Adapting the Provision of Public Services to Demographic Changes

Experiences from Germany

Dr. Jens-Martin Gutsche

Gertz Gutsche Rümenapp – Stadtentwicklung und Mobilität, Hamburg/Germany
Transportation and Mobility
Urban Planning and Infrastructure
Spatial Development and Public Finances
Simulation of regional trends

www.ggr-planung.de
Adapting the Provision of Public Services to Demographic Changes in Germany

The Challenge
Demographic changes in Germany

The Concept
Planning Approach „Regional Strategy for the Provision of Public Services“

Some Examples
Outcomes of the Approach

Some Closing Remarks
What I (Still) Get to Hear in Growing Regions in Germany
The Challenge

Demographic changes in Germany
Adapting the Provision of Public Services to Demographic Changes in Germany

Germany – a rough orientation

Source: Google Maps
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Demographic Changes in Germany

1990-2010

2010-2030

Source: BBSR
Demographic Forecast: Vogelsberg County

- 20,000 inhabitants less within 20 years
- 1,000 Einwohner less per year
- Population in 2030 will be about 82% of today’s population (-18%)

Source: HessenAgentur, GGR
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Age Group 0-25: Children, Teenagers and Young Adults

Source: HessenAgentur, GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Age Group 0-25: Children, Teenagers and Young Adults

-38% within 20 years

Source: HessenAgentur, GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Age Group 25-65: Parents and Work Force

Source: HessenAgentur, GGR
Age Group 25-65: Parents and Work Force

-27% within 20 years

Source: HessenAgentur, GGR
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Age Group 65 and older: Best Agers and Senior Citizens

Source: HessenAgentur, GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Age Group 65 and older: Best Agers and Senior Citizens

+28% within 20 years

Source: HessenAgentur, GGR
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Effects of the Demographic Changes on Public Infrastructure and Services (and vice versa)

Demographic Changes

Public Infrastructure and Services

Source: GGR
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Effects on the Technical Infrastructure
(Streets, Water Supply, Telecommunications, Sewers, ...)

Source: GGR
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Effects on the Technical Infrastructure
(Streets, Water Supply, Telecommunications, Sewers, ...)

Source: GGR
Community of Porta Westfalica (36,000 inhabitants)

Over 1/3 of all residents of single detached houses are older than 65 years.

Source: ILS, Community of Porta Westfalica
Community of Porta Westfalica (36,000 inhabitants)
Sewer System: Status Quo (red) and Planned Extensions (yellow)

Source: ILS, Community of Porta Westfalica
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Effects on Social Infrastructure (Schools, Kindergarten, Hospitals, Family Counseling, ...)

Source: GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Effects on Social Infrastructure
(Schools, Kindergarten, Hospitals, Family Counseling, ...)

Source: GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Effects on Social Infrastructure
(Schools, Kindergarten, Hospitals, Family Counseling, ...)

Source: GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Effects on Social Infrastructure
(Schools, Kindergarten, Hospitals, Family Counseling, ...)

Source: GGR
The Concept
Planning Approach „Regional Strategy for the Provision of Public Services“
Regional Strategy for the Provision of Public Services
*(Regionalstrategie Daseinsvorsorge)*

The “Regional Strategy for the Provision of Public Services” is an informal planning process initiated by regions or counties,

- to deal systematically with the impacts of demographic change on the different sectors of infrastructure of general interest and the provision of public services
- to develop an adaptation strategy to the demographic change
- to ensure political and organizational implementation
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Action Program for the Provision of Public Services

Funded by the Federal Ministry of Transport, Building and Urban Development

Source: BMVBS
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Example: “Master Plan Public Services” of Werra-Meissner-County

Source: Werra-Meißner-Kreis
**Approach Profile**

The planning approach „Regional Strategy for the Provision of Public Services“:

- ... look about 20 years ahead (= much further than most obligatory planning processes for social services and social infrastructures)
- ... pays attention to the interdependencies between infrastructures (e.g. schools, public transport and health care)
- ... puts aside authority for a moment (without losing sight of them)
- ... dares to ask „What infrastructures and services do we really need in our county?“
- ... accepts situations of powerlessness (but make them visible to higher administrative and legislative levels)

→ the “Regional Strategies” have already be driving forces for legislation

Source: GGR
An example: Secondary schools – Kyffhäuser County (Thuringia)

- Secondary schools (~GCSE) 2025
  - Minimum number of students: 7
  - Not reached: 1

- Secondary/high school 2025
  - Minimum number of students: 3
  - Clearly not reached: 1

But:
Further closures of locations lead to too long ways to school.

Source: GGR
Educational System in Thuringia („Status Quo“)

- Primary/junior school
- Secondary/junior school (~GCSE)
- Secondary/high school (~GCE A-levels)

Source: GGR
Wissen & Bildung

Projekt Gemeinschaftsschule

Gemeinsam lernen in Thüringen

VON MICHAEL BILLIG

Approach Profile II

The planning approach „Regional Strategy for the Provision of Public Services“ ...

- ... gets developed by work groups over a period of about 1 – 1½ years (about 5-7 meetings)
- ... tries to get a wide range of stakeholders (different levels of administration, operators, charities, churches, users, age group representatives, businesses, ...) into the work groups
- ... sometimes includes politicians into the work groups (and sometimes keeps them out of the “creative phases”)
- ... lives (or dies) with good (or bad) leadership: The approach needs to be wanted!
- ... exist aside from all the formal planning procedures (but should leave traces in these procedures afterwards)

Source: GGR
Approach Profile III

The planning approach „Regional Strategy for the Provision of Public Services“ ...

• ... follows a partly standardized phase model

Source: GGR
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Project „Regional Strategy for the Provision of Public Services“

Arbeitschritte der Region / des Kreises

Initierung des Prozesses
Auswahl der Infrastrukturen nach Handlungsnotwendigkeit und -möglichkeit
Großkonzept Akteurs-einbindung
Konstituierung der thematischen Arbeitsgruppen
Steuerungsgremiums mit starkem/r Spielermacher/in
Beauftragung der externen Begleitung

Auftaktphase
I. Probleme benennen
II. Status Quo erfassen und bewerten
III. Trend der Entwicklung fortschreiben
IV. Alternative Zukunftsvarianten durchspielen
V. Position beziehen und Ergebnisse sichern

Arbeitsgruppenphase

Implementationsthe phase

Verstetigung

Source: GGR, BMBVS
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Select infrastructures to deal with
Establish work groups
Set up time schedule

Source: GGR, BMBVS
Adapting the Provision of Public Services to Demographic Changes in Germany

- Define the problem, to goal aims and the range for seeking solutions
- Clarify responsibilities and procedures
- Check data availability

Source: GGR, BMBVS
Adapting the Provision of Public Services to Demographic Changes in Germany

List status quo locations, offers and costs of infrastructures and services

Develop a small-scale population forecast

Discuss quantitative and qualitative evaluation standards for a “good service”

Source: GGR, BMBVS
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- Develop a trend scenario (What happens if we do nothing?)
- Assess this trend scenario (Are we really going to have a problem? Where? Who? Why?)
- Outline first alternative strategies

Source: GGR, BMBVS
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Develop alternative strategies iteratively

Determine achievable levels of provision, qualities and costs

Select the preferable alternative and justify the choice

Source: GGR, BMBVS
Agree on recommendations
Document the derivation of the recommendation
(analysis, model calculations, working process)
Develop an implementation strategy

Source: GGR, BMBVS
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Present results to the political boards

Get political decisions

Define a working structure for the implementation phase

Adapt financial and technical regulations

Source: GGR, BMBVS
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Put recommendations into practice
Monitor implementation and impacts

Source: GGR, BMBVS
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Approach Profile III

The planning approach „Regional Strategy for the Provision of Public Services“...
- ... follows a partly standardized phase model
- ... works with scenarios
- ... uses GIS and database models to access the scenarios
- ... creates creativity through a “idea – assessment – idea – assessment”-loop (made possible by a flexible external consultant)

Source: GGR
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Small Scale Population Forecast

Population change 2009 - 2019

Population change 2009 - 2034

Source: GGR, Werra-Meißner-Kreis
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Detailed mapping of settlement structure

Source: GGR, Google Maps
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Accessibility Assessment and Modelling

Source: GGR
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Some Examples
Outcomes of the Approach
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Examples #1
Health Care (General Practitioners)
The older we get, the more we go to the doctor
Bad Kissingen County: More Demand for Health Care Despite Population Decrease

Source: GGR
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All Over Rural Germany:
Trouble with the Replacement of General Practitioner Practices

Wanted: General Practitioner

Source: Spiegel Online
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Werra-Meissner-County: Assessing the Impact of Lost General Practitioner Practices

Source: GGR, Werra-Meißner-Kreis
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Werra-Meißner-County: Using the Assessment as a Priority List for Coordinated Replacement Efforts

- Low priority
- Rather low priority
- Average
- Rather high priority
- High priority

Source: GGR, Werra-Meißner-Kreis
Examples #2
Primary schools
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Transit time:
- < 5 min
- till 10 min
- till 15 min
- till 20 min
- till 30 min
- till 40 min
- > 40 min

Amount of students with transit time
- > 40 minutes: 1%

Student ratio 2025: 0.49

Zirchow Primary School
Adapting the Provision of Public Services to Demographic Changes in Germany

Transit time:
- till 5 min
- till 10 min
- till 15 min
- till 20 min
- till 30 min
- till 40 min
- > 40 min

Amount of students with transit time > 40 minutes: 11%

Zirchow Primary School
Adapting the Provision of Public Services to Demographic Changes in Germany

- **Transit time:**
  - till 5 min
  - till 10 min
  - till 15 min
  - till 20 min
  - till 30 min
  - till 40 min
  - > 40 min

- **Student ratio 2025:** 0.59

- **Amount of students with transit time > 40 minutes:** 13%
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Amount of students with transit time > 40 minutes: 6%
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Amount of students with transit time > 40 minutes: 17%

Student ratio 2025: 0.93

Transit time:
- till 5 min
- till 10 min
- till 15 min
- till 20 min
- till 30 min
- till 40 min
- > 40 min

Usedom Primary School
Adapting the Provision of Public Services to Demographic Changes in Germany

Transit time:
- till 5 min
- till 10 min
- till 15 min
- till 20 min
- till 30 min
- till 40 min
- > 40 min

Amount of students with transit time > 40 minutes: 37%
## Outcome: Assessment of Alternative School Closures

<table>
<thead>
<tr>
<th>Amount of students with transit time to school &gt; 40 min</th>
<th>with school</th>
<th>without school</th>
<th>delta (impact of school closure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kröslin</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Lassan</td>
<td>7%</td>
<td>9%</td>
<td>+ 2%</td>
</tr>
<tr>
<td>Zirchow</td>
<td>1%</td>
<td>11%</td>
<td>+ 10%</td>
</tr>
<tr>
<td>Schlatkow</td>
<td>1%</td>
<td>4%</td>
<td>+ 3%</td>
</tr>
<tr>
<td>Krien</td>
<td>13%</td>
<td>6%</td>
<td>- 7%</td>
</tr>
<tr>
<td>Kemnitz</td>
<td>10%</td>
<td>16%</td>
<td>+ 6%</td>
</tr>
<tr>
<td>Usedom</td>
<td>17%</td>
<td>37%</td>
<td>+ 20%</td>
</tr>
<tr>
<td>Karlshagen</td>
<td>0%</td>
<td>4%</td>
<td>+ 4%</td>
</tr>
<tr>
<td>Spantekow</td>
<td>6%</td>
<td>17%</td>
<td>+ 11%</td>
</tr>
</tbody>
</table>

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Examples #3

Educational Outreach to Underprivileged Teenagers
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Demographic Forecast: Saale-Holzland County

Source: Thüringer Landesamt für Statistik
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Age Group 25-65: Parents and Work Force

-34% within 20 years

Source: Thüringer Landesamt für Statistik
At the end of the 2010/2011 school year 9% of all kids leaving school had no certificate.
Analysis: Where in the County do Educationally Underprivileged Teenager (probably) live?

- Accessibility of schools: 18 detailed ratios, 4x, 15%
- Income level: 2x, 10%
- Reception of social welfare: 4x, 20%
- Job status of the parents: 3x, 15%
- School leaving certificates: 3x, 20%
- Voter participation: 1x, 5%
- Mileau (social environment): 2x, 15%

1 generalized ratio for each community

Source: GGR
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Ratio: Estimated Portion of Educationally Underprivileged Teenagers

Estimated Portion

- significantly under average
- average
- significantly over average

Source: GGR, Thüringer Landesamt für Statistik, microm
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Ratio: Estimated Portion of Educationally Underprivileged Teenagers

**Estimated Portion**
- Green: significantly under average
- Orange: average
- Red: significantly over average

**Estimated Absolute Number**

Source: GGR, Thüringer Landesamt für Statistik, microm
Examples #4
Senior-focused Housing Projects
(Public Service or Free Market Projects)
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Westmecklenburg Planning Region
Population 65 and older: 2010 to 2030

Datenbasis: Kleinräumige Bevölkerungsprognose
Defining a Suitability Ratio

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Adapting the Provision of Public Services to Demographic Changes in Germany

Suitability of Communities for Senior-focused Housing Projects

- Suitability over average
- Average
- Suitability under average
Examples #5
Voluntary Fire Brigades
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Stettiner Haff County: Amount of voluntary fire man (trend forecast)

Decrease by one third within 17 years

Source: GGR
Number of Voluntary Fire Men Ready for Action Within 5 Minutes after Alarm

- Saturdays and Sundays: Aktive Kameraden
- Workdays before 6 pm: Aktive Kameraden, Davon: Atemschutzgeräteträger

Source: GGR
Adapting the Provision of Public Services to Demographic Changes in Germany

Elapsed Time to Fire Fighter Arrival

<table>
<thead>
<tr>
<th>Status Quo</th>
<th>Saturdays, Sundays, Holidays</th>
</tr>
</thead>
<tbody>
<tr>
<td>fire departments</td>
<td></td>
</tr>
</tbody>
</table>

- less than 10 min.
- 10 to 13 min.
- 13 to 15 min.
- 15 to 17 min.
- 17 min. and more

Source: GGR
Elapsed Time to Fire Fighter Arrival

Workdays between 6 am and 6 pm

- less than 10 min.
- 10 to 13 min.
- 13 to 15 min.
- 15 to 17 min.
- 17 min. and more

Source: GGR
Elapsed Time to Fire Fighter Arrival

Workdays between 6 am and 6 pm

- <10 min.
- 10 till <13 min.
- 13 till <15 min.
- 15 till <17 min.
- 17 min. and more

Source: GGR
Some Closing Remarks
What I (Still) Get to Hear in Growing Regions in Germany
Demographic change? Yes, that happens. But not in my community.
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Primary Schools
Status Quo in 2007

Dithmarschen County

Steinburg County
We are still growing. And with these new developments we are planning ...
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City of Hamburg
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Kummerfeld Primary School

<table>
<thead>
<tr>
<th>Year</th>
<th>Nullfall</th>
<th>Baulandstrategie &quot;Kommunale Glättung&quot;</th>
<th>Mindestschülerzahl</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2010</td>
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<td></td>
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<tr>
<td>2012</td>
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<td></td>
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<tr>
<td>2014</td>
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<td>2016</td>
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<tr>
<td>2018</td>
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<td>2020</td>
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<td>2022</td>
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<tr>
<td>2024</td>
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</tr>
</tbody>
</table>
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Prisdorf Primary School

![Chart showing the number of students (forecast) from 2008 to 2024. The graph includes lines for Nullfall, Baulandstrategie "Kommunale Glättung", and Mindestschülerzahl. The chart indicates a forecasted trend for student numbers over the years.]
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Tangstedt Primary School

Number of students (forecast)

- Nullfall
- Baulandstrategie "Kommunale Glättung"
- Mindestschülerzahl

Year: 2008 to 2024
Regional perspective: We do not have that many kids to distribute

Analysis focused on Borstel-Hohenraden

Analysis focused on Prisdorf

Analysis focused to Tangstedt

Analysis focused to Kummerfeld

= regional nonsense
Learn to co-operate while times are still good otherwise each service dies all alone
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Schools
Unstrut-Hainich County

Ratio concerning the number of students
100% is needed to prevent a school closure

- less than 50%
- 50% to 100%
- 100 to 150%
- 150% to 200%
- over 200%
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Dr. Jens-Martin Gutsche
Gertz Gutsche Rümenapp
Stadtentwicklung und Mobilität GbR
Ruhrstraße 11, 22761 Hamburg, Germany

Phone: +49 (0)40 / 853737-48
gutsche@ggr-planung.de

www.ggr-planung.de
Programme of Action for the Regional Provision of Public Services

The Federal Ministry of Transport, Building and Urban Development’s Programme of Action for the Regional Provision of Public Services is designed to assist 21 pilot regions in rural areas – districts, municipal associations or regional associations – in 2012/2013 in sustaining the provision of basic public services, despite an ageing and declining population, by autonomously developing a regional strategy based on a tried-and-tested procedure. In 2012/2013, each of the pilot regions will receive grants of up to 180,000 euros for this purpose. For those regions that show a high degree of dedication in shaping their strategy and use the results to develop innovations that are ripe for implementation, further funds have been budgeted for 2014 for follow-up projects to implement the regional strategies, with further grants of between 50,000 and 200,000 euros. The programme of action is accompanied by various milestones such as professional conferences and demography congresses. The ministries responsible for spatial planning in the non-city states were included in the programme of action right from the outset.

At the kick-off conference in Berlin on 1 and 2 December 2011, Federal Minister Peter Ramsauer gave the starting signal for the working phase of the 21 pilot regions in this, the most comprehensive spatial planning pilot project “MORO” to date.