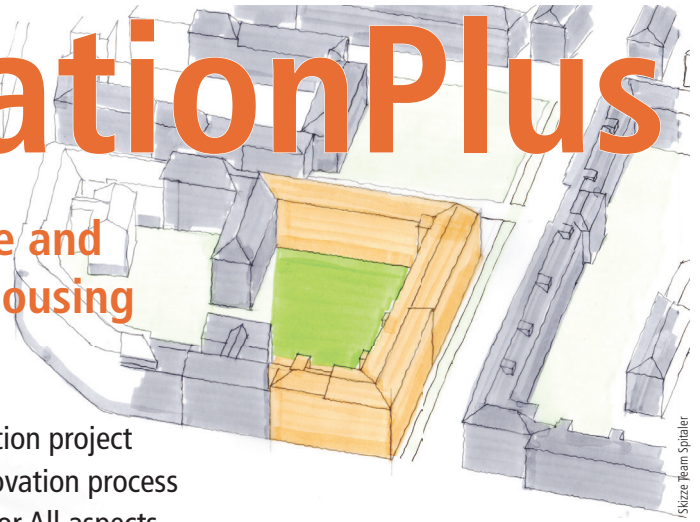


# RenovationPlus

## Renovation for accessible and age-friendly communal housing in Vienna



Summary of the study by design for all, commissioned by „Magistratsabteilung 50, Wohnbauförderung und Schlichtungsstelle für wohnrechtliche Angelegenheiten“.

November 2019

Using the example of an ongoing renovation project this study investigated the structural renovation process in the light of Universal Design / Design for All aspects.

The inclusion of housing and social aspects, personal space and mobility led to the concept we call „Renovation Plus“, a strategy for future living in Vienna.

Starting from a list of communal housing developments due for full structural renovation („Sockelsanierung“) in Vienna, the building complex Mundygasse 1, in the 10th district was chosen. It should serve as a case study for the purpose of this investigation (162 flats, 32 per cent over 60 years-old tenants).

Our research questions:

- How can aspects of accessibility and age-friendly design be better incorporated into the renovation process of Wiener Wohnen?
- What is the potential for improvement in the course of a renovation and at reasonable cost?
- How can competences and knowledge from various community agencies contribute towards a better renovation process?

We approached these questions in four steps:

1. Walk-through and audit of the building and the immediate environment as a basis for evaluation of the built environment.
2. Context research, discussions and round-table conversations with experts from various departments of the city of Vienna.
3. Interviews with tenants.
4. One Universal Design workshop with participants from various departments of the city of Vienna.

### Research and context analysis

Briefly summarized the main aspects in this context are: security, well-functioning communication, direct exchange of information, accessibility, integration into the development of the district, and short reaction times when real or imagined problems occur. City agencies working in the community approach these topics as concerns for the built environment and for social aspects of housing and neighbourhood.

Safety is a particular issue for senior citizens, as well as the fear of change.

Community organisations at district level communicate directly and personally with residents and with each other, an efficient way to find quick and pragmatic solutions. Sadly, the good news of well-functioning community services seldom get reported to the public.

Mundygasse 1 is located in a low traffic zone, the building complex is easily reached by car from major roads and has good connections to public transport. Some of the walkways are in need of renovation. Tenants tend to avoid the neighbourhood park (Mundypark). They prefer the playground in the courtyard, though during the time of observation this also was little used. When asked, tenants named parks and playgrounds further afield, such as Laaerberg. Helmut-Zilk-Park is close, but still quite new, and the walk to get there is not particularly attractive.

*Ageing cities should take a comprehensive approach, integrating economic and social policies (OECD)*

Daily errands and shopping can be easily done on foot, however, public space in the surrounding streets is not such that it promotes lingering.

The ground floor of buildings is not a lively space, shops tend to be uninviting. From our interviews with tenants we were able to draw parallels between individual mobility profiles and perception of the quality of public space.

The building itself has a pleasant layout with a large, quiet courtyard, it has a lot of potential for developing new concepts of use that support future communities, fully or partly accessible and age-friendly. The currently high level of empty flats opens up a window of opportunity.

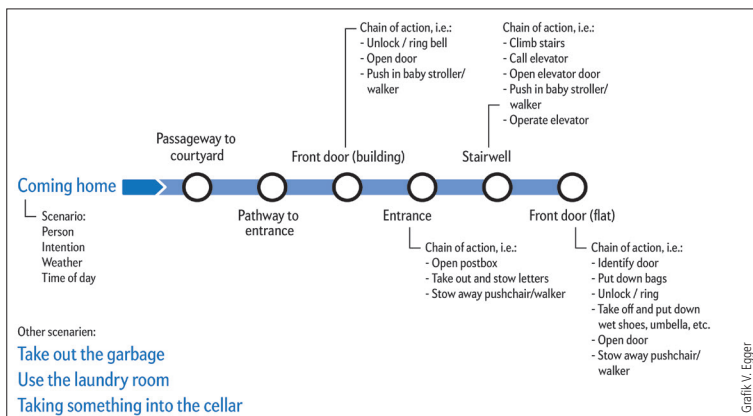
Analysis of the mobility chain of building use in Mundygasse 1 identified key situations relevant to the quality of living. These key positions can also be applied on a general level.

### Interviews with tenants

Semi-structured interviews investigated the views on personal living space, the building, the neighbourhood and social interaction in six thematic areas: statistical data of the tenants themselves, the quality of living and their favourite places, communication and information, use of the residential complex, mobility patterns in the neighbourhood, and housing in old age with aspects of care.

Thirteen interviewees came from seven out of eight buildings („Stiegen“) withing the complex. Six of them were men, seven women, aged between 22 and 94. This is not a representative number for all tenants, but in some subject areas a clustering can be detected that may point towards greater significance and should be investigated further.

Some of the issues mentioned and were also identified in the design for all building audit will



Schematic example of a mobility chain.

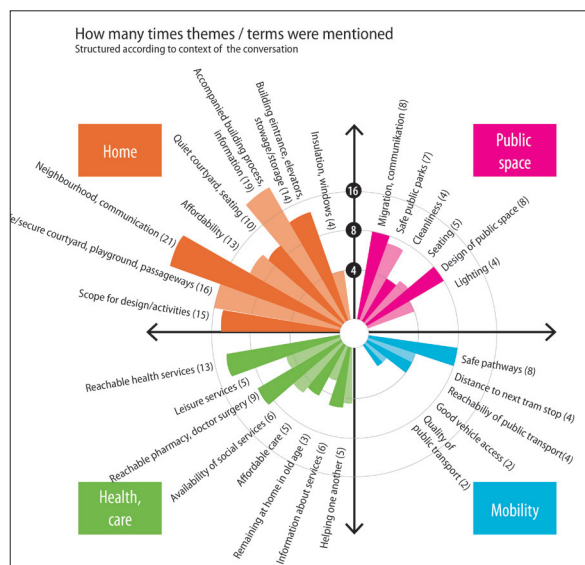
be dealt with in the course of structural renovation. Others have been adopted as Design for All criteria into the recommendations of this study.

The courtyard is one such topic that touches a nerve. It is about usage, the wish for more careful design of this space. „Not very inviting, not enough seating or tables, just playground, no gardening“ were some of the complaints. Another one was safety and security – people wish for a gate at the passage to the street so that no strangers can enter the building complex.

Experiences about relationships with neighbours diverged between „I know everyone in my building“ and „they don't even say hello“. There seems to be a functioning community within the separate buildings, but not in the whole complex. We observed that people do tend to greet each other, and that strangers are being noticed.

Two of our interviewees had moved to their current homes because of better accessibility (buildings 4 and 5). Several persons are in need of care, they seldom leave their flats and are being looked after by family members (they live in buildings where the elevator exits are halfway between floors).

One interesting observation was, that, after a lively conversation on other topics, interviewees were quite reticent in answering questions about their plans for old age and the need for assistance or care. This seems to confirm experiences reported by care and support organisations: people don't like to think about their own old age or preparing for it.



Neighbourhood quadrant („Grätzquadrant“) – summary of qualitative responses from all conversations and interviews.

Statements such as „in our family people were either active or dead“ are revealing. At best some isolated measures are being considered. There seems to be a need for more information about the services that are available regarding home care, living support, or for structural adaptations inside the home and funding assistance.

The way people move around their neighbourhood and how far they walk varies individually depending on factors such as their social network, the physical condition, or whether they own a dog. Attitudes towards migration also determines that some areas are being avoided. „I only spend time in my own home or outside the 10th district“ was one such comment from a tenant who has lived in the district for a long time.

Favoritenstraße, the main shopping street, was only mentioned by five of our interviewees as a destination. For persons who have issues with immigrants this street is not part of their mobility profile.

Most walking routes in the area are determined by the supermarkets, particularly the discount stores (because of low income). This last point on affordability was raised by our interviewees without prompting.

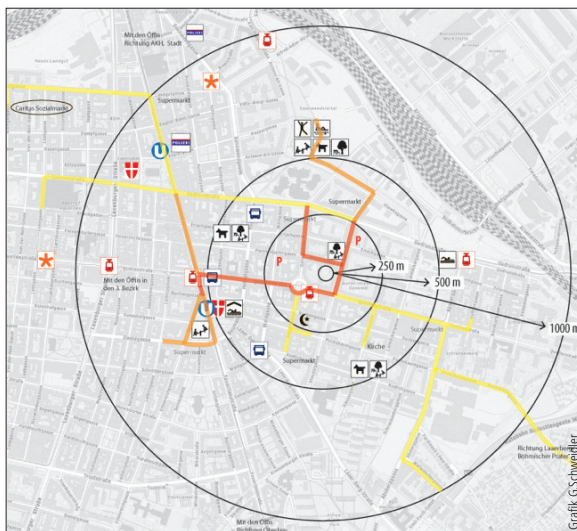
Despite many critical remarks the overall mood was positive. All tenants we talked to said that they basically enjoyed living in Mundygasse 1.

## The built environment and the building: recommendations and actions (excerpt)

Quite a large number of recommendations could be realized in the course of the current structural renovation of the building complex in Mundygasse 1. A summary of all Design for All use qualities can be found in the table **Renovation-Plus Qualities** at the end of this paper.

Sunlit building facades and surfaces that are sealed to a high degree are the cause for extreme overheating within the home. Especially older people suffer in extreme heat. In addition to thermal insulation other measures can contribute towards protection against overheating:

- Better ventilation of streets between Helmut Zilk-Park and surrounding areas: renaturation of parts of the street would lead to more public green spaces that also have a significant impact on the microclimate. This „green bracket“ could create new connections within the district and provide more high quality public spaces.
- Green walls: a green second skin to the building doesn't only provide shade, it also improves the air quality. Best results are obtained by a combination of external window shades, full insulation and green facades.



Mobility profile of tenants: red = used by many, orange = used by half of the interviewees, yellow = used by a few



Ventilation and renaturation of streets.

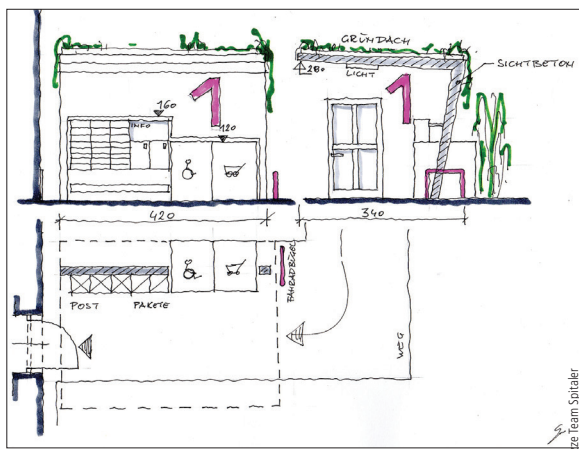


More green on the facade, green walls.

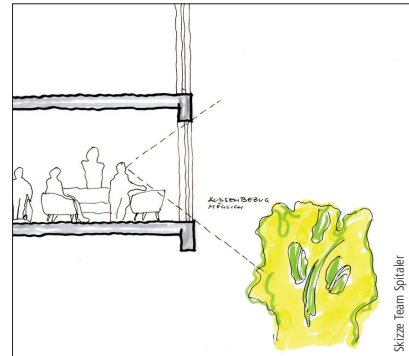


- Access to stairwells: currently there is no room for temporary stowage behind the front doors of the buildings. Important functional elements such as post boxes are placed in tight corners and difficult to reach. One possible solution could be to relocate functions outside the entrances.
- Connection to the world outside: lowering some window parapets is a simple strategy for enabling people to relate to the world outside. French windows reach all the way to the floor, they provide an outdoor feeling, an experience of weather and nature. Another way to extend living space is the addition of balconies. The renovation could enable this option for tenants.

- Courtyard: a renovated and actively used courtyard can be instrumental for greater sense of community and strengthen the social structure within the complex. In order to achieve this, some building measures have to be implemented as well as concepts for use that provide an attractive space for all generations. Some possible solutions are outlined below.



Example for building access in greater comfort with more space and functionality.



Better connection to the world outside by lowering some window parapets.

### Potential for future concepts of use within the building complex

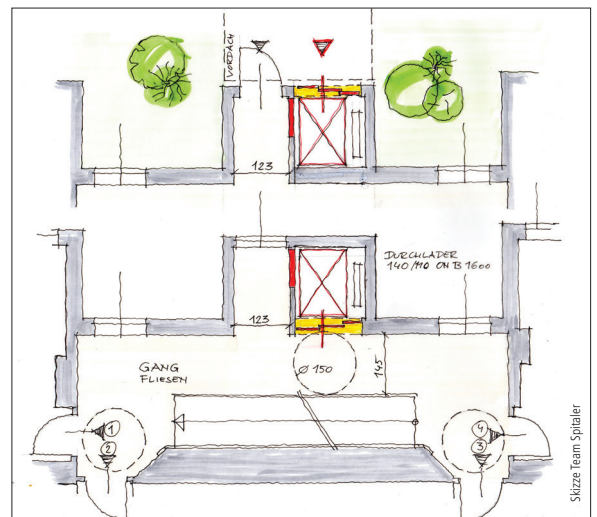
This building complex has great potential for accessibility and Design for All use qualities.

Buildings 4 and 5 already have an elevator that exits directly on the main levels. With the relevant adaptations up to five levels in each of the two buildings can be made fully accessible. This could mean:

- 3 to 4 accessible homes per level,
- one accessible laundry room within the complex,
- the opportunity to create facilities such as senior living groups, social-therapeutic living groups, community facilities for all, and much more.



Idea for a courtyard concept in Mundygasse 1.



Adaptation of elevators in buildings 4 und 5 can provide level access for up to five levels.

## Guidelines for implementation of RenovationPlus

These guidelines are intended to support the renovation process with qualitative additions beyond structural improvements.

### Building strategy

As soon as a decision has been taken to renovate a building, the strategic planning can begin.

Early on in the process a larger circle of stakeholders should be involved. Thus, the whole social and structural potential of a building can be assessed, and by using synergies between departments the available resources can be maximized. This holistic approach towards the building and its environs increases the scope both in fields of action and, quite possibly, also financially.

The building strategy is set out to have a mid to long term effect beyond structural improvement.

Integrating community and social services of the city such as the „Wohnpartner“ can anticipate necessary resources and deploy services more efficiently: less friction loss in the renovation process, happier tenants, the building services can do their job, and social support is available when needed.

Partially, this cooperation could already be tested in Mundygasse 1. Wiener Wohnen customer services and Wohnpartner participated in a project workshop, and both can see the potential of such an approach.

### Information, communication and supporting measures

To counteract fears and keep rumours at bay it would be helpful to have a consolidated approach towards informing tenants. Everyone should tell the same story, use the same wording and the same information material.

A communication concept for renovation projects can also contribute towards a feeling of community amongst tenants. („Our new house“).

Change is always a cause for concern and insecurities, and building work causes disruptions. However, this could be seen as another chance to improve communication between neighbours and strengthen the community in the long term.

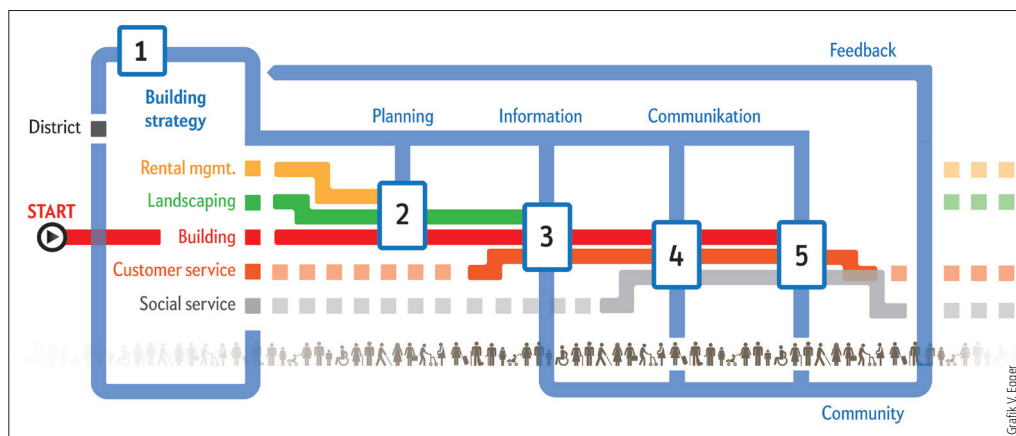
### RenovationPlus qualities

These are desirable Design for All-qualities that contribute towards greater comfort and ease in daily life for everyone, but specifically towards the experience of older people and persons with reduced mobility.

Every key situation in the mobility chain has defined qualities for ease and comfort of use. These are Universal Design / Design for All qualities that everyone can benefit from. Considered early in the planning process, many of these qualities do not increase the cost at all, or only have a marginal effect.

Commissioners of the project need to demand these qualities in the brief. It is the task of architects and planners to implement the qualities within the given context.

With the evaluation of more renovation projects the qualities can be formulated and specified in detail as „Wiener Wohnen Qualities“.



Building strategy in five phases: 1. the overall strategy, 2. project development and planning, 3. information for tenants, 4. communication and accompanying measures, 5. feedback and post project evaluation

# RenovationPlus Qualities

## Building access

Key situation	Qualities
Access from public space to the courtyard*	<ul style="list-style-type: none"> <li>- Easily visible entrances</li> <li>- Address/numbers clear and readable</li> <li>- Attractive passageways</li> <li>- Increased perception of safety</li> </ul>
Access to building entrance*	<ul style="list-style-type: none"> <li>- Numbering easily visible from the centre of the courtyard</li> <li>- Increased lighting levels on the way to the entrance</li> <li>- Level pathways</li> </ul>

## Building entrance

Key situation	Qualities
Front door*	<ul style="list-style-type: none"> <li>- Visible entrance and numbering</li> <li>- Adequate lighting</li> <li>- Protection from weather</li> <li>- Effortlessly opening doors (not too heavy)</li> <li>- Easy turning lock, easy to use locking system</li> <li>- Level access and sufficient space to move</li> </ul>
Intercom*	<ul style="list-style-type: none"> <li>- Readability of names/numbers (typeface, size, lighting)</li> <li>- Easy to use (buttons visible, reachable, easy to press, understandable)</li> <li>- High contrast design</li> <li>- Good acoustic quality</li> </ul>
Stowage and storage (bicycles, toys, walkers, etc.)*	<ul style="list-style-type: none"> <li>- Protection from weather</li> <li>- Adequate lighting</li> <li>- Accessible and usable by all</li> <li>- Recognisable functions</li> <li>- Separated storage areas</li> </ul>
Postbox / parcel box*	<ul style="list-style-type: none"> <li>- At reachable height</li> <li>- No spacial conflict with other functional elements</li> </ul>

## Moving through the building

Key situation	Qualities
Stairs, stairwells*	<ul style="list-style-type: none"> <li>- Adequate lighting</li> <li>- Information boards visible, at readable height</li> <li>- Easy to grip handrails (according to standard)</li> <li>- Contrasting first and last step of every staircase (according to standard)</li> </ul>
Elevator*	<ul style="list-style-type: none"> <li>- Effortless opening of door</li> <li>- Elevated lighting level in cabin</li> <li>- Buttons visible, reachable, readable, usable</li> <li>- Information visual, acoustic, tactile</li> </ul>

## Using the courtyard

Key situation	Qualities
Spaces to pass the time*	<ul style="list-style-type: none"> <li>- Functional separation of uses</li> <li>- Bright, adequate lighting</li> <li>- Seating for all</li> <li>- Increased perception of safety (no dark corners)</li> <li>- Scope for gardening (raised beds, water faucet, toolshed)</li> <li>- Create variety</li> <li>- Level surfaces easy to roll on</li> </ul>
Playgrounds*	<ul style="list-style-type: none"> <li>- Bright, adequate lighting</li> <li>- Seating for all</li> <li>- Spaces for (ball-)games</li> <li>- Increased perception of safety (no dark corners)</li> </ul>
Waste disposal*	<ul style="list-style-type: none"> <li>- Separate from other functions, no dark corners</li> <li>- Accessible and well-lit</li> <li>- Closed refuse bins (avoiding unpleasant smells)</li> </ul>
Climate*	<ul style="list-style-type: none"> <li>- Cooling conditions (shade, reduced ground sealing, water features)</li> <li>- Planting</li> <li>- Zoning of areas according to sun exposure</li> </ul>

## The home

Key situation	Qualities
Front door to the flat*	<ul style="list-style-type: none"> <li>- Level entrance</li> <li>- Entrance recognisable, visible</li> <li>- Numbering easy to read</li> <li>- Bright, adequate lighting</li> <li>- Effortless opening door, door handle (no knob)</li> <li>- Easy to use locking system</li> <li>- Somewhere to place and/or hang up things</li> <li>- Doorbell audible, visible, accessible, easy to use</li> </ul>
Connecting to the world outside*	<ul style="list-style-type: none"> <li>- Enable outside views</li> <li>- Lower some window parapets</li> </ul>
Balconies	<ul style="list-style-type: none"> <li>- Level exit to balcony</li> <li>- Scope for designing your own space (i.e. a raised flower bed, planting troughs)</li> <li>- Green walls</li> <li>- Shading</li> <li>- Surface easy to roll on</li> </ul>
Bathrooms	<ul style="list-style-type: none"> <li>- Seating close to washbasin is possible</li> <li>- Fittings and controls easy to reach and use</li> <li>- Maximise free space</li> <li>- Level or very low shower tray</li> <li>- Enable secure fixture for individual handholds</li> <li>- Ergonomic toilet seating</li> </ul>

\* These qualities can be easily implemented in Mundygasse 1.

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