electric wheelchairs, maximum gradient 1:12.
- Walkways in downtown areas are dimensioned for walkers, maximum gradient 1:20.
- Gateways and openings between playground equipment etc., are dimensioned for the width of a twin pram (1.2 m).

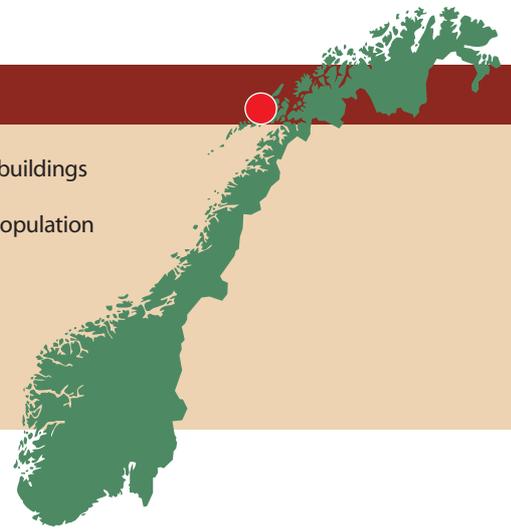


The photo shows a restored dam at Jegersberg lake in Kristiansand. The path along the dam is part of more than 100 km of cleared, accessible paths throughout the municipality.

Photo: Per Svein Staalesen

# Sortland municipality

- Population just under 10,000. Sometimes called the blue city, after an initiative to paint all buildings in different shades of blue.
- Regional centre in Vesterålen and the only municipality in the region that has had stable population growth the past 25 years.
- Key industrial activities: goods and services, fisheries, aquaculture and agriculture.



## Downtown development

**Main goal 3: To achieve physical solutions that are satisfactorily accessible, safe, environmentally sound and aesthetically appealing.**

**Good planning is needed when cities and urban centres are receiving a facelift in keeping with universal design principles. Many different interests and actors may play into the process.**

Sortland municipality has been working on a master street plan for its downtown area, with

details for the market square and adjoining streets. Planning efforts have focused on maintaining a high aesthetic quality through all seasons. Contact with the ocean, breaking up of monotonous surfaces, activity zones, planted areas, street furniture, street lighting and surface materials are to provide a sense of space and atmosphere. All elements are developed on the basis of universal design principles.

The planning process revealed that building owners were afraid that changes would lead to problems, such as loss of parking spaces. It was necessary to move forward very slowly.

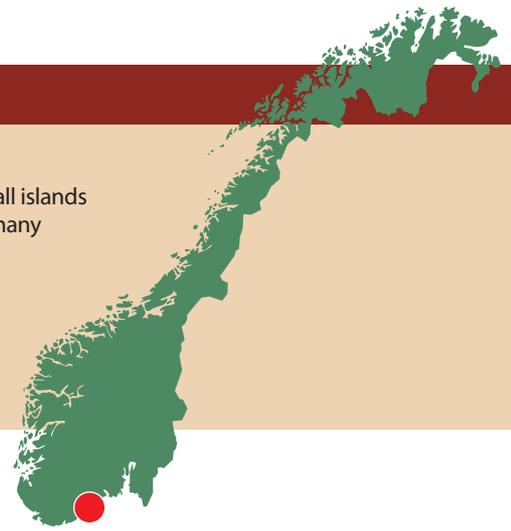


Downtown Sortland.

Photo: Raina Kristensen/Sortland municipality

# Risør municipality

- Population approximately 7,000, with roughly half living in the urban centre.
- Features well-preserved wooden houses along a coast sheltered from the open sea by small islands that create a unique atmosphere around an active and creative cultural community with many established artists.
- Key industrial activities: services, industry, handicrafts, tourism and travel.



## Preservation of buildings

**Main goal 3: To achieve physical solutions that are satisfactorily accessible, safe, environmentally sound and aesthetically appealing.**

### Good plans may conflict with conservation considerations.

Risør municipality's strictly enforced zoning plan has been a major factor in keeping the city's characteristic charm intact. The entire downtown area is zoned as a specially protected area.

In the interface between conservation plans and universal design, Risør has found it to be very important to achieve constructive collaboration with user organisations and cultural heritage authorities. This has helped to ensure that measures are implemented in a manner that is not detrimental to the protected buildings and outdoor areas.

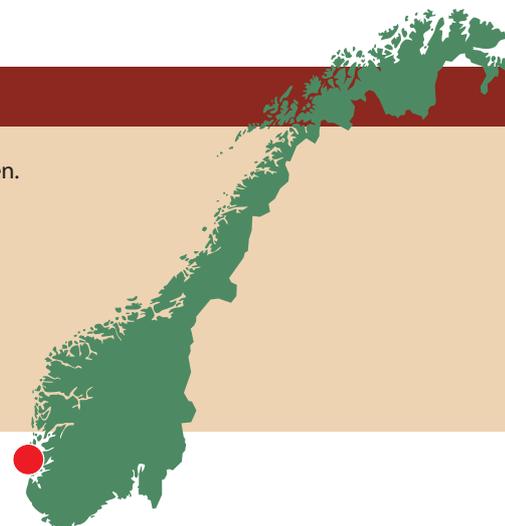
Risør municipality has drawn up a list of protected buildings for consultation during planning activities. Planning efforts for the downtown area have shown that it is not possible to achieve full accessibility to all buildings. Many of the new ramps needed would take so much space from the walkway that it would affect general pedestrian traffic. As a result, efforts have been focused on trying to find constructive alternatives, such as moving or establishing shared entrances.



The new tourist information office in Risør. A new entrance has been built in an old window opening and a ramp installed as a new part of an existing green park. Photo: Risør municipality

## Stord municipality

- Urban centre located at the mouth of the Hardanger Fjord between Stavanger and Bergen.
- Granted city status in 1997. Population roughly 17,000 and growth is projected.
- Highly active construction industry, with easy access to private developers.



**Boats are an important means of transport for many. High-speed passenger boats and ferries link together islands and urban centres.**

**Main goal 3: To achieve physical solutions that are satisfactorily accessible, safe, environmentally sound and aesthetically appealing.**

It takes a lot of cooperation to facilitate good solutions that allow everyone to travel by boat when they want to. Hordaland county municipality administers a transport company that issues licenses for public transport throughout the county.

A number of different companies are licensed to operate bus and boat routes that stop in many places in the villages, urban centres and islands throughout the district. Universal design is one of the required criteria when licenses are granted. The municipality and county must have a shared understanding of how important it is for people using ferries and busses that their entire travel route is adequately linked together

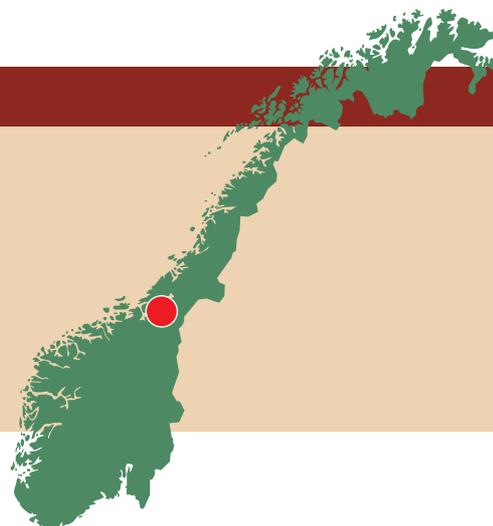


A well-designed gangway is beneficial to many different users.

Photo: Stord municipality

## Verdal municipality

- Located 95 km north of Trondheim with an area of 1,543 km<sup>2</sup>.
- Downtown area granted city status in 1998, and population reached 14,000 in 2007.
- Key industrial activities: agriculture and industry, closely followed by trade and services.



### Transport centre

**Main goal 3: To achieve physical solutions that are satisfactorily accessible, safe, environmentally sound and aesthetically appealing.**

The transport centre in downtown Verdal is both a meeting place and a hub for public transport. The outside square with its sculptures is part of a larger project that will be enhanced with tactile indicator lines in the pavement leading toward the railway station and pedestrian underpass.

Importance has been placed on creating sufficient contrast in paving stones, tactile and visual guides that indicate direction and hazards, and good seat height on the benches. The sculptures of the ravens Hugin and Munin, from Norse mythology, provide a hands-on experience for children and adults with impaired vision.

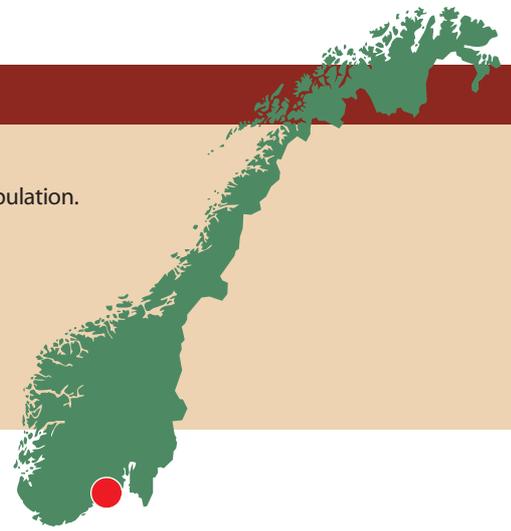
The Norwegian Public Roads Administration and the Norwegian National Rail Administration have both been active partners in this process.



Photo: Verdal municipality

## Porsgrunn municipality

- Located at the mouth of the Telemark watercourse with 34 000 inhabitants.
- The smallest municipality in the county (165 km<sup>2</sup>), but has the most rapidly expanding population.
- Key industrial activities: heavy industry and processing industry and long traditions in shipping and timber.



### Porsgrunn has achieved targeted cooperation with the municipal council for the disabled and user organisations.

#### **Main goal 4: To further develop targeted collaboration with municipal councils for the disabled and other relevant user groups.**

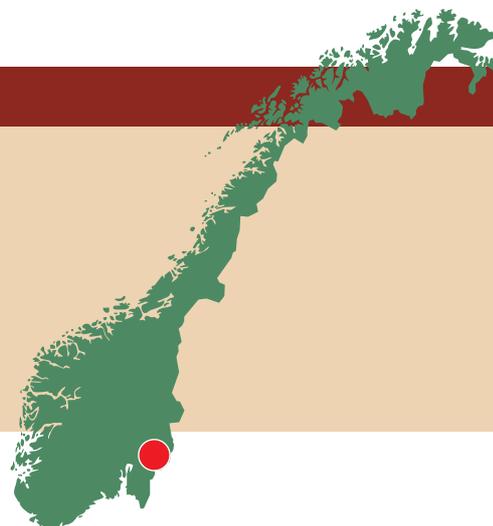
- The municipal council for the disabled is part of the interdisciplinary working group.
- User organisations such as the Association of the Blind, Association for Persons with Disabilities, and Association for the Hearing Impaired are also represented.
- User representatives provide valuable input when choosing solutions during the planning process and offer quality assurance of plans before implementation and during start-up.
- When needed, the project management for universal design meets regularly with the council for the disabled to provide information and obtain input for universal design activities.



Photo: Kjersti Berg/Porsgrunn municipality

## Eidskog municipality

- Located 100 km from Oslo – shares a border with Kongsvinger and Sweden.
- Two small urban centres with approximately 1,900 of the total population of 6,400.
- About 60 per cent of an area of 643 km<sup>2</sup> is productive forest land.
- Key industrial activities: timber, glass and aluminium production.



### Study trips with users

**Main goal 4: To further develop targeted collaboration with municipal councils for the disabled and other relevant user groups.**

### Interdisciplinary and cross-sectoral study trips open for new knowledge and learning

Early on in the pilot project, Eidskog municipality conducted a number of study trips, scheduling visits to review street setups in Denmark, Sweden and Drammen, Norway. Representatives from user groups were included in these trips as well, and the result was many useful discussions on the features of good solutions – and not so good solutions.



From one of the study trips conducted by Eidskog municipality. Here, participants are considering an example of a well-designed bus-stop, with tactile indicator lines in the pavement. Photo: Jan Kontorp/Norwegian Public Roads Administration

## Gjøvik og Vestre Toten municipalities

- Population of Gjøvik municipality 28,300, 12,600 in Vestre Toten.
- Both with varied and fertile agricultural land with highly productive forests.
- Key industrial activities includes industry, trade, services and higher education. Industry park that is among the largest in Norway, with 3,400 employees. Expert centre for light materials and automated production.



### Knowledge is the key

**Main goal 5: To increase competence among all parties responsible for planning, implementation and operation of municipal activities.**

### Interdisciplinary and cross-sectoral study trips open for new knowledge and learning

Gjøvik municipality is currently expanding the number of kindergartens and investing extensively in its schools. The municipal council for the disabled and department of properties cooperate closely to ensure that universal design principles are incorporated at the right stage of the process. This way, no wide-ranging, costly reconstruction will be required in the event of enrolment of children with special needs.



At Tongjordet kindergarten it is clear that the staff has been actively involved from the first drawings to the finished building. The kindergarten features excellent accessibility, good lighting, top acoustics, lots of space and good support for educational activities. Photo: Hans Petter Olsen

### Scepticism turned to enthusiasm

Chief Librarian Elisabeth Lund was somewhat sceptical to the idea of visual floor guides when the Raufoss library opened after its renovation in January 2008. But the guides are clearly popular among users, as is the new shelf lighting. Wheelchair users now have unimpeded access



Vestre Toten municipality has opened a model universal design library, featuring a step-free entrance, high performance shelf lighting, excellent acoustics, tactile and visual guiding lines on the floor and a counter induction loop system. Photo: Hans Petter Olsen

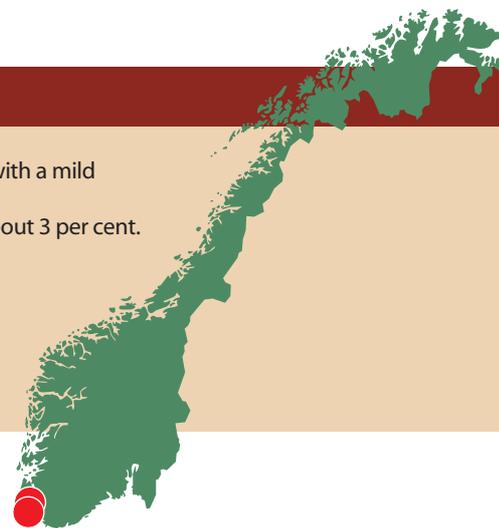
to the library and are able to navigate through the building and access lavatories without assistance. General use of the library has increased by 38 per cent since the re-opening.



The library in Raufoss. Chief Librarian Elisabeth Lund is proud to head the first library in Norway that combines the Opening the Book design principles with universal design. Photo: Ivar Ødegård/Office of the Oppland County Governor

## Time and Klepp municipalities

- Located along the southwestern coast, approximately 30 km south of Stavanger, an area with a mild climate and well known for vegetable production.
- Population roughly 16,000 in each of the municipalities and both with growth rated at about 3 per cent.
- Key industrial activities: agriculture, industry, private and public sector services.



### Partners Time and Klepp

#### Strength in numbers

**Main goal 6: To serve as a role model and motivate other municipalities to implement more universal design.**

Municipal administrations often experience rapid employee turnover in certain types of jobs. Working together as partners has made Time and Klepp less vulnerable to loss of key personnel, making it possible for them to maintain better continuity in their working group. At the same time, the partnership has spawned a healthy competitive spirit between the two municipalities, as each strives to be the most successful.

#### Investment in municipal buildings

**Main goal 5: To increase competence among all parties responsible for planning, implementation and operation of municipal activities.**

Time municipality has focused efforts on renovating school buildings in recent years. Planning efforts have incorporated universal design principles. Tours of premises with user representatives have provided useful insights into key details, such as door weight, furnishing of lavatories and signage.

Time municipality recently adopted regulations for its building commission, which is under the auspices of the municipal working environment committee. The regulations stipulate the need to integrate universal design thinking into the various phases of municipal building processes, including new construction, renovation and buildings leased for use.



Frøyland school, rehabilitated on the basis of universal design principles.  
Photo: Anne Reidun Garpestad



The Kjøpmannsbrotet residential area – good planning and close follow-up.  
Photo: Anne Reidun Garpestad

### Klepp Exercising a conscious housing policy

**Main goal 2: To encourage local community measures through cooperation with trade and industry and other actors from the private and public domain.**

Klepp's municipal action plan for housing for 2007-2010 states that the municipality is to consider imposing requirements relating to lifespan dwellings when purchasing new housing. Since 2007, the municipality has stipulated 30-70 per cent of the housing built in all development contracts must satisfy minimum visitability requirements.

Politicians, building entrepreneurs and user representatives visited the Kjøpmannsbrotet residential area together for evaluation purposes. The complex was a large-scale project carried out for Klepp municipality, and the visitation was conducted to show how this specific planning project incorporated universal design. Consideration was given to whether the right requirements were stipulated, whether these requirements were followed up, and whether the design components function well in practice.

# Ullensaker municipality

- Home to Oslo Gardermoen Airport, main gateway to and from Norway, 50 km northeast of Oslo.
- Population close to 28,000. One of the most rapidly growing municipalities in Norway since the airport opened in 1998.
- Key industrial activities: airport, hotel and transport. Formerly military facilities and agriculture.



## Cooperation with the Norwegian Mapping Authority Accessibility mapping – a pioneering effort

**Main goal 7: Provide input and take part in the dialogue relating to national universal design efforts.**



An illustration from the accessibility map. Accessibility is shown using colour coding. Green means easily accessible, red means inaccessible.

Illustration: Ullensaker municipality/ Norwegian Mapping Authority

**The Norwegian Mapping Authority is assisting Ullensaker municipality in its efforts to devise standardised accessibility information for the general public.**

Originally, Ullensaker municipality set out to develop a tool for locating accessible parks, parking places and pedestrian walkways. During the process, however, it became clear that this tool would also be useful for land-use planners and operation/maintenance activities.

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