



A vision for improving Minnesota by redesigning government to be more flexible, fair, and efficient.

Maximizing the Abilities of Your County Engineer

Background

An important element of government today is its ability to be flexible and adaptive in a changing world. Governmental organizations and processes that were effective in the past may not have adequately adjusted to keep pace with technological, economic and societal changes, and Minnesota's counties must therefore be prepared to rethink, restructure and redesign so that they again effectively address the needs of their constituents. In addition to the need to keep pace with external changes, county governments currently face a challenging fiscal landscape that will likely remain the status quo into the foreseeable future. Ultimately, as long as budgets remain tight, county boards will continue exploring opportunities to improve the ratio of county services delivered per taxpayer dollar expended.

County boards statewide plan to begin or have already begun exploring new ways to deliver social, health, and environmental services in addition to reassessing the expectations and requirements of every job within County government. The county highway engineer position is therefore being examined along with other county department head positions by county boards across the state, and during those examinations, boards have found that highway engineers often spend time on non-engineering work that could be assigned elsewhere. In response to those findings, county boards requested that AMC identify any relevant statutory/rule requirements that impact the county highway engineer position and generate ideas of potential engineering models that could free up a county engineer's time so that he/she could concentrate on the complex and technical engineering functions of county business.

Questions for the County Board

Before a county board considers any significant changes to the county engineer position or the existing engineering structure within its jurisdiction, AMC recommends that the county board answer, at minimum, the following ten questions to determine if changes could prove beneficial:

1. Is the county highway department currently delivering and providing the outcomes desired by the county board and constituents? If not, what outcomes need to be improved?
2. What are the primary or high priority functions of your county's highway department?
3. What are the secondary or lower priority functions of your county's highway department?
4. How does the county board define successful outcomes for the highway department?
5. What are the county highway department's key deliverables to the county board?
6. How much of the county highway engineer's time is devoted to engineering and how much is devoted to other functions such as personnel management, budgeting, administration, etc.?
7. Are there some duties that are currently the responsibility of the engineer that could be transferred to others in the department or to another department?
8. Are there any non-structural changes that the county board should consider to better meet the identified high priority outcomes the board identified on a previous question?
9. Are there any structural changes that the county board should consider to better meet the identified high priority outcomes the board identified on a previous question?
10. Has the county board talked with other county boards from the nearby region (or across the state) to discuss ways to improve county engineering outcomes?

Current Statutory and Rule Requirements

There are Minnesota statutes, rules and reports that impact the provision of county engineering services across the state. The following is a summary of the relevant requirements and processes that have implications for any proposed Redesign of county engineering services. If any of these statutes, rules or reports are found to impede counties' efforts to innovate and improve their engineering departments, AMC may need to legislatively or administratively pursue changes to remove the barriers:

Minnesota statute 163.07 requires the following:

- County boards shall appoint and employ a county highway engineer for a four-year term. There are only two exceptions to the four-year term appointment: 1) A newly appointed engineer can be appointed for an initial one-year, probationary term; or 2) An engineer that will reach the age of mandatory retirement within the four-year appointment can be appointed for the amount of time from the appointment until the engineer will reach the age of mandatory retirement.
- The county engineer shall devote their entire time to "official duties".
- Counties can contract with another county to share the services of a county engineer except for St Louis, Hennepin and Ramsey counties (which are prohibited from sharing services because they contain a first class city).

Minnesota rule 8820.0400 requires the following:

- Each county shall establish and maintain a highway department.
- The department must be adequately organized, staffed, and equipped to administer matters relating to the operations of the state aid program and to exercise all functions in accordance with law.
- The preparation of plans and specifications and supervision of construction and maintenance must be under the control and direction of a professional engineer, registered in the state of Minnesota and retained for that purpose.

Minnesota rule 8820.3000 allows the Commissioner to withhold a portion of the county's apportionment if he/she believes the county has failed to comply with MnDOT's State Aid division requirements.

In order to ensure that each county had the funds to adequately pay for an engineer, related staff, and supplies, the Highway Taxes Distribution Commission recommended in their 1956 report to the State Legislature that the MnDOT State Aid formula distribute 10% of Highway Trust Fund revenues equally among all counties. In 2009 the equalization apportionment was \$381,597 per county.

Potential Benefits and Challenges from Redesign

The following attempts to foresee some of the potential benefits and challenges—from the perspective of the county board and the county highway engineer—regarding any Redesign of county engineering services. Three potential benefits and challenges are listed under each of the four categories; each list is meant to be illustrative as every county board that wishes to oversee a Redesign of their county's engineering services would face a unique set of circumstances. AMC recommends that any county board that is interested in pursuing a Redesign of its engineering services should first consult the general template provided below and then develop a list of potential benefits and challenges that are specific to the county of interest.

Potential benefits from Redesign (from the county board's perspective):

- If counties shared the services of a highway engineer, all participating counties would only pay a portion of the highway engineer's salary and benefits (note that a county highway engineer's compensation is generally one of the higher salaries in county government).
- The funds saved through a Redesign of engineering services could be applied toward additional highway maintenance activities or to employ a lower-paid staff person to manage less technical, but still necessary, activities.
- The county information-sharing and collaboration that would be required to produce successful outcomes would result in improved cross-jurisdictional transportation planning and funding.

Potential benefits from Redesign (from the county highway engineer's perspective):

- A county highway engineer, removed from the burdens of managing less complex tasks, could focus his/her time on the duties pertaining to engineering and long range planning for the participating counties.
- County highway engineers would be able to influence the transportation maintenance and development of a larger jurisdiction than under the one-county, one-engineer model that is currently most prevalent throughout Minnesota.
- County highway engineers would have more funds at his/her disposal to leverage when competing for outside funding sources.

Potential challenges from Redesign (from the county board's perspective):

- In-person responses between the county board and its highway engineer could be delayed. Current county highway engineers describe their personal relationships with county board members as very important, and that dialogue could suffer without the implementation of appropriate procedures and vigilance from all stakeholders.
- A county board's highway engineer might submit multiple applications for the same competitive transportation funds – and some of those competing applications submitted by the county highway engineer could likely come from other counties under the regional jurisdiction of the county highway engineer.
- County boards would be required to develop a means of reconciling conflicting transportation visions and priorities with other county boards within the same county engineering Redesign model.

Potential challenges from Redesign (from the county highway engineer's perspective):

- In-person responses between the county highway engineer and county board members or the public could be delayed. Current county highway engineers describe their personal relationships with county board members as very important, and that dialogue could suffer without the implementation of appropriate procedures and vigilance from all stakeholders.
- A supervising county highway engineer would have to cede select duties to strong assistants, preferably registered engineers, whom would be required to be available for day to day operations within the participant counties. These duties could include reviewing bills for payment, signing payroll, daily communications with maintenance superintendents, or oversight of design staff and construction inspectors.
- The county highway engineer would be expected to assist multiple county boards in reconciling conflicting transportation visions and priorities so that the county highway engineer had clear direction on how to manage the region under his/her jurisdiction.

Potential Structural Options to Redesign County Engineering Services

The following structural options with brief comments are intended to provide a foundation from which county boards can begin a Redesign discussion about the future of their engineering services; there are obviously more options for how to Redesign a county's engineering services than are listed below. Finally, it is worth noting that some of the less-complex options below have been attempted (with varying degrees of success), but that the most transformative Redesign options (that would be the most challenging to implement but would also offer the greatest potential benefit) have not been seriously explored by county boards to date. *Models are listed from least complex to most complex:*

Two counties share a county highway engineer

- Competition between county boards for the county highway engineer's attention will exist but two pairs of counties currently employ this model.
- An agreement must be signed which defines how expenses, time, and pay will be calculated for engineering services.
- MnDOT State Aid requires that each county averages one half of the engineer's time to be certain that appropriate oversight of highway maintenance and construction occurs.
- Equipment can be shared or rented but is owned by one county.
- Interested counties may want to consider a joint committee of commissioners from both counties to resolve issues regarding competing needs.
- Any county considering this sharing model would be advised to interview counties that have used or currently use this model.
- County boards would have to accept some competition for the highway engineer's time and efforts in pursuing competitive funding.

Three or more counties share a supervising, county highway engineer

- This model would require the presence of capable assistants within each county.
- If county boards desired to individually receive reports from the county highway engineer, county board meeting agendas would need to accommodate likely scheduling challenges.
- The county highway engineer would be required to assess what work would require close technical oversight and what items could be deemed routine and therefore handled by assistants.
- County boards would have to accept some competition for the highway engineer's time and efforts in pursuing competitive funding.

Multiple counties create a Joint Powers Board for transportation

- The model would allow transportation planning and oversight to be conducted through a shared, decision-making process.
- The presence of capable assistants within each county would improve the implementation of this model.
- The county highway engineer would ultimately report to the Joint Powers Board instead of to the individual county boards.
- The Joint Powers Board would allow all staff to be consolidated and shared geographically.
- All equipment could be purchased and operated jointly.
- All planning and programming would be done on a shared basis.
- This model would allow the county highway engineer to make professional judgment calls that consider the transportation needs of the entire shared-engineering services region.

Two or more counties create, through a joint powers agreement, a Highway Engineering Department that employs the Department Highway Engineer and multiple assistant engineers as needed to do all engineering for the participating counties. This allows the engineering function to be spun out of the county public works department and act as a quasi-independent entity.

- Each county, cities within the counties, and townships within the participating group of counties would be eligible to contract with the JPA Engineering Department for engineering and project management services to the level that jurisdiction required.
- Each entity would be responsible for its own public works department in manners that are appropriate to that jurisdiction.
- This model, the most complex of the models listed, would allow county highway engineers to solely focus on core engineering tasks that are highly technical and cannot be managed by non-engineers.
- Other county managers could be hired to oversee other important tasks that must be completed but do not require engineering expertise.