Johnson County Road Improvement Fee Study

Jeffrey Summerville
University of Iowa

Dan Swartzendruber
University of Iowa

Lisa Garlich
University of Iowa

Please see article for additional authors.

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Road Improvement Fee Study

Prepared For:
The Johnson County Board of Supervisors
The Johnson County Planning and Zoning Department

April 28, 2000

Prepared by:
Jeffrey Summerville
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Field Problems in Planning 102:209/210
Graduate Program in Urban and Regional Planning
University of Iowa

Property of Urban and Regional Planning
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Johnson County Planning and Zoning
Mr. Rick Dvorak
Mr. R.J. Moore

University of Iowa, Urban and Regional Planning Faculty
Mr. Scott Hochstrasser
Dr. Peter Fisher
Dr. John W. Fuller

Other Contributors
Johnson County Board of Supervisors
Johnson County Secondary Roads Department
Johnson County Council of Governments
Johnson County Auditor’s Office
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Executive Summary

The Johnson County Land Use Plan, adopted in 1998, laid out a series of land use strategies. One of these strategies was to investigate development impact (benefit) fees that would cover the cost of infrastructure for new residential development. Pursuant to this strategy we have conducted a study of how to design and implement road improvement fees for the North Corridor. We focused on road costs because there is a clear connection between new development and the need for new or expanded road infrastructure to support this development, and because the required data is readily available. A road improvement fee can be assessed as a condition of the issuance of a building permit, occupancy permit, or plat approval. It’s legal justification lies in local government powers to regulate new growth and development and to provide adequate public facilities and services. It is levied to fund large-scale, off-site public facilities and services. The fee should be proportionate to the need for public facilities generated by the new development.

Any solution to Johnson County’s North Corridor funding needs must begin with an understanding of the County’s existing budget structure and revenue stream. Our analysis of road improvement fees demonstrated that 58% of Johnson County’s Secondary Road Budget comes from intergovernmental transfers and 42% from property taxes. This report begins with a summary of alternative funding sources the County may wish to pursue. The list of alternative revenue sources includes measures that could be implemented sooner rather than later because the County has clear legislative authority, for example, property tax increases. It also includes some measures that would require new enabling legislation. The report concludes with a model road improvement fee ordinance that takes into account the legal issues surrounding the road improvement fee.

There is no explicit statutory authority for local governments in Iowa to impose development impact fees. Impact fees arguably have a basis in the county zoning enabling statute (chapter 335) and the county home rule implementation statute (chapter 331) of the Code of Iowa, or other statutes governing the planning and financing of public facilities and services, may by implication grant local governments the authority to adopt impact fees. Because road improvement fees are a relatively new way of financing public facilities, they have given rise to legal debates, many of which have ended up in courts. In these cases, it has been important to prove that impact fees differ from taxes, and that a legal basis for issuing fees exists, stemming from state statute or home-rule authority. The most frequent question has been whether impact fees are taxes and the most critical issue on which the courts have ruled differently is whether impact fees imposed in a certain area are taking private property without compensation.

It is critical to state clearly the purposes for which the regulation is imposed, and to address the issues of earmarking, timing, calculation, and refund of the fee. Revenues collected should be placed in a separate fund to assure that they are used only for the facilities for which the impact fee was imposed, and not diverted for general use. Fees must be expended within a reasonable time to ensure that development receives a benefit from the facilities it was charged for. The amount of the fee must be proportionate to the need for public facilities generated by the new development. Finally, provisions must be made for refunds, appeals and individualized determination of fees.

The road improvement fee that we propose is based on a “demand-driven” model; it charges new development the cost of replacing the capacity that it consumes on the road network. That is, for every vehicle-mile of travel generated by the development, the road improvement fee charges the
proportionate cost to construct an additional vehicle-mile of capacity. Because travel is never evenly distributed throughout a roadway system, actual roadway systems require more than one vehicle-mile of capacity (VMC) for every vehicle-mile of travel (VMT) in order to keep most road segments functioning at an acceptable level of service. Consequently, the demand-driven road improvement fee model generally underestimates the full cost of growth. It is however, a conservative, legally sound and relatively simple approach to the calculation of road improvement fees.

Johnson County’s Secondary Road Management Study has identified a need for eleven major capacity-expanding improvements to the County’s secondary roads. After discussions with County staff, we narrowed the focus of this study to just six of the eleven major secondary roads. The secondary roads that were considered in this study are: Sugar Bottom Road, Newport Road, Lake Manor Road, 12th Avenue, Mehaffey Bridge Road, and Sandy Beach Road. The improvements include the paving of all six roads to increase capacity. The six projects will add 40,000 vehicle-miles of capacity during the peak hour for a total cost of about $17 million, of which about $9 million is anticipated to be funded with state or federal highway dollars. The remaining $8 million will need to be funded by county property taxes, developer contributions, or some other local revenue source.

The potential revenues from the proposed road improvement fee are dependent upon the amount and rate of future development in the unincorporated North Corridor area. With the projected road improvement fee, new development could pay approximately $2 million at build-out of the North Corridor. The estimate of new lots at build-out does not take into account any future re-zonings or subsequent platting of land in the North Corridor. Many of these assumptions are conservative, thus, potential revenues could be greater. It is clear that the road improvement fee will not capture all of the impacts of growth in the North Corridor, it will however, be a positive step towards meeting the capacity demands that growth places on Johnson County’s Secondary Road System.
Introduction

Road improvement fees are one of the most direct ways for local government to require new developments to pay a proportionate share of the costs they impose on the community. Fees are one-time, up-front charges, which are generally imposed at the time of development approval, although some jurisdictions allow extended payments over a period of years. Essentially, road improvement fees require that each new residential or commercial project pay its pro-rata share of the cost of new infrastructure facilities required to serve that development.

Road improvement fees and other forms of developer exactions are not the sole answer to local government’s capital funding needs. These funding mechanisms do not address the costs of maintenance, rehabilitation or replacement of existing facilities, nor can they be used to fund capital improvements required to remedy existing capacity deficiencies or safety problems. Finally, road improvement fees rarely generate sufficient revenue to fund all growth-related improvements required to accommodate new development. In sum, road improvement fees should be viewed as a supplemental financing mechanism to be used in concert with more traditional funding sources.

This study calculates road improvement fees that could be assessed by Johnson County in unincorporated areas in the North Corridor. (Road improvement fees for the remainder of the county may be developed later.) The road improvement fees are designed to recover the net costs of expanding the county’s arterial road system to accommodate the traffic generated by new development. The road improvement fee revenues will be earmarked for the arterial road improvements identified in the Johnson County Secondary Road Management Plan.

Let us begin with some definitions and rationale behind a Development Impact Fee (DIF) and then progress to the complexity of how one is calculated. According to Nicholas et al in *Practitioner’s Guide to Development Impact Fees* they can be defined as monetary charges imposed by local governments on new development to offset a proportionate share of public capital costs required to accommodate such development with necessary public facilities. The objective of a DIF should not be to raise money but to ensure adequate public facilities. The local government has the responsibility to provide adequate public facilities to protect the public health, safety, and welfare of its residents. The general idea is that the present community need not absorb all the costs of providing needed facilities to support new development, but may impose a proportionate or fair share of such costs upon the new development warranting the needed facilities. The major tenets of a proportionate share road improvement fee are as follows:

1. There must be a reasonable connection between the need for additional facilities and the growth resulting from new development.

2. Fees charged must not exceed the proportionate share of costs incurred or to be incurred to accommodate new development.

3. There must be a reasonable connection between expenditure of fees collected and benefits received by development paying fees in both time and geography. In other words, benefits must be received within a reasonable time (5 years) and funds should be spent exclusively within the geographic area (district) from which the funds were collected.
The proportionate share road improvement fee study will focus on secondary roads. The goal for the Road Improvement Fee is to protect the taxpayers that do not reside in the North Corridor from bearing the cost of improvements that benefit the residents of the North Corridor. The Road Improvement Fee will only cover the portion of road costs that would otherwise be paid by the county-wide property taxes, for this is the portion of costs that burdens county taxpayers. The portion of North Corridor road costs financed from the State of Iowa Road Use Tax Fund need not be charged to North Corridor development.

Demographics

Johnson County is located in one of the fastest growing counties in the State of Iowa. Between 1980-1994 there has been significant growth in the North Corridor. The number of residential units has increased by 1,029 units during this time. This amounts to a 73% increase of residential units in the North Corridor.

Table 1
North Corridor Non-Agricultural Residential Units, 1980-1994

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Big Grove</td>
<td>305</td>
<td>472</td>
<td>167</td>
</tr>
<tr>
<td>Jefferson</td>
<td>406</td>
<td>638</td>
<td>232</td>
</tr>
<tr>
<td>Newport</td>
<td>192</td>
<td>447</td>
<td>255</td>
</tr>
<tr>
<td>Penn</td>
<td>496</td>
<td>871</td>
<td>375</td>
</tr>
<tr>
<td>Total</td>
<td>1,399</td>
<td>2,428</td>
<td>1,029</td>
</tr>
</tbody>
</table>

Source: Johnson County Auditor

Johnson County’s population increased 18% overall between 1980 and 1990 (14,402 persons). The population of the unincorporated areas in the North Corridor grew by 26% over the same period. This growth rate is considerably higher than the County’s overall growth rate of 18%. According to the 1995 Johnson County North Corridor plan, the corridor population comprised 15% of the county’s total population in 1990. Between 1980-1990, the corridor accounted for 26% of the County’s growth. Using the assumption that the corridor will account for 15% of the projected County population, the corridor’s population is projected to increase between the range of 1,800 to 3,800 individuals by the year 2010.

Table 2

<table>
<thead>
<tr>
<th>Township</th>
<th>1980</th>
<th>1990</th>
<th>Difference</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Grove</td>
<td>1244</td>
<td>1347</td>
<td>103</td>
<td>8%</td>
</tr>
<tr>
<td>Jefferson</td>
<td>1482</td>
<td>1703</td>
<td>221</td>
<td>15%</td>
</tr>
<tr>
<td>Newport</td>
<td>956</td>
<td>1245</td>
<td>289</td>
<td>30%</td>
</tr>
<tr>
<td>Penn</td>
<td>1572</td>
<td>2322</td>
<td>750</td>
<td>48%</td>
</tr>
</tbody>
</table>

Source: 1980 & 1990 United States Census of the Population
1995 Johnson County North Corridor Plan
ALTERNATIVE REVENUE SOURCES

Introduction

Any solution to Johnson County’s North Corridor funding needs must begin with an understanding of the County’s existing budget structure and revenue stream. Our analysis of impact fees demonstrated that 58% of Johnson County’s Secondary Road Budget comes from intergovernmental transfers and 42% from property taxes. It highlights special challenges facing the County such as funding levels for road maintenance and equipment replacement. With this background, discussion within this section turns to identification of the full range of potential revenue sources available to Johnson County to meet its current increasing capital construction needs. Those revenue sources are then evaluated against a number of criteria including revenue potential, ease of implementation, legal authorization and incidence – or who pays.

Revenue Source Description

When considering solutions to its capital roadway needs, Johnson County staff directed the team to investigate the widest possible set of potential revenue sources. That set has been summarized in Table 3.
Table 3: REVENUE ALTERNATIVES

<table>
<thead>
<tr>
<th>Exactions</th>
<th>Fees</th>
<th>Taxes</th>
<th>Districts</th>
<th>External Grants</th>
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</thead>
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<tr>
<td>Exactions</td>
<td>Impact Fee</td>
<td>Property Tax</td>
<td>County Improvement District</td>
<td>State or Federal Grants</td>
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<td></td>
<td>Transportation Utility Fee</td>
<td>Sales Tax</td>
<td>Special Assessment District</td>
<td></td>
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<tr>
<td></td>
<td>Special Service Fee</td>
<td>Use Tax</td>
<td></td>
<td>BR, RISE</td>
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<tr>
<td></td>
<td>Vehicle Registration Surcharge</td>
<td>Local Options Gas Tax</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Connection/ Linkage Fee</td>
<td>Excise Tax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table was generated from an inventory of fiscal measures using several sources of information: a review of county powers, comparisons to other county's practices, and knowledge of the Iowa Code. The list includes measures which are relatively immediately implementable and for which the County has a clear legislative authority, for example, property tax increases or imposition of a use tax. It also includes some measures that would require new enabling legislation. This set of measures is described in the narrative that follows.

In Table 4, the list of revenue sources is further tested by a set of 13 evaluation criteria.

Exactions

Exactions are specific requirements for developers, such as paving a section of county road leading to their development, making improvements to arterials adjacent to the development, and/or completing roadways interior to the development.

According to our research, Johnson County currently does not require developers to provide all improvements to roadways. The developer does not pay a proportional share of signs and traffic control devices. The developer may be required to contribute towards improvements for an entrance or turning lanes onto the secondary road. It is Johnson County that is responsible for maintaining a secondary roads system to provide access to the unincorporated areas of the County.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Currently Used in</th>
<th>Can be Dosed</th>
<th>Under Current</th>
<th>Per Cent / Use of Fields</th>
<th>Graphic Area</th>
<th>OK for existing</th>
<th>OK for increasing new</th>
<th>Ease of Implementation</th>
<th>Revenue Potential</th>
<th>Revenue Flow</th>
<th>Local impact on Development</th>
<th>Equity</th>
<th>Political Feasibility</th>
<th>Uniqueness of Benefits</th>
</tr>
</thead>
</table>
| Irrigation | No | Yes | By resolution and/or administrative policy to property | Unincorporated county only | Yes | Relatively easy | Will not produce revenue, but will increase need | By definition, it is not directly tied to the growth of property | Consists of forecasts of amount of new property development expected | Accepted w/"cost of rip-off" small scale 
| | | | | | | | | | | | | | | | |
| Transportation Improvement Fee | No | Yes | Yes if legally funded | Vote required by the IC Board of Supervisors | Citywide or unincorporated county | No | No | Requires detailed study based on study conducted code | Rationale needs established. | Refined within given time frame | Consists of estimate, based on actual usage. | Detailed studies, involving spending, often legal challenges | |
| | | | | | | | | | | | | | | |
| Traffic Control | No | No | No if not used in town | Vote required. Assesse through monthly charge | Citywide or unincorporated county | No | No | Requires detailed study | Premises plus traffic generation is borne measure of impact | Unaccepted. Few provisions. Questions on legal authority | |
| | | | | | | | | | | | | | | |
| Special Service Fee | Yes | Yes | Vote required by the IC Board of Supervisors | Processing, Administration costs | Unincorporated county only | No | No | Based on development activity | None | None | Consists of well accepted | Clandestine of determination from impact costs | |
| | | | | | | | | | | | | | | |
| Vehicle Registration Fee | No | No | Vote probably required. Possible alternative is a fee | Construction, ops., and maint. | Citywide or unincorporated county | Yes | Yes | Relatively easy, due to use of existing administrative system | Consists of convenient, Predictable, Timely | Varies with economic cycle | Included in sales tax and other costs | High potential for abuse, if based on annual VMT | |
| | | | | | | | | | | | | | | |
| Connections/Linkage Fee | Yes | Yes | Vote required by the IC Board of Supervisors | Construction, ops., and maint. | Citywide or unincorporated county | Yes | Yes | Moderately low, based on total number of requests | Depends on cost | None | Consists of well accepted | Other legal challenges | |
| | | | | | | | | | | | | | | |
| Sales Tax | Yes | Yes | Requires public vote | Construction, ops., and maint. | County-wide | Yes | Yes | Requires public vote | Consists of increases | Varies with economic cycle | None within range | Voters more likely to accept it if tied to a specific improvement | |
| | | | | | | | | | | | | | | |
| Local Option Gas Tax | No | No | No if to avoid competition between counties | Requires public vote | Jurisdictional-wide | Yes | Yes | Difficult, requires new legislation, vote and accounting methods | High, Amount variable, depending on vote | Varies with governmental need for revenue | None | Voters willing to accept it if it does not affect their pocketbooks | Short-term subsidies | |
| | | | | | | | | | | | | | | |
| Property Tax | Yes | Yes | Requires public vote | Construction, ops., and maint. | County-wide | Yes | Yes | Requires new administration | Consists of increases | Varies with economic cycle | Somewhat consistent, Predicable | Generally not beyond school public support | Amendment of state constitution | |
| | | | | | | | | | | | | | | |
| State and Federal Grants | Yes | Yes | Application for grants based on specific project needs | Use according to purpose approved | Project boundaries | Yes | Yes | Therefore easy | Varies according to size, project type, and time | Varies according to size, project type, and time | Medium | Generally not limited to specific uses and eligibility criteria | |
| | | | | | | | | | | | | | | |

Table: Potential Revenues Matrix
Impact Fees

Impact fees require that each new residential or commercial project pay its pro-rata share of the cost of new infrastructure required serving that development. Impact fees are charges that are assessed on new development based on a standard formula such as the amount of square footage, the number of bedrooms per dwelling unit, or trips per employee. The collection of fees should occur at the issuance of a building permit.

Impact fees do not address the cost of maintenance, rehabilitation, or replacement of existing facilities, nor can they be used to fund capital improvements required to remedy existing capacity deficiencies or safety problems. Impact fees rarely generate sufficient revenue to fund all growth-related improvements required to accommodate new development. Impact fees are not the ultimate solution to a community’s capital funding needs, and should be viewed as a supplemental financing mechanism to be used in concert with more traditional funding sources.

Revenues from each impact fee must be used only on the type of facility for which it was collected, in a way that benefits the property for which the fee was paid. Impact fees do not require a referendum; they do however, require a majority vote by the Board of Supervisors. Impact fees are relatively simple to implement and generate revenue with each new building permit. Impact fees can be implemented countywide or specific to a geographic area e.g. the North Corridor.

Transportation Utility Fees (TUF)

TUF are based on the concept of treating the road system as a utility. The County recaptures a portion of the cost through some reasonable assignment and calculation of proportional benefit.

The fee structure would be based on a relationship to street usage defined by trip generation. Fees are typically used to complement the existing property tax levy. As part of an overall financial strategy, a transportation utility fee reduces dependence on tax revenues, fairly charges existing users, and has the advantage of flexibility. The fee can be adjusted yearly during the budget cycle based on the absolute amount of the street maintenance shortfall or increase from other revenue sources. The authority to enact local transportation utility fees is largely based on police powers as defined by the State of Iowa enabling legislation. The transportation utility fee has not been used in Iowa and the legality of this mechanism could be challenged.

Special Service Fees

Service fees may be charged to recover the administration costs of processing building permits and general administrative expenses. Some fee exemptions currently exist within “Enterprise Zones” where development is encouraged. Revenues from the fees cannot be used for roadway needs, but may cover the processing costs. By reducing the burden on general fund revenues, additional funding may be available for roadway purposes.

Vehicle Registration Surcharge

Counties may apply a surcharge on annual vehicle registrations. The charge may be one flat rate or a scale, which is based on the number of miles driven, age, value of vehicle, or the amount of
pollutants the vehicle emits. The purpose of the program is to raise the marginal cost of vehicular miles traveled. This serves as a disincentive to single occupancy commuting, thereby reducing vehicle miles traveled and mobile source emissions of pollutants. The program may be devised in a fashion that will discourage ownership of high polluting vehicles and to encourage proper vehicle maintenance. This type of fee must have enabling legislation in order to assess the fee. Thus, this method is not available to Johnson County at this time.

Connection/Linkage Fee

The history of linkage fees can be traced to inclusionary housing programs that were developed as a response to the exclusionary zoning policies established by several communities during the rapid suburbanization of the 70's and 80's. The exclusionary housing programs established by these communities were aimed at keeping minorities from obtaining housing in many suburban locations. In addition to the exclusionary housing policies promulgated by zoning, there was also the flight of many companies, which were being enticed to the suburban fringe areas. These two factors prevented many minorities and people of lower incomes from having access to jobs and affordable housing.

As a response to these issues, many communities established inclusionary zoning policies that sought to exact from developers, a portion of the housing units for low to moderate-income individuals. In exchange for the low-income housing, developer would be permitted to develop large suburban residential tracts. These low and moderate-income individuals were then able to move into federally subsidized housing units within these suburban developments. With the devolution of the federally subsidized affordable housing programs to the local level during the Reagan administration, it became clear that forcing developers to set aside a certain number of affordable units in a development would inflate housing prices across the board.

This came closer to home for many communities across the country which were faced with the inability of many of its residents to afford housing in the communities in which they worked. Professionals such as police officers, fire fighters, and school teachers who were not able to live in the communities where they worked, was a major problem. Searching for a more satisfactory approach, local governments have shifted away from using inclusionary zoning policies as a regulatory tool charging developers of residential subdivisions an exaction imposed on non-residential development.

The impetus behind the use of linkage fees is the reasoning that job-generating facilities such as office parks or industrial developments are seen as creating the need for low and moderate income housing, more than residential development. This emerging technique of off-site development impact exaction are imposed at the certificate of occupancy stage upon large scale mixed use or non-residential developments to promote policies such as low or moderate income housing and job training programs. Therefore, in order to mitigate the shortage of housing units, developers are being forced to add additional units to the city’s housing inventory. One of the problems with this approach is that there are several legal challenges to this type of linkage fee, and outside of California and New Jersey, these programs have not been widely established or legally tested.

Perhaps more germane to a rural area, is a variant of the linkage fee which seeks to limit growth and its externalities that flow to the county or rural community. For instance, in Washington County, Oregon the Intel Corporation and the County agreed in 1999 that the company would invest in new
equipment and plant upgrades over the next fifteen (15) years. The county agreed to grant $200 million in tax breaks to the company. In return, the company agreed to pay a growth impact fee of $1000 per excess worker per year if it exceeded a ceiling of 1,000 new manufacturing jobs above the 4,000 it already provides in the area. This was seen as a means to retain existing jobs in the area, but not overly burden the existing facilities such as roads, schools, and utilities. The use of a linkage fee in Johnson County specifically for secondary roads would be difficult to implement. As previously mentioned, linkage fees have been historically used to provide low to moderate income housing and the legality of linkage fees is tenuous at best.

Sales Tax

Sales tax may generate revenue for general expenses or specific services or purposes. A tax could be enacted for the purpose of funding roads (political factors may dictate specifying individual projects). Currently, no sales tax goes to the County general fund.

Iowa has a 5% state sales tax; the county has no additional sales tax. Due to the failure of the Iowa City Local Options Sales Tax of 1999, the use of a sales tax may not be appropriate for the County to pursue. This measure was defeated by a 4.5-1 vote in the unincorporated area.

Use Tax

Use taxes are paired with sales taxes at the same rate and applied to certain items purchased outside the jurisdiction for use inside the jurisdiction. They are not assessed at the sale, rather, during the licensing or permitting phase by the taxing jurisdiction. Counties may apply the use tax to building supplies. Vehicle use taxes are collected in the registration process and building supplies are applied when building permits are issued.

Property Tax

Property taxes may generate revenue for general expenses of government or specific services. The amount of the tax is determined by a property’s dollar valuation multiplied by a taxing jurisdiction’s “mill levy”. A mill represents one-thousandth of a property’s assessed valuation. For example, 10 mills of property tax on a property valued at $100,000 will generate $1,000 in tax revenue.

Johnson County does not currently have a road and bridge mill levy. The mill levy for rural residential for FY00 is 8.31288. The total levy rates for unincorporated rural areas vary between townships and districts; levies range from 19 to 23. If the mill levy were to increase, voters should know exactly what improvements the revenue would cover. If Johnson County decides to pursue a road or bridge levy, the residents of Johnson County must approve the levy in a referendum.

Local Option Gas Tax

The application of a local option gas tax is not available under current enabling legislation in Iowa. Johnson County could lobby to have the authority to assess a local option gas tax. This approach may work best as a multi-jurisdictional effort requiring intergovernmental sharing of revenues.
Excise Tax

An excise tax is a tax on the performance of an act, the engaging in an occupation, or the enjoyment of a privilege. In order to finance municipal infrastructure, a local government may impose an excise tax on the privilege of subdividing or developing property, rather than on the property itself. The sole purpose of an excise tax is to raise revenues for general government expenditures.

Figure 1

SALES & USE TAX COMBINATIONS

County Sales Tax
Applied to goods/services purchased within the county

City Use Tax
Applied to selected goods/services purchased outside city

Note: use taxes within a jurisdiction are cumulative, i.e., the sum total of all overlapping tax rates

County Use Tax
Applied to building supplies

County and City Use Tax
Applied to selected goods/services purchased outside City/County

State Constitutions of Colorado and Georgia allow CPIDS:

County Public Improvement Districts (CPIDS)

CPIDS are formed to make public improvements through an increase in the mill levy. Improvements may consist of providing fire protection services or for the purpose of installing, or acquiring any public improvement, including, but not limited to, fire protection facilities, grading, paving, curbing, guttering, or otherwise improving the whole or any part of any street or alley, parking and off-street facilities, sewer drainage collection systems, storm sewer drainage systems, and surface drainage systems. The distinction between a county public improvement district and other funding sources is, they can be used for all costs, including operating expenses.

Special Assessment District
Special Assessments finance infrastructure that benefits a relatively small geographic area rather than the entire community. These assessments are primarily used for financing local streets, streetlights, sidewalks, curbs, gutters and sewers. The cost of the facility is spread among those benefited by the construction of the facility; each beneficiary is required to pay its proportionate share of the improvement. Benefits are thought of as being the resultant increased property values that result from improvements.

The assessment should be levied in proportion to the benefit received by the landowner. The method in which the property may be assessed differs in various areas. Property is usually assessed by front footage, acreage, or square footage. State statutes typically authorize these assessments.

One of the perceived benefits of a special assessment is that it is targeted towards the local users of the benefits, and can target the needs of different areas of the community. They are often more politically palatable than a general tax increase to the entire area. These charges can be applied over a period of time, in order to spread out the impact on individuals who are directly affected.

Chapter 311 of the Iowa State Code addresses Secondary Road Assessment Districts. The power to establish, on petition, a secondary road assessment district lies with the board of supervisors. The district shall not be more than one-half mile wide on each side of the road. Total costs of any secondary road assessment district shall be paid out of the county treasury. The use of a special assessment district would be the most efficacious alternative to generate revenues (other than the road improvement fee) for road improvements in the North Corridor.

State or Federal Grants

Federal funds are available to counties through both Federal Highway Commission (FHWA) and Federal Transit Administration (FTA) grants. The FHWA funds transportation improvements through the Transportation Efficiency Act (TEA-21) as currently extended by Congress. The seven TEA-21 categories that currently fund transportation improvements in the Iowa region include:

- Interstate Maintenance
- National Highway System
- Bridge Replacement
- Congestion Mitigation/ Air Quality Improvements (CMAQ)
- Surface Transportation Program (STP)
- Discretionary Funds
- High Priority Projects (earmarked in legislation)

Interstate Maintenance and National Highway System funds are for the use on their respective roadway systems, with funding decisions determined by the Iowa Department of Transportation (IDOT). Bridge Replacement funds are allocated by formula, with funding decisions also determined by IDOT. The benefit of these funds to Johnson County is dependent to the extent of Interstate or National Highway System, or substandard bridges in a county. The Highway Bridge Replacement and Rehabilitation Program (HBRRP), a program under TEA-21, has increased its appropriations each year to Johnson County, as stated within the Act. The FY 2000 bridge replacement balance is $425,891.
CMAQ funds are used for transportation projects that demonstrate air quality benefit, particularly travel demand management and traffic flow improvement programs. The Surface Transportation Program allocates 10% of funds statewide for safety improvements, with projects selected by formula; 10% of funds statewide to enhancement programs; and the balance of funds distributed as either STP-Metro or STP-Flexible, with these funds available for a variety of transportation projects, including new roadways, roadway widening, and other roadway improvements. The availability of these funds to a county depends on the county’s ability to compete for these funds against other regional transportation needs.

Discretionary funds are individual applications of the federal government to fund very large transportation improvements. The number of discretionary projects to any state is extremely limited, and difficult for a County to obtain.

The FTA has two categories of funds available to counties:
1) Section 5307 (FTA capital assistance to elderly persons and persons of disabilities)
2) Section 5309 (FTA general transit assistance to rural and small urban areas)

**State Funds**

Revitalize Iowa’s Sound Economy (RISE) is the main source of state funding for Iowa County roads. RISE was created by the Iowa Legislature in 1985 to promote economic development in Iowa through construction or improvement of roads and streets. Funded by a two-cent increase in the motor vehicle tax, RISE receives approximately $33 million annually (according to 1993 figures). This Act, Section 315.3, subsection 3, Code 1997, authorizes the state Transportation Commission to transfer moneys temporarily from the RISE Fund to the Primary Road Fund if the commission receives a letter from the Director of Transportation certifying that federal transportation funding is not available. Moneys must be repaid to the RISE Fund within three months of any transfer. The commission must ensure that moneys will be available to meet contract obligations on approved RISE projects. The Act took effect February 3, 1998.

The RISE Program is designed to be targeted toward value-adding activities, to provide maximum economic benefit, emphasize local involvement and initiative, and address the situations requiring an immediate response and commitment of funds. Many factors are considered when evaluating RISE applications including the economic impact on the state. County governments can apply for these funds with 25% of the funds being allocated for secondary roads.

**Tax Incidence**

Table 4 addresses the issue of tax incidence, that is who pays? Officials as well as the public are concerned about not only what the tax is and how much it is, but with who bears the responsibility of paying it. There are two concerns, first, that a tax not be passed on unfairly to an unintended target and second, that the tax not result in undesired locational impacts.
Table 5: Tax Incidence of Alternative Revenue Sources: Who Pays

<table>
<thead>
<tr>
<th>Potential Revenue Sources</th>
<th>Who Pays Initially</th>
<th>Who Ultimately Pays</th>
<th>Effect on Development Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exactions</td>
<td>By the developer at the development approval stage and/or at other points in the development process</td>
<td>In a competitive market, much of the costs will be absorbed by the land owner/developer; exactions will be offset by lower land costs</td>
<td>Location will be more important than exactions unless they are set extremely high.</td>
</tr>
<tr>
<td>Impact Fees</td>
<td>By the developer/builder if paid at the building permit stage</td>
<td>In most markets, the cost will be absorbed by the home buyer, but will be offset by lower land costs affecting the developer/land seller</td>
<td>Location will be more important than fees unless they are set extremely high.</td>
</tr>
<tr>
<td>Connection/Linkage Fee</td>
<td>Developer</td>
<td>To fend off extra costs for low income homes, the cost is passed on to the home owner from the developer</td>
<td>Location is very important</td>
</tr>
<tr>
<td>Use Tax</td>
<td>Construction Companies and Out of Town Motor Vehicle Purchasers</td>
<td>In a strong building market, most of this cost would be passed along to the homebuyer/owner and business owner. For vehicles, the buyer pays.</td>
<td>Low</td>
</tr>
<tr>
<td>Property Tax</td>
<td>Property Owner</td>
<td>For the owner-occupied dwellings and businesses- the owner bears the costs. Rental property- the cost may be passed down to the renter</td>
<td>The property tax itself is unlikely to cause regional shifts; it can however, hasten the development of ag lands</td>
</tr>
<tr>
<td>Sales Tax</td>
<td>Retail purchaser; grocery and natural gas/electric exempted</td>
<td>Residents of Johnson County as well as visitors/ travelers</td>
<td>Low; 48 out of the 99 counties in Iowa have a local options sales tax</td>
</tr>
<tr>
<td>Excise Tax</td>
<td>Purchaser</td>
<td>Purchaser</td>
<td>Not typically</td>
</tr>
<tr>
<td>Local Options</td>
<td>Vehicle Operator</td>
<td>Vehicle operator in most cases; it is unlikely that commercial vehicle operators could pass much of the cost on to consumers</td>
<td>If enacted by one county, could displace gas purchases over county line. However, tax would be less than normal fluctuation</td>
</tr>
<tr>
<td>Gas Tax</td>
<td></td>
<td></td>
<td>If actual benefits are proportional to costs, should either have no effect or could encourage development in Johnson County</td>
</tr>
<tr>
<td>Improvement District</td>
<td>Depends on the specific revenue device— see sales and property tax above; could also assess fees of one sort or another</td>
<td>Depends on the specific revenue device— see sales tax and property tax above</td>
<td></td>
</tr>
</tbody>
</table>

The tax incidence table (Table 4), attempts to summarize the anticipated incidence of the various fees and taxes considered during this study. Some of the sources exhibit an incidence that is transparent and desirable. The local option sales tax, for example, clearly is a user fee. If adopted countywide and in cooperation with other metro counties, the tax would have no locational impacts. For other sources, the incidence and/or the locational impacts are less clear. Increasing the property tax to fund roadways might not place Johnson County at a competitive advantage with other counties but might provoke premature development of agricultural lands.

The incidence of impact fees is what draws the most comments. Research within other jurisdictions that have imposed fees indicate that the incidence of an impact fee varies by market conditions, the amount of the fee, and geography (e.g., whether the housing market for the taxing jurisdiction is self-sufficient or integrated into a larger region). In the present economic climate of Johnson County, it appears that a moderate impact fee will tend to be absorbed by the home buyer but will be offset by lower land costs affecting the developer/land seller. With a downturn in the housing market, the impact fee cost would tend to be absorbed more directly by the developer.
Legal Foundation of Road Improvement Fees

Because road improvement fees are a relatively new way of financing public facilities, they have given rise to legal debates, many of which have ended up in courts. The courts have looked upon impact fees as either invalid taxation or necessary local land use regulation. The following section explores general legal issues surrounding these debates with some explanation of their legal basis [1].

The first three issues—statutory authority, proportionality, and geographic relationship—have been raised when impact fees were challenged as being illegal taxation disguised as fees. In these cases, it has been important to prove that impact fees differ from taxes, and that a legal basis for issuing these fees exists. This basis stems from state statute or home-rule authority. The most frequent question has been whether impact fees are taxes and the most critical issue on which the courts have ruled differently is whether impact fees imposed in a certain area are taking private property without compensation. United States and Iowa Constitutional challenges could arise in three ways: regulatory takings, the equal protection clause, and the right to due process.

Road improvement fees can be defined as a type of development exaction in the form of a predetermined money payment.

- They are assessed as a condition of the issuance of a building permit, occupancy permit or plat approval.
- They are pursuant to local government powers to regulate new growth and development and to provide for adequate public facilities and services.
- They are levied to fund large-scale, off-site public facilities and services necessary to serve new development.
- They are in the amount that is proportionate to the need for public facilities generated by the new development.

A tax is a charge for the purpose of raising general revenue and has no relation to the services rendered and differs from a fee (such as an impact fee), which is a charge regarded as a payment for services rendered. The distinction is important because local units of government may exercise only those powers granted to them by the state, and the power to tax and the power to regulate using fees have different constitutional and statutory bases. A tax is a revenue generating measure, while a fee is a regulatory measure.

Statutory Authority

One of the greatest challenges to the use of impact fees by local governments is whether there is legislative authority to impose them. “Dillions Rule” states that municipal corporations “possess and can exercise the following powers, and not others: First those granted in express words, second, those necessarily or fairly implied in or incident to the powers expressly granted; third, those essential to the accomplishment of the declared objects and purposes of the corporation—not simply convenient, but indispensable.” [2]
More than twenty states have expressly authorized development impact fees. Often such enabling legislation is limited in scope to certain jurisdictions, or to specific public improvements. The Texas model for example, contains extensive substantive and procedural standards and has been followed in Wisconsin and Illinois.

Impact fees may also have a basis in the general language of zoning statutes, or by the valid exercise of a local government’s police power authority. Zoning or planning enabling statutes, or other statutes governing the planning and financing of public facilities and services, may by implication grant local governments the authority to adopt impact fees. Impact fees may also be seen as a reasonable exercise of police power authority to protect public health, safety and welfare by ensuring that adequate public facilities exist to serve new and existing development.

**Proportionality and Geographic Relationship**

Proportionality refers to the amount of the fee in relation to the need for it and the benefit the fee payers will receive. The first issue is whether the development will create a need for new public facilities. The second and more critical issue is the extent to which the government requires the new development to pay its proportionate share for new facilities, but not more than its share. The third issue is the extent to which the fee benefits the development that pays it. Some states like Florida have established districts or zones within which fees are collected and spent, ensuring geographic relationship between the fee payers and benefits. State courts have established a variety of tests to review the proportionality of fees. However, the standard test most often applied when reviewing the legality of an ordinance is the rational nexus test. The requirements include: proportionality between the need for new facilities generated by the development and the amount of the fees, and a reasonable connection between the funds collected and the benefits accruing to the development.

**Takings**

When a government enacts a regulation that goes too far, the regulation may constitute a taking. The Supreme Court decision in the often-cited Dolan v. City of Tigard lends guidance regarding the proper relationship between the amount of the exaction and the purpose for the exaction. Because the money generated by the imposition of impact fees is of a regulatory nature, it must be used to finance a public interest that is directly related to the development being assessed and may not exceed that development’s fair share of the cost of the improvement. The test is called "rough proportionality" and requires local governments to determine that their proposed exaction is related both in nature and extent to the impact of the development [3].

**Due Process and Equal Protection**

Two aspects of the Fourteenth Amendment—due process and equal protection, may challenge impact fees. Due process claims focus on whether the regulation in question is a reasonable exercise of the state’s police power. The relevant legal practice of the local jurisdiction must include the “notice and hearing” requirement of procedural due process and the “arbitrary, irrational and capricious” standard for substantive due process.

The equal protection clause of the Fourteenth Amendment and Iowa Constitution, Article 1, Section 6, ensure all people equal protection under the law. This means that local governments cannot
unreasonably discriminate between persons who are similarly situated. The equal protection doctrine does not require that all persons are dealt with identically, but it does require that if a distinction is made it must have some relevance to the purpose for which the distinction is made. Any classification for fee payers must have a rational basis. To avoid an equal protection claim, the fees must not be applied arbitrarily and must not have been enacted for a discriminatory purpose.

**Judicial Review of Impact Fees**

The other critical issue in determining the validity of an impact fee is the characterization of the fee as a regulation or a tax. The fundamental difference between a tax and a fee lies in its purpose and authority. A tax is a revenue generating measure, while a fee is a regulatory measure. Thus tax revenues may be deposited into a general fund and are available for general purposes. In contrast, fees, particularly impact fees, should be used only for the purpose for which the fees were collected, and placed into a separate fund. The authority of a tax comes from the taxing power from the state legislature to the local jurisdiction. The authority of a fee stems from the state’s police power to regulate in the interest of public health, safety and welfare.

This distinction depends primarily on the stated purposes for adopting the ordinance. If the ordinance is imposed primarily to raise general revenue, it is a tax; if the purpose is for regulation of some activity under the police power, then it is a fee (regulation). When an impact fee is deemed to be regulatory in nature (thus an exercise of police power), the ordinance will be upheld. However, even if the fee is found primarily to be regulatory, it still needs to withstand the *rational nexus test*.

**Johnson County Road Improvement Fee**

There is no explicit statutory authority for local governments in Iowa to impose development impact fees. Impact fees arguably have a basis in the county zoning enabling statute (chapter 335) and the county home rule implementation statute (chapter 331) of the Code of Iowa. Other statutes governing the planning and financing of public facilities and services may also grant local governments the authority to adopt impact fees by implication.

The most recent litigation over the issue of impact fees in Iowa concerned an impact fee ordinance for a neighborhood park system in the city of West Des Moines. First and foremost the Iowa District Court found the West Des Moines ordinance to be a tax and not a regulatory fee, thereby unauthorized by state legislation. However, this fee lacked many features expected of an impact fee; therefore it never was a true impact fee. If a secondary road improvement fee in Johnson County met all the standards of the rational nexus test, would it still be upheld in an Iowa court as a valid regulatory fee if challenged? This question still remains. The secondary road improvement fee we have calculated addresses the proportionality and geographic relationship requirements for impact fees. The implementation strategies and model ordinance recommended contingencies that take into account all the legal concerns over impact fees discussed above.

To summarize briefly, it is critical to state clearly the purposes for which the regulation is imposed, and to address the issues of earmarking, timing, calculation, and refund of the fee. Revenues collected should be placed in a separate fund to assure that they are used only for the facilities for which the impact fee was imposed, and not diverted for general use. Fees must be expended within a reasonable time to ensure that development receives a benefit from the facilities it was charged for. The amount of the fee must be proportionate to the need for public facilities generated by the
new development. Finally provisions must be made for refunds, appeals and individualized determination of fees.

Case Studies

Iowa City Neighborhood Open Space Plan, 1993

On July 20, 1993 the City of Iowa City adopted the Neighborhood Open Space Plan as an amendment to the Comprehensive Plan. Its main purpose is to ensure that adequate parkland is identified and preserved in developing areas, with the developer/homebuilder providing land and or in lieu fees for acquisition and development of these parks. The method chosen for providing additional open space was to conduct a needs assessment based on existing neighborhood open space for every 1,000 residents. The assumed standard was based on a national standard and this number was determined adequate for the City of Iowa City.

The Neighborhood Open Space Ordinance mandated that a development provides three acres of *active* open space per 1,000 residents. It was also stated that the developer could contribute an in lieu fee rather than providing for the open space. The cash that was generated from these payments would then be used by the City to purchase open space that would serve the development. Within the ordinance, it was provided that the developer could receive a credit against the amount of required land that would have to be dedicated. The credit would be given if there were a park or elementary school site in the district; however, the developer could not be fully exempt from providing some form of land or fee. The Iowa City Homebuilders Association immediately challenged the fee. However, to date there has been no legal action taken against the City of Iowa City. The attorney for the Homebuilders Association has specified some concerns with the fee and these are outlined below.

1. The Homebuilders Association felt that the City of Iowa City was vague in how they determined the fee. For example, the City only stated that a national standard determined that three acres per 1,000 residents was adequate. The City of Iowa City did not clearly define current standards that existed within the City.

2. The Homebuilders Association felt that the provision of the City’s ability to mandate an in lieu fee rather than land might penalize a developer by not allowing a credit for any provided open space that may be provided. The Homebuilders Association argued that this provision by the City might not be justified.

3. The final section of the Homebuilders Association concern was with the use of in lieu funds. The association argues that it is not clear how the city will determine when a park “will benefit the residents of the subdivision making the payment.” The Homebuilders Association quite accurately determined this was vague and needed to be more thoroughly defined. The City addressed this issue.

In summary, the City of Iowa City has successfully implemented the Neighborhood Open Space Plan. While there were some early objections by the Homebuilders Association, it is evident that the fee or land dedication was not arbitrary and capricious. This assumption is made because there has been no legal action pursued by the Homeowners Association to date.
City of West Des Moines Mandatory Dedication Ordinance, 1985

The Mandatory Dedication Ordinance was adopted by the city of West Des Moines in 1985. Its main purpose is to ensure that adequate parkland is identified and preserved in developing areas, with the developer/homebuilder providing the funds for acquisition and initial development of these parks. The method chosen for financing the City’s park system is through a series of fees on each acre of residential land and on each housing unit, regardless of type. The level of fee was established to have each development pay the equivalent of 5 percent of the value of the land being developed plus initial park improvements (grading, seeding, sidewalk, street frontage, utility hook-ups) [4].

The Mandatory Dedication Ordinance enacted a fee of $100 per acre on developers at the time of subdivision and then enacted a variable fee on residential builders at the time of application for a building permit. The fee on residential builders was as follows: $200 for a single family detached unit, $150 for a single family attached unit, and $75 for an apartment unit. The ordinance also enacted a fee for additions and improvements in excess of 50 percent of the fair market value. The ordinance was amended in 1995 to double the amount of fees imposed on developers and residential builders. This fee increase led to a legal challenge by the Homebuilders Association of Greater Des Moines. The Iowa District Court for Polk County found the ordinance to be invalid for the following reasons:

1) that the mandatory dedication ordinance is a tax rather than an road improvement fee, that the tax has not been authorized by the Iowa legislature, and as a result, the ordinance is void;

2) that each of the fees exacted in the mandatory dedication ordinance is an unlawful taking under the due process clauses of both the United States and Iowa Constitutions;

3) that the classifications created by the mandatory dedication ordinance violate the equal protection clauses of the Iowa and United States Constitutions by:
   a) irrationally creating two classes of fee payers based upon timing of development or building;
   b) by creating irrational fee structures among developers and various types of buildings;
   c) by excluding commercial development from the exactions;
   d) by requiring double taxation of new development;

4) That the mandatory dedication ordinance is so arbitrary and capricious as to violate substantive due process.

The court found the Mandatory Dedication Ordinance to be a tax and not a regulatory fee, and a tax cannot be levied without express authorization from the Iowa Legislature. In finding the ordinance to be a tax the court cited the few Iowa cases dealing with the distinction between taxes and regulatory fees. A tax has been defined “as a charge to pay the cost of government without regard to special benefits conferred.” The court further stated, a “city’s police power to impose regulatory fees limited to a reasonable cost of enforcement. When the amount charged is substantially in excess of any expenses incurred by the governmental body in regulating the activity for which the fee is imposed, it generally is regarded as a tax” [5].
The court goes on to say that acquiring and developing neighborhood parks is not a regulation, as that term is normally understood. Instead, such an activity is more properly characterized as a public improvement. With respect to public improvements, Iowa Code authorizes special assessments. Because the Mandatory Dedication Ordinance is not truly regulatory in nature it is an unauthorized tax. Unlike regulatory fees such as the cost of a building permit or a sewer line, each resident or acre of land is not receiving a direct benefit. The alleged benefits of neighborhood parks are too indirect and too remote. As a result, the Mandatory Dedication Ordinance is a tax, not a regulatory fee.

The second argument of the court states that even if the Mandatory Dedication Ordinance is a regulatory fee; it fails the rational nexus requirements of proportionality and geographic relationship. The requirements include: proportionality between the need for new facilities generated by the development and the amount of fees, and a reasonable connection between the funds collected and the benefits accruing the development. For example, the $200 per acre impact fee on land developers has no rational relationship to actual demand for neighborhood parks, since people, not acres, generate actual demand. Similarly, the fee schedule for residential structures is not proportionate to occupancy at all. The result is an impact fee on single-family attached and detached dwellings that is higher than an appropriate fee based on occupancy. Finally some fee payers have received little or no benefit from the ordinance. The ordinance as enacted did not require that funds raised in a neighborhood park district be spent on a park benefiting that fee payers. As a result, the Mandatory Dedication Ordinance is a tax designed to raise revenue, “not a regulatory fee where the levy exacted is calibrated as closely as possible to the benefits conferred” [6].

The court declared the fees exacted by the ordinance to constitute a taking under the due process clauses of both the United States and Iowa Constitutions. It is a violation of due process for a government to collect a tax it has no authority to impose; it is considered a taking without due process of law. Even if the ordinance is not a tax, it still constitutes a taking because of its irrationality and lack of proportion. “In order to defeat the plaintiff’s claims the City must demonstrate that the exactions under the ordinance impose burdens and distribute benefits in a roughly proportional manner [7].” Rough proportionality does not mean mathematical precision, rather an effort to achieve as much proportionality as reasonably possible under the facts and circumstances.

The classification of fee payers created by the ordinance violates the equal protection clause of the United States and Iowa Constitution. There is no justification for the level of fee on land developers ($200 per acre) compared to builders ($150 to $400 per residential unit). The method of assessment does not attempt to fairly apportion the fees. The concept of equal protection provides that any classification of fee payers must have a rational basis. This is similar to the rough proportionality standard for takings. If a classification of fee payers does not bear a roughly proportional relationship to benefits obtained it is irrational as an impact fee.

**City of Solon Recoupment Fees For Use of City Resources**

The City of Solon adopted the Recoupment Fees For Use of City Resources. This fee is designed to regulate the use of development of land to assure that new development bears a proportionate share of the cost of capital expenditures necessary to provide public capital facilities in the City.
The ordinance mandates that any person who seeks to develop land in the City of Solon is required to pay a fee in addition to the set building permit rate schedule. The amount of the fee is determined by the City Council, there is no defined formula for determining the fee. Rather, a process of negotiation precludes the determination of the fee. The use of the funds are meant for any capacity expanding project in the City of Solon, the funds cannot be used for maintenance or operations. To date, this fee has not been legally challenged.

**End Notes**


4. Homebuilders Association of Greater Des Moines v. The City of West Des Moines, CL 74217 (Iowa District Court for Polk County 1999).

5. Ibid., 29.

6. Ibid., 32.

7. Ibid., 38.
Design of the Road Improvement Fees

The proposed road improvement fee methodology is based on a "demand-driven" model, which basically charges a new development the cost of replacing the capacity that it consumes on the road network. That is, for every service unit of traffic generated by the development, the road improvement fee charges the net cost to construct an additional service unit of capacity (a service unit is defined as a vehicle-mile). Because travel is never evenly distributed throughout a roadway system or the time of day, actual roadway systems require more than one vehicle-mile of capacity (VMC) for every A.M. peak hour vehicle-mile of travel (VMT) in order to keep most road segments functioning at an acceptable level of service. Consequently, the demand-driven road improvement fee model generally underestimates the full cost of growth. It is, however, a conservative, legally sound and relatively simple approach to the calculation of road improvement fees. Much of this section will focus on a road improvement fee for single family units. While the discussion primarily focuses on single family homes, the group is not implying the fee cannot be charged to other land uses. The single family home was chosen because most of the development that occurs in the North Corridor is single family homes. It should be mentioned that fees generated by other land uses are different from those collected for single family homes.

A demand-driven fee will not necessarily recover the full cost of a planned list of road improvements. However, a list of planned road improvements is needed in order to calculate the average cost to add a unit of capacity to the system. The list of planned improvements identified in the County's Secondary Road Construction Program has been narrowed for the purposes of this study. Because these are the priority improvements identified in the County's Secondary Road Management Study, fee revenues will be restricted to funding these improvements. To keep the planning basis for the fees up-to-date, the Secondary Road Construction Program, road improvement fee study and ordinance should be updated every three years.

The recommended formula for county road improvement fees in the North Corridor of Johnson County is as shown in figure 2. The next section discusses the definition of service area, which is proposed to be limited to the North Corridor. In the following sections of this study, the components of the formula are addressed, including the definition of service unit, definition of the major road system, travel demand factors and net cost per service unit.
Figure 2

Road improvement fee per land use = VMT x Net Cost

Where:
VMT = Trips x % New x Length
Net Cost = Cost – Credit

Where:
VMT = Vehicle miles of travel generated by the development on the county arterial system during the AM peak hour.

Trips = Peak hour trip ends during AM peak of adjacent street traffic

% New = percent of trips that are primary trips as opposed to pass by or diverted link trips.
For example, a convenience station does not generate much new traffic. Many of the persons that use convenience stores do not make a trip to exclusively stop at the convenience station. It is necessary to adjust this number based on how many of the trips generated will be new trips. There is no adjustment for single-family homes, as all of the trips generated by the development are new.

Length = Average length of a trip on the county arterial system in miles

Cost = Average cost to create a new vehicle mile of capacity (VMC) based on planned arterial improvements (presumably in the North Corridor Road Management Plan).
Cost = cost of a mile of road divided by the capacity.

Credit = Revenue credit based on existing proportion of road improvements which have been funded by the State or Federal government.

Service Area

In light of the differences in land development patterns, it is recommended that Johnson County be divided into at least two service areas (North Corridor and the remainder of Johnson County) for the purpose of road improvement fees. This study develops road improvement fees only for the North Corridor portion of the county, since the Johnson County Road Improvement Standard and Secondary Road Management Study provides information only for existing road conditions and needed road improvements for the North Corridor. Johnson County may develop Road Improvement Fees for the remaining portion of the County at a later date.

Service Units/Vehicle Miles of Travel

Service units create the link between supply (roadway capacity) and demand (traffic generated by new development). An appropriate service unit basis for road improvement fees is vehicle-miles of travel (VMT). Vehicle-miles is a combination of the number of vehicles traveling during a given
time period and the distance (in miles) that these vehicles travel. Consequently, peak hour VMT is the most appropriate service unit for Johnson County’s Road Improvement Fee.

For an individual development, peak hour trip (PHT) generation rates are most appropriate for assessing the impact of a new development on the need for road improvements. The peak hour trip rates are used because roads must be constructed with capacity limits that meet or exceed the demand placed on them during peak hours of travel.

**Major Road System**

The proposed road improvement fee is designed to address the cost of expanding the County’s secondary road system in order to accommodate the traffic generated by new development. State and federal highways are excluded from the major roadway network that is to be funded with road improvement fees.

The county’s secondary roads that are the focus of this report (these are listed in Table 5), consist of 30.88 lane-miles, and have a capacity of 6,000 vehicles during the peak hour. It is projected that the North Corridor has already met capacity on some of the roads which service this area and any further growth will lead to increased pressure for road improvements. A detailed summary of the focus roads in the North Corridor is provided in Table 5. This table shows existing traffic volume and projected traffic volume at build-out. This table also summarizes the current capacity of each road.

Based on the Johnson County Secondary Road Assessment, only 3 of the 12 roads currently exceed capacity. However, in the absence of some major capacity expanding projects, several of the County’s secondary roads will exceed capacity in the near future.

**Travel Demand Factors**

The travel demand generated by specific land use types is a product of three factors: 1. Trip Generation 2. Percent Primary Trips and 3. Trip Length. The first two factors are well documented in the professional literature, and the average trip generation characteristics identified in studies of communities around the nation should be reasonably representative of trip generation characteristics in Johnson County. In contrast, trip lengths are much more likely to vary between counties, depending on their geographic size, shape, and major roadway systems.

Trip generation rates are based on information published in the most recent edition of the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual, 1996*. Rates were established for specific land use types within the broader categories of residential, commercial, industrial, office/financial, and general recreation. Rates are per dwelling unit or 1,000 square feet of gross floor area.

Trip generation rates represent trip ends, or driveway crossings from the site of a land use. Trip rates also need to be adjusted by a “primary trip factor” to exclude pass-by and diverted trips. This adjustment is intended to reduce the possibility of over-counting by only including primary trips generated by the development. Pass-by trips are those trips where a person is already on a particular route for a different purpose and stops at a particular development along that route. For
example, a stop at a convenience store on the way home from work is a pass-by trip for the convenience store. A pass-by trip does not create additional burden on the secondary road system because that vehicle would have used the road segment even without stopping at the convenience store. Therefore, it should not be counted in the assessment of a road improvement fee. A diverted trip is similar to a pass-by trip, but a diversion is made from the regular route to make an interim stop. The reduction for pass-by and diverted trips was drawn from the ITE manual and discussions with faculty at the University of Iowa.

The average trip length is the most difficult travel demand factor to determine, because it must be based on local data. It was determined that eight miles was an approximate estimation of average trip length. This number was derived from discussions with County staff and the team measuring lengths from different points in the North Corridor. An origin/destination survey would be an appropriate tool to determine the average trip length in the North Corridor. While crude, this approximation is adequate for this study.

Proportionate Cost per Peak Hour Vehicle Mile of Capacity

Dividing the cost of the planned improvements by the additional capacity created by the improvements derives the average cost of adding an additional vehicle mile of capacity; proportionate to the demand that is generated by the new development. This cost should be reduced to account for the availability of outside revenue sources to fund the growth-related improvements, resulting in an average local cost per service unit.

The average cost to add a new peak hour vehicle mile of capacity to the county’s arterial system is derived from the cost estimates for capacity-expanding projects identified in the Johnson County Council of Governments, Secondary Road Management Study. The Secondary Road Management Study has identified a need for eleven major capacity-expanding improvements to the county’s secondary roads. This number was reduced upon discussions with County staff and this report ultimately considers six major secondary roads. The improvements include the paving of all six roads to increase capacity. By paving these six roads, the capacity would be expanded because speeds on these roads would increase and the flow of traffic would move more efficiently. The six projects will add 42,000 vehicle-miles of capacity during the peak hour for a total cost of about $17 million, of which about $9 million is anticipated to be funded with state or federal highway dollars. The remaining $8 million will need to be funded by the County, developer contributions, or some other local revenue source.
Table 5
Planned Road Improvements

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Miles</th>
<th>Lane Miles</th>
<th>Existing</th>
<th>Future</th>
<th>Peak Hour</th>
<th>VMC</th>
<th>Estimated Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUGAR BOTTOM NE RD</td>
<td>1.32</td>
<td>2.63</td>
<td>2</td>
<td>2</td>
<td>1,000</td>
<td>8,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>NEWPORT NE RD</td>
<td>3.89</td>
<td>7.77</td>
<td>2</td>
<td>2</td>
<td>1,000</td>
<td>8,000</td>
<td>$3,300,000</td>
</tr>
<tr>
<td>LAKE MANOR NE RD</td>
<td>2.04</td>
<td>4.08</td>
<td>2</td>
<td>2</td>
<td>1,000</td>
<td>8,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>12th Avenue Extended</td>
<td>1.1</td>
<td>2.2</td>
<td>2</td>
<td>2</td>
<td>1,000</td>
<td>8,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>MEHAFFEY BRIDGE NE RD</td>
<td>2.62</td>
<td>5.24</td>
<td>2</td>
<td>2</td>
<td>1,000</td>
<td>8,000</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>SANDY BEACH NE RD</td>
<td>4.48</td>
<td>8.96</td>
<td>2</td>
<td>2</td>
<td>1,000</td>
<td>8,000</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>Total</td>
<td>15.46</td>
<td>30.88</td>
<td>6,000</td>
<td>48,000</td>
<td>$16,600,000</td>
<td>$7,968,000</td>
<td></td>
</tr>
</tbody>
</table>

1Existing Capacity is based on a study performed by JCCOG. This study was in anticipation of a Johnson County Secondary Road Management Study.

The numbers presented are the capacity for chip seal roads.

2Future Capacity is based Johnson County Secondary Road Improvements Standard.

3Estimated Project Cost is based on the same JCCOG Secondary Road Management Study.

4Local cost is 48% of total project cost. Inter-Governmental transfers account for 52% of J.C. Secondary Road Budget.

The data from the Johnson County Secondary Road Budget indicates that State and Federal highway funding has historically funded roughly fifty-two percent of the major road expansion projects. This number was derived from taking the total Johnson County Secondary Road Budget and finding the average percent of the budget, which is from inter-governmental transfers. An analysis of the Johnson County road expenditures reveals that most of the County’s road funds are used to maintain the existing road system, and almost no funding is available from current sources to expand the road system to accommodate growth in traffic volumes.

Table 6
Johnson County Secondary Roads Source of Funds

<table>
<thead>
<tr>
<th></th>
<th>State of Iowa Road Use Tax Fund (RUTF) Receipts</th>
<th>Property Tax Transfers</th>
<th>Total Funds</th>
<th>New Construction Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>$2,113,566</td>
<td>$2,041,312</td>
<td>$4,154,878</td>
<td>$560,206</td>
</tr>
<tr>
<td>1994</td>
<td>$2,117,236</td>
<td>$2,131,504</td>
<td>$4,248,740</td>
<td>$447,250</td>
</tr>
<tr>
<td>1995</td>
<td>$2,527,816</td>
<td>$2,360,016</td>
<td>$4,887,832</td>
<td>$458,489</td>
</tr>
<tr>
<td>1996</td>
<td>$2,514,257</td>
<td>$2,440,084</td>
<td>$4,954,341</td>
<td>$353,371</td>
</tr>
<tr>
<td>1997</td>
<td>$2,623,628</td>
<td>$2,528,700</td>
<td>$5,152,328</td>
<td>$607,782</td>
</tr>
<tr>
<td>1998</td>
<td>$2,694,331</td>
<td>$2,491,979</td>
<td>$5,186,310</td>
<td>$641,637</td>
</tr>
<tr>
<td>1999</td>
<td>$2,915,746</td>
<td>$2,153,642</td>
<td>$5,069,388</td>
<td>$1,093,083</td>
</tr>
<tr>
<td>Total</td>
<td>$17,506,580</td>
<td>$16,147,237</td>
<td>$33,653,817</td>
<td>$4,161,818</td>
</tr>
</tbody>
</table>

Source: Johnson County Secondary Roads Budget

The calculation of the net cost per service unit, based on the foregoing analysis, is shown in Table 7. The total cost of the planned improvements is divided by the new capacity created to determine the average cost per service unit. This number is then multiplied by the percent of the cost that will be paid with local funds to determine the local cost per service unit. This credit is based on the percentage of Johnson County’s Secondary Road Budget, which is provided by the State and Federal government.
Table 7
Proportionate Cost Per Vehicle Mile of Capacity

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Planned Improvement Cost</strong>(^1)</td>
<td>$16,600,000</td>
</tr>
<tr>
<td><strong>New Vehicle Miles of Capacity</strong>(^2)</td>
<td>42,000</td>
</tr>
<tr>
<td><strong>Proportionate Cost Per Vehicle Mile of Capacity</strong></td>
<td>$395.24</td>
</tr>
<tr>
<td><strong>Percent Local Cost</strong>(^3)</td>
<td>48%</td>
</tr>
<tr>
<td><strong>Local Cost Per Peak Hour Vehicle Mile of Travel</strong></td>
<td>$189.71</td>
</tr>
</tbody>
</table>

\(^1\)Total Planned Improvement Cost is based on the JCCOG Secondary Road Inventory.
\(^2\)New Vehicle Miles of Capacity = Future Capacity - Existing Capacity. Existing capacity is based on J.C. Secondary Road Inventory
\(^3\)Local cost is 48% of total project cost. Inter-Governmental transfers account for 52% of J.C. Secondary Road Budget.

Road Improvement Fee Schedule

Based on projected peak hour travel demand by land use and the net cost per peak hour vehicle miles traveled, the proportionate costs to provide major road capacity per unit of development are shown in Table 7. In order to determine the road improvement fee by land use type, the following equation was used:

\[(A.M. \text{ Peak Hour Trip Rate}) \times \text{Percent New Trips} \times \text{Average Trip Length}\]

This calculation determined the peak hour vehicle miles traveled by land use type. Upon determining this figure, the calculation for the ultimate fee is:

Peak Hour Vehicle Miles Traveled by Land Use \times Proportionate Cost per Peak Hour Vehicle Miles of Capacity

This calculation determines the net cost per peak hour vehicle mile traveled by land use type. Thus, if the board accepts the road improvement fee, each newly constructed single-family unit will have to pay $1,138.29, which will be placed in the Road Improvement Fund. The average trip length figure was determined by discussions with County Staff and an effort by the team to choose points within the North Corridor and drive the distance into the Central Business District of Iowa City. This estimate is conservative and the County could get a more accurate estimate of average trip length by conducting a survey of the residents in the North Corridor. The percent new trips were determined by the guidelines published in the *ITE Trip Generation Manual, 1996* and discussions with County Staff, and faculty at the University of Iowa.
Table 8
Road Improvement Fee Schedule

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>A.M. Peak Hour Trip Rate</th>
<th>Average Trip Length Miles</th>
<th>Percent New Trips (Primary Trip Adjustment)</th>
<th>Peak Hour Vehicle Miles Traveled by Land Use</th>
<th>Proportionate Cost per Peak Hour Vehicle Miles Traveled</th>
<th>Net Cost per Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential per Dwelling Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Family</td>
<td>0.75</td>
<td>8</td>
<td>100%</td>
<td>6.00</td>
<td>$189.71</td>
<td>$1,138.29</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>0.51</td>
<td>8</td>
<td>100%</td>
<td>4.08</td>
<td>$189.71</td>
<td>$774.03</td>
</tr>
<tr>
<td>Manufactured Home</td>
<td>0.4</td>
<td>8</td>
<td>100%</td>
<td>3.20</td>
<td>$189.71</td>
<td>$607.09</td>
</tr>
<tr>
<td>Condominiums</td>
<td>0.44</td>
<td>8</td>
<td>100%</td>
<td>3.52</td>
<td>$189.71</td>
<td>$667.79</td>
</tr>
<tr>
<td>Commercial per 1,000 sq. ft. (Open 15-16 Hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience Retail</td>
<td>10.56</td>
<td>8</td>
<td>10%</td>
<td>8.45</td>
<td>$189.71</td>
<td>$1,602.71</td>
</tr>
<tr>
<td>Industrial per 1,000 sq. ft.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Industrial</td>
<td>3.02</td>
<td>8</td>
<td>100%</td>
<td>24.16</td>
<td>$189.71</td>
<td>$4,583.50</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>0.82</td>
<td>8</td>
<td>100%</td>
<td>6.56</td>
<td>$189.71</td>
<td>$1,244.53</td>
</tr>
<tr>
<td>Office/Financial per 1,000 sq. ft.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Office</td>
<td>3.32</td>
<td>8</td>
<td>100%</td>
<td>26.56</td>
<td>$189.71</td>
<td>$5,038.81</td>
</tr>
<tr>
<td>Medical Office</td>
<td>8.91</td>
<td>8</td>
<td>100%</td>
<td>71.28</td>
<td>$189.71</td>
<td>$13,522.83</td>
</tr>
<tr>
<td>General Recreation per Parking Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campground</td>
<td>74.38</td>
<td>8</td>
<td>33%</td>
<td>196.36</td>
<td>$189.71</td>
<td>$37,252.90</td>
</tr>
<tr>
<td>Golf Course</td>
<td>20.52</td>
<td>8</td>
<td>100%</td>
<td>164.16</td>
<td>$189.71</td>
<td>$31,143.50</td>
</tr>
</tbody>
</table>

Potential Revenues

The potential revenues from the proposed road improvement fee are dependent on the amount and rate of future development in the unincorporated North Corridor area, which in turn will be determined, by the countywide rate of development. This is based on the current amount of land, which are zoned RS and A2. The group assumed that only 65% of the total vacant land in the North Corridor would be developed. The estimate that is provided does not consider any future re-zonings or subsequent plattings of land in the North Corridor. It is also assumed that the only development that will occur in the North Corridor is residential development. With the projected road improvement fee, new development could pay approximately $2 million given these assumptions. As previously mentioned, many of these assumptions are conservative, thus, potential revenues could be greater. It is clear that the road improvement fee will not capture all of the impacts of growth in the North Corridor.

Table 9
Potential North Corridor Road Improvement Fee Revenues at Build-Out

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Unit</th>
<th>Total Residentially Zoned Acres (excluding platted lots)</th>
<th>Total Residentially Zoned Acres (Assuming Building at 65% of Capacity)</th>
<th>Total Lots Platted</th>
<th>New Lots Buildout</th>
<th>Net Cost/Development Unit</th>
<th>Potential Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Single Family</td>
<td>2,510</td>
<td>1,632</td>
<td>141</td>
<td>1,773</td>
<td>$1,138</td>
<td>$2,017,874</td>
</tr>
</tbody>
</table>

Source: Johnson County Auditor's Office
Implementation Strategies

Adoption

It is often the case that road improvement fees alter the way communities and developers approach new development. There are important considerations, which include timing of the effective date and the transition period. It is typical that road improvement fees do not become fully effective on the date they are adopted; there is usually a grace period. In general, the effective dates of new road improvement fee ordinance range from about thirty days to three months from the date of enactment. Prior to adoption of the road improvement fee, Johnson County should hold a series of public meetings where the public and development community can become familiar with the proposed ordinance. There are various reasons why Johnson County may delay effective dates of road improvement fees.

First, there is the practical reason of allowing time for staff to adjust to the new administrative task. Road improvement fees are usually assessed at the time of building permit issuance, so it is usually the building permit authority that handles the fee determination and collection. However, coordination with the Secondary Roads Department will be necessary to ensure that fee collection is properly recorded and allocated. This process will obviously take time; thus this issue must be considered when determining the effective date of the Road Improvement Fee.

Second, there is the practical political consideration of giving the development community enough time to adequately respond to a new assessment program. Developers who are considering projects in the North Corridor must be forewarned about the magnitude of the fee.

Third, there must be consideration given to projects that have already been approved but for which building permits have not been issued. In this instance, developers will argue that initial project approval was based on a set of financial assumptions, one of which did not include the road improvement fee. According to Nicholas et al, developers rarely receive an exemption if platting was approved prior to adoption of the fee but building has yet to commence.

Collection

The fundamental issue in collection is who will collect the fees. Since the objective of road improvement fees is to provide Johnson County Secondary Roads with the necessary revenue, close collaboration with the Planning and Zoning Staff will be required. Collection of road improvement fees should be handled by one entity, usually the building permit authority. Although, the Planning and Zoning Staff will be responsible for collection, it is imperative that the Secondary Roads Department be aware of the fee schedule, how many fees are collected from which developments, and when the building permit was issued and the expected date of development completion. The Planning and Zoning Staff could complete this step relatively easily once the fee is in place.

Accounting

Accounting procedures are needed to assure that road improvement fees collected are deposited into an earmarked account, expenditures from which will benefit contributing development. Because the improvement fee will be assessed exclusively in the North Corridor, it is imperative that the
funding only be used to benefit that area. The accounting system should also be designed to make available to anyone information on where road improvement fees from individual contributing developments were spent. This allows public officials and developers alike to be assured that improvement fees benefit contributing development.

Disbursement

It is obvious that road improvement fees must be spent. However, there are several issues, which are raised relating to earmarking, timing of disbursement, and location of disbursement, and effect on capital improvement policy.

Earmarking

While the improvement fee should be earmarked to account(s) suggested above, care must be taken not to accumulate so many separate accounts that they are too small to be useful. Therefore, for the purpose of this improvement fee, the system should be devised as a single account, which is specifically for the North Corridor. If at a later date the County decides to implement an improvement fee for the rest of the County, this issue will need to be discussed. However, because of the geographic boundaries of this study, it would be most beneficial to have a single account, which covers the entire North Corridor.

Timing

Road improvement fees must be expended within a reasonable amount of time. Most communities expend them within a five to six year capital improvements program. There are some exceptions to this rule; however, to avoid possible legal problems Johnson County should exercise caution when determining the amount of time that the improvement fee must be expended. If Johnson County does find it impossible to spend the improvement fee within a reasonable period of time, there must be a provision for a refund of the fee.

Location

Because the proposed road improvement fee is going to be exclusively charged to new development in the North Corridor, the County must ensure that the residents of the North Corridor receive all benefit.

Effect on Capital Improvement Policy

Road improvement fees can influence existing capital improvement policy. Because there will be funding available for projects in the North Corridor and not for others, those roads may receive higher priority than originally planned. This may occur in Johnson County because money received from new development must be spent within a certain period of time. Thus, the effect may be to place roads in the North Corridor at a higher priority, to ensure that the fees collected are spent in a reasonable period of time.
Appeals

The Road Improvement Fee program must include a provision for consideration of special or unique circumstances. Developers, for example, may claim lower road improvement fees for a particular project than indicated or implied on the formal road improvement fee schedule. Administrative provisions should allow developers to perform their own impact fee analysis and present it to the fee administrator or governing body. Finally, there must be provisions for an appeals process. A fee payer affected by the decision of the Road Improvement Fee administrator on an application for independent fee calculation should be able to make an appeal by filing a petition with the governing authority.

Refunds

In instances when road improvement fees may not be used as intended, they cannot be diverted to other purposes. Unspent improvement fees may need to be refunded if the facilities they were to finance are cancelled or unreasonably delayed. In the event of a refund, the County should focus on notice and the parties who should be paid.

In the case of a refund, Johnson County should only entitle current landowners to the refund. It is believed that current owners ultimately absorbed most of the improvement fee in higher prices, lower quality, and/or higher density development. Further, notice should be given to all owners contributing to development as shown on the local property tax records. Owners should be given a reasonable period of time, perhaps three months to one year, to claim the refund. Refund claims should be relatively simple, involving only certification of ownership.

Determining the appropriate improvement fee to be refunded involves using the fee schedule for the year in which the building permit was issued. Refunds should also include interest, most likely at the local government-borrowing rate.

Data Maintenance

The improvement fee program must be continually updated as to assumptions, facility cost estimates, growth patterns and rates, demographic changes, and so on. Improvement fee assessments will therefore be kept current and less subject to adverse court review. There are three considerations, which must be accounted for by Johnson County.

First, Johnson County should establish the frequency at which it will update the improvement fee schedule. Specific staff should be designated for this responsibility. Data updating may require establishing formal links between agencies; perhaps road improvement fees task force comprised of representatives of all affected agencies. This group could be required to meet annually so that data may be updated, more specifically, cost estimates should be given the most consideration by this task force.

Second, the Board of Supervisors should establish a formal process by which changes are effected. This may include a formal public hearing during which the changes are proposed and adopted. Citizens and developers would be allowed to propose changes at that hearing as well. Changes that are adopted should be supported by the findings of the task force; this will avoid the problem of being arbitrary and capricious.
Finally, Johnson County might decide the conditions under which unscheduled reevaluation would occur. Changes may include substantially higher or lower than projected growth rates, large formerly unplanned annexations by the communities contiguous to the North Corridor.

**North Corridor Road Management Plan**

Prior to adopting a formal road improvement fee, Johnson County must adopt a North Corridor Road Management Plan, which would clearly define, some of the assumptions made within this report and would prioritize the required road improvements within the Capital Improvements Plan. To that end, a needs assessment should be carried out inventorying existing secondary roads, identifying necessary improvements or expansions based on explicitly identified service areas and service standards, and the capital costs of these improvements or expansions. The road management plan should also include information on trip rates and average length of trips. Much of this has been accomplished in the initial Secondary Road Management Study performed by JCCOG. This document in turn needs to have a basis in the comprehensive plan and then connected to a Road Improvement Fee capital improvement plan.

**Administrative Expense**

According to Nicholas et al, the road improvement fee will initially carry a high implementation cost. However, once the schedule and staff training are in place, it can be administered at relatively low cost. Figures vary between communities; however, the range is often between two and five percent of the road improvement fee. If the cost of administration can be determined, the improvement fee itself can recover it. This practice has occurred in other communities and should be considered in Johnson County. The procedure for collecting a fee for staff time involves reasonably documenting the cost of administering the program as a percentage of total improvement fee receipts. This cost is then added to the improvement fee as a proportionate increase covering administrative costs.
Appendix A
Model Johnson County
Road improvement fee Ordinance

I. Findings
II. Title
III. Applicability
IV. Intent and Purpose
V. Level of Service Standard
VI. Definitions
VII. Fee Imposition
VIII. Independent Fee Calculation Study
IX. Earmarking of Funds
X. Refunds
XI. Periodic Review of Ordinance
Findings

The Board of Supervisors for Johnson County finds, determines and declares that:

1. Johnson County must expand its road system in order to maintain current levels of service if new development is to be accommodated without decreasing current levels of service. This must be done to promote the public health, safety, and welfare.

2. The Iowa Code, under Home Rule Authority, _______________ authorizes the use of road improvement fees.

3. The imposition of road improvement fees is one of the preferred methods of ensuring that development bears a proportional share of the cost of capital facilities necessary to accommodate such development.

4. The revenue generated by this new growth and development under the county’s existing fiscal structure will not be adequate to fund the needed road capital improvements necessary to accommodate this new growth and development if the desired level of service standard on the county’s major road system is to be maintained.

5. The fees derived from this ordinance are based upon, and do not exceed the costs of providing the additional rights of way, road construction, and road improvements necessitated by the new land developments for which the fees are levied.

6. The report entitled “_______________,” dated ________, sets forth a reasonable methodology for the determination of the impact of new development on the need for and costs of additional rights-of-way, road construction, and road improvements in Johnson County.

Short Title and Authority

1. Citation. This section shall be known as and may be cited as the “Johnson County Road improvement fee Ordinance.”

2. Authority. The Board of Supervisors of Johnson County has the authority to adopt this regulation, pursuant to Sections - _____________ and other relevant laws of the State of Iowa.

Applicability This regulation shall apply to all lands in unincorporated Johnson County lying in the area known as the “North Corridor.”
Intent and Purpose

1. **General.** This regulation is intended to implement and be consistent with the Road improvement fee Study and the North Corridor Transportation Plan.

2. **Implementation.** This objective is accomplished by requiring all new Traffic generating development to contribute its proportionate share of the funds, land, or public facilities necessary to accommodate any impacts on road capital facilities having a rational nexus to the proposed land development and for which the need is reasonably attributable to the proposed development.

3. **Fair allocation of costs.** This regulation is intended to be consistent with the principles for allocating fair share costs of new public facilities to new users. It approaches the problem of determining the fair share road improvement fee in a conservative and reasonable manner. This fee will only partially capture the governmental expenditures associated with improving the County’s major road system.

4. **Technical Support.** This regulation is based primarily upon the Secondary Roads Construction Program and other technical data and conclusions contained in the Johnson County Road improvement fee Study, all of which are incorporated herein by reference.

Level of Service Standard

The Johnson County Board of Supervisors has determined that the County’s major road system shall operate at LOS D (This is the current level of service).

Definitions

1. **Average Trip Length** means the average length in miles of trips on the County’s secondary road system.

2. **Building Permit** means a development permit issued by the Johnson County Planning and Zoning Department before any building or construction activity can be initiated on a parcel of land.

3. **Capacity** means the maximum number of vehicles which have a reasonable expectation of passing over a given section of road during a given time period.

4. **Existing Traffic Generated Development** means the most intense use of land within the (12) months prior to the time of commencement of Traffic-Generating Development.

5. **Fee-payer** means a person commencing traffic generating land development activity who is obligated to pay a road improvement fee in accordance with the terms of this regulation.

6. **Gross Floor Area** is the area within the outside dimensions of a building including each floor level, halls, lobbies and stairways. It shall not include floor space within the building reserved for parking or loading of vehicles and unimproved basement space, or separate space used only
for building maintenance or storage. Exterior features of the building such as stairs, walkways, porches are not to be considered part of the gross floor area.

7. **Road improvement fee Administrator** means the person or persons designated by the Johnson County Planning and Zoning Administrator to administer the road improvement fee ordinance.

8. **Level of Service (LOS)** means a qualitative measure describing operational conditions, from “A” (best) to “F” (worst), within a traffic stream or at intersections, which is quantified for road segments by determination of the traffic volume to capacity ratio (V/C), which is a measurement of the amount of capacity of a road which is being utilized by traffic.

9. **Major Road System** means all arterial roads within the unincorporated parts of Johnson County, excluding state and federal highways.

10. **Non-Site Related Improvements** mean road capital improvements and right-of-way dedications for roads on the County’s major road system that are in the Road improvement fee Study that are not site-related improvements.

11. **Percent New Trips Factor** means the percentage of peak hour trips that a proposed use will generate that constitutes new or additional trips added to the County’s major road system. Those trips that do not represent additional trip ends shall not be counted as new or additional trips. Pass-by trips and diverted trips do not constitute new trips.

12. **Person** means an individual, corporation, governmental agency, business trust, estate, trust, partnership, association, two or more persons having a joint or common interest, or any other entity.

13. **Road Capital Improvement** shall include transportation planning and preliminary engineering, design, surveys, right-of-way acquisition, permitting and construction of all necessary features for any road construction project on an arterial road of the County’s major road system as defined and limited to the area of study in the North Corridor. Road capital improvements shall include but not be limited to: a) construction of new through lanes; b) bridge construction; c) drainage facilities that are necessitated by the new road system; d) construction of turn lanes and acceleration and deceleration lanes; e) the widening of existing roads.

14. **Site-Related Improvements** mean those road capital improvements and right-of-way dedications that provide direct access to the development. Direct access to the development shall include but not be limited to the following: a) driveways and streets leading to and from the development; b) right and left turn lanes leading to those driveways and roads; c) internal subdivision streets. Credit is not provided for site-related improvements under the terms of this Regulation.

15. **Traffic Generating Development** is a development which was designed or intended to create a use of the land that will contain more dwelling units or floor space than the most intensive use during the preceding twelve (12) months prior to the commencement of traffic generating development that increases the generation of vehicular traffic.
16. *Traffic Generating Development (Commencement of)* occurs upon the issuance of the final plat of the subdivision, or the issuance of a building permit, whichever occurs first after the effective date of this Regulation.

17. *Trip* means a one-way movement of a vehicular travel from an origin (one trip end) to a destination (the other end trip).

18. *Trip Diverted* means a trip that is already on a particular route for a different purpose that simply diverts travel to a particular land use.

19. *Trip Generation* means the attraction or production of trips caused by a certain type of land development.

20. *Trip Pass-by*, means a trip that is already on a particular route for a different purpose that simply stops at another particular land use.

21. *Vehicle Miles of Travel* means the combination of the number of vehicles travelling during a given time period and the distance (in miles) that they travel.

**Fee Imposition**

**Timing and Obligation of Payment.**

a. After the effective date of this Regulation, any person who causes the commencement of traffic generating activities shall be obligated to pay a road improvement fee consistent with the terms of this Regulation. The fee shall be calculated and paid at the time of issuance of a building permit for the development. The obligation to pay the road improvement fee shall run with the land.

b. Any person who, prior to the effective date of this Regulation, agreed as a condition of development approval to pay a road improvement fee shall be responsible for the payment of the fees under the terms of such an agreement, and the payment of such fees will be offset against any road improvement fees otherwise due pursuant to the terms of this regulation.

**Exemptions.**

The following development shall be exempt from the terms of this regulation. An exemption must be claimed by the fee-payer at the time of application for a building permit.

a. Alterations or expansion of an existing building where no additional dwelling units are created, the use has not changed, and no additional vehicular trips are generated over and above the existing use.

b. The construction of accessory structures or buildings that will not be used as dwelling units, or produce any additional vehicular trips over and above that are generated by the existing use.
c. The replacement of a destroyed or partially destroyed building or structure of the same size and use, provided that no additional trips will be produced over and above that produced by the existing use of the land.

Establishment of a Fee Schedule

a. any person who causes the commencement of traffic generating development, except those persons exempted shall pay a road improvement fee in accordance with the following schedule:

Road Improvement Fee Schedule

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>A.M. Peak Trip Rate</th>
<th>Average Trip Length Miles</th>
<th>Percent New Trips (Primary Trip Adjustment)</th>
<th>Peak Hour Vehicle Miles Traveled by Land Use</th>
<th>Net Cost per Peak Hour Vehicle Miles Traveled</th>
<th>Net Cost per Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential per Dwelling Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Family</td>
<td>0.75</td>
<td>8</td>
<td>100%</td>
<td>6.00</td>
<td>$189.71</td>
<td>$1,138.29</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>0.51</td>
<td>8</td>
<td>100%</td>
<td>4.08</td>
<td>$189.71</td>
<td>$774.03</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>0.4</td>
<td>8</td>
<td>100%</td>
<td>3.20</td>
<td>$189.71</td>
<td>$607.09</td>
</tr>
<tr>
<td>Condominiums</td>
<td>0.44</td>
<td>8</td>
<td>100%</td>
<td>3.52</td>
<td>$189.71</td>
<td>$667.79</td>
</tr>
<tr>
<td>Commercial per 1,000 sq. ft. (Open 15-16 Hours)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience Retail</td>
<td>10.56</td>
<td>8</td>
<td>10%</td>
<td>8.43</td>
<td>$189.71</td>
<td>$1,602.71</td>
</tr>
<tr>
<td>Industrial per 1,000 sq. ft.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Industrial</td>
<td>3.02</td>
<td>8</td>
<td>100%</td>
<td>24.16</td>
<td>$189.71</td>
<td>$4,583.50</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>0.82</td>
<td>8</td>
<td>100%</td>
<td>6.56</td>
<td>$189.71</td>
<td>$1,244.53</td>
</tr>
<tr>
<td>Office/Financial per 1,000 sq. ft.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Office</td>
<td>3.32</td>
<td>8</td>
<td>100%</td>
<td>26.56</td>
<td>$189.71</td>
<td>$5,038.81</td>
</tr>
<tr>
<td>Medical Office</td>
<td>8.91</td>
<td>8</td>
<td>100%</td>
<td>71.28</td>
<td>$189.71</td>
<td>$13,522.83</td>
</tr>
<tr>
<td>General Recreation per Parking Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campground</td>
<td>74.38</td>
<td>8</td>
<td>33%</td>
<td>196.36</td>
<td>$189.71</td>
<td>$37,252.90</td>
</tr>
<tr>
<td>Golf Course</td>
<td>20.52</td>
<td>8</td>
<td>100%</td>
<td>164.16</td>
<td>$189.71</td>
<td>$31,143.50</td>
</tr>
</tbody>
</table>

b. If a fee is based on 1,000 square feet, the square footage of the structure shall be measured in terms of gross floor area.

c. If a fee is to be paid for mixed uses, then the fee shall be determined according to the above schedule by apportioning the space committed to uses specified on the schedule.

d. If the type of traffic generating development for which a building permit is requested is not specified on the fee schedule, the road improvement fee administrator shall determine the fee on the basis of the fee applicable to the most nearly comparable type of land use by using trip generation rates contained in the most current edition of the ITE Trip Generation Manual.

Preliminary Road Improvement Fee Calculation.

Any person contemplating establishing a Traffic Generating Development may request a preliminary determination of the road improvement fees due from such development. A person requesting a pre-development review road improvement fee calculation shall complete and
submit to the Road improvement fee Administrator the proper application form and an application fee. Using the information regarding the proposed traffic generating land development activity as submitted on the application, the Road improvement fee Administrator will provide, within fifteen (15) days of the date of submittal of the completed application, a preliminary calculation of the road improvement fees due for the proposed traffic generating development.

Independent Fee Calculation Study

General.

a. The road improvement fee may be computed by the use of an independent fee calculation study at the election of the fee payer, and for any proposed land development activity for which the Road improvement fee Administrator concludes the nature, timing, or location of the proposed development make it likely to generate impacts costing substantially more to mitigate than the amount of the fee that would be generated by the use of the fee schedule.

b. The preparation of the independent fee calculation study shall be the responsibility of the electing party.

c. Any person who requests to perform an independent fee calculation study shall pay an application fee for administrative costs associated with the review and decision on such independent fee calculation study.
Formula.

a. The Independent Fee Calculation Study for the road improvement fee shall be calculated by using the following formula:

**Road improvement fee = VMT x Net Cost**

**Where:**
- VMT = Trips x % New x Length
- Net Cost = Cost – Credit

**Where:**
- VMT = Vehicle miles of travel generated by the development on the county arterial system during the AM peak hour.
- **Trips** = Peak hour trip ends during AM peak of adjacent street traffic
- % New = percent of trips that are primary trips as opposed to pass by or diverted link trips.
  *For example, a convenience station does not generate much new traffic. Much of the persons that use convenience stores do not make a trip to exclusively stop at the store. It is necessary to adjust the number based on how many of the trips generated will be new trips. There is no adjustment for single-family homes, as all of the trips that are generated by a development are new.*
- **Length** = Average length of a trip on the county arterial system in miles
- **Cost** = Average cost to create a new vehicle mile of capacity (VMC) based on planned arterial improvements (presumably in the North Corridor Road Management Plan).
  - Cost = cost of a mile of road divided by the capacity.
- **Credit** = Revenue credit based on existing proportion of road improvements which have been funded by the State or Federal government.

b. The fee calculations shall be based on data, information or assumptions contained in this Regulation or independent sources, provided that:

1. The independent source is an accepted standard source of transportation engineering or planning data or information; or the independent source is a local study on trip characteristics carried out by a qualified traffic planner or engineer pursuant to an accepted methodology of transportation planning or engineering; and,

2. The percent new trips factor and average trip length used in the independent fee calculation study, if different from those contained in the Road improvement fee Study for the same land use type, shall be based on actual survey conducted in Johnson County.
c. An independent fee calculation study shall be undertaken through the submission of an application for an independent fee calculation study. A potential fee-payer may submit such an application. The County shall submit such an application for any proposed traffic-generating development interpreted as one that is not comparable to any land use on the fee schedule, and for any proposed traffic generating development for which it concludes the nature, timing, or location of the proposed development make it likely to generate impacts costing substantially more to mitigate than the amount of the fee that would be generated by the use of the fee schedule.

d. Within ten days of receipt of an application for independent fee calculation study, the road improvement fee administrator shall determine if the application is complete. If the road improvement fee administrator determines that the application is not complete, a written statement specifying the deficiencies shall be sent by mail to the person submitting the application. The Road improvement fee Administrator shall take no further action on the application until it is deemed complete.

e. When the road improvement fees administrator determines the application is complete, the application shall be reviewed and the road improvement fee administrator shall render a written decision in twenty (20) days on whether the fee should be modified, and if so, what the amount should be, based on the standards in Section____.

Standards.

If on the basis of generally recognized principles of impact analysis it is determined the data, information and assumptions used by the applicant to calculate the independent fee calculation study satisfies the requirements of this Section, the fee determined in the independent fee calculation study shall be deemed the fee due and owing for the proposed traffic generating development. The adjustment shall be set forth in a Fee Agreement. If the independent fee calculation study fails to satisfy the requirements of this section, the fee shall be that fee established for the Traffic Generating Development in Section____.

Appeal.

A fee-payer affected by the administrative decision of the road improvement fee administrator on an application for independent fee calculation study, or on an application for independent fee calculation study initiated by the County staff on their proposed Traffic Generating Development, may appeal such decision by filing a petition with the Board of Supervisors. In reviewing the road improvement fee administrator’s decision, the Board of Supervisors shall make written findings of fact and conclusions of law and use the standards established in Section____.

Earmarking of Funds

Benefit District.

For the purpose of ensuring fee-payers receive sufficient benefit for fees paid, one road benefit district is established. The road benefit district is designated as the North Corridor, which is the
area between Highway 1 on the east and State Highway 965 on the west. It extends north from the city limits of Iowa City and Coralville, and east of North Liberty to the Linn County border. It includes all or parts of the Big Grove, Jefferson, Newport, and Penn Townships. Road improvement fee funds shall be spent within the benefit district from which the traffic generating development paying the fee is located.

**Trust Fund.**

There is hereby established the Johnson County Road improvement fee Trust Fund for the purpose of ensuring that the fees collected pursuant to this Regulation are designated for the accommodation of impacts reasonably attributable to the proposed traffic generating development.

a. Proceeds collected for the road improvement fee shall be placed in the road improvement fee trust fund. Proceeds collected and all interest accrued on this account shall be used solely for road improvements specifically identified in the Road improvement fee Study within the Road Benefit district from which fees have been collected.

b. Any proceeds in the road improvement fee trust fund not immediately necessary for expenditure shall be invested in interest bearing assets. All income derived from these investments shall be retained in the trust fund.

c. Each year, during the annual budget review process, the road improvement fee administrator shall propose appropriations to be spent from the road improvement fee trust fund to the Johnson County Board of Supervisors. After review of the road improvement fee administrator’s recommendation, the Board shall either approve or modify the recommended expenditures of the trust fund monies. Any amounts not appropriated from the trust fund shall be carried forward to the following fiscal year period.

**Refunds.**

**General.**

Any fees collected shall be returned to the fee-payer or fee-payer’s successor in interest if the fees have not been spent within seven years (7) from the date the building permit was issued, along with interest of 6% per annum. The Board of Supervisors may extend this by resolution for up to three (3) years the date at which fees must be refunded. Such an extension may be granted upon a finding that the within such three year period, specific road capital improvements within the district are planned and evidenced by the adoption and incorporation into the Road improvement fee Study, that these road capital improvements shall be constructed within the next three (3) years, and that these capital improvements are reasonably attributable to the fee-payer’s traffic generating development. Fees shall be deemed to be spent on the basis of the first fee collected shall be the first fee spent.

**Refund Procedure.**

The refund of fees shall be undertaken through the following process:

a. An application for refund must be submitted within one (1) year of the end of the seven-year period from the date on which the building permit was issued. If the
Board of Supervisors elects to extend the date at which the refunds must be given, then it shall be one (1) year following the end of the extension. The Refund Application shall include the following information:

1). A copy of the dated receipt issued for the payment of the fee;

2). A copy of the building permit; and

3). Evidence that the applicant is the successor in interest to the fee-payer.

b. Within ten days of the receipt of the Refund Application, the Road improvement fee administrator shall determine if it is complete. If the road improvement fee administrator determines the application is not complete, a written statement specifying the deficiencies shall be forwarded by mail to the person submitting the application. Unless the deficiencies are corrected, the road improvement fee administrator shall take no further action on the refund application.

c. When the road improvement fee administrator determines the refund application is complete, it shall be reviewed within 20 days, and shall be approved if it is determined the fee-payer or a successor in interest has paid a fee which the County has not spent within the period of time required under this Section. The refund shall include the fee paid plus interest of 6% per annum.

**Appeal.**

Any fee-payer or successor in interest may appeal the decision of a Refund Application by filing a petition with the Board of Supervisors within thirty (30) days of the decision. In reviewing the road improvement fee administrator's decision, the Board of Supervisors shall use the standards established in this section.

**Review Every Three Years.**

The road improvement fee study and this regulation shall be reviewed and evaluated by the road improvement fee administrator at least once every three (3) years, to determine if any modifications need to be made to the road improvement fee study and this regulation.
### Appendix B

#### Johnson County Secondary Road Projections

<table>
<thead>
<tr>
<th>Location</th>
<th>Existing Traffic Volume</th>
<th>Projected Traffic Volume</th>
<th>Road Surface Type</th>
<th>Preliminary Cost Estimate</th>
<th># of Lanes</th>
<th>Existing Capacity</th>
</tr>
</thead>
</table>
| Seneca Rd.                    | 140                     | 229                      | Gravel (16'-17' Travel Width)          | Nearing limits of existing rock surface, but should be ok with dust alleviation up to 300 vehicles/day. An additional 9 dwelling units will put traffic volume beyond 300 vehicles/day, and hard surface should be considered. | Dust Alleviation: $32,000  
Hard Surface: $550,000 | 2           | 300              |
| Blain Cemetery Rd. (North of Seneca Rd.) | 180                     | 440                      | Gravel (18' travel width)              | Volume exceeds rock surface traffic threshold. Should be reconstructed to design standards as defined by Iowa DOT. | $160,000   | 2           | 300              |
| Blain Cemetery Rd. (South of Seneca Rd.) | 170                     | 330                      | Gravel (18' travel width)              | Volume exceeds rock surface traffic threshold. Should be reconstructed to design standards as defined by Iowa DOT. | $900,000   | 2           | 300              |
| Greencastle Ave. (North of Blain Cemetery Rd.) | 280                     | 688                      | Gravel (16'-17' Travel Width)          | Volume exceeds rock surface traffic threshold by more than 100% Should be reconstructed to design standards as defined by Iowa DOT. | $320,000   | 2           | 300              |
| Greencastle Ave. (South of Blain Cemetery Rd.) | 80                      | 248                      | Gravel (16'-17' Travel Width)          | Nearing limits of existing rock surface, but should be ok with dust alleviation up to 300 vehicles/day. An additional 6 dwelling units will put traffic volume beyond 300 vehicles/day, and hard surface should be considered. | Dust Alleviation: $48,000  
Hard Surface: $830,000 | 2           | 300              |
| Sugar Bottom Rd.              | 711                     | 7521                     | Chip seal (21' travel width)           | Chip Seal not adequate for traffic volume. Existing high speeds and above average accident rate. Should be reconstructed to hard surface. Because topography cannot be improved to Iowa DOT standards, make as many modification as possible and post and enforce design speed. | Hard Surface: $1- 
$5 million depending on design | 2           | 1000             |
<table>
<thead>
<tr>
<th>Location</th>
<th>Existing Traffic Volume</th>
<th>Projected Traffic Volume</th>
<th>Surface Type</th>
<th>Road Surface Condition</th>
<th>Preliminary Cost Estimate</th>
<th># of Lanes</th>
<th>Existing Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12th Ave. Extended (only Johnson Co. portion)</td>
<td>1635</td>
<td>1655</td>
<td>Chip seal (21' travel width)</td>
<td>Good</td>
<td>$1,000,000</td>
<td>2</td>
<td>1000</td>
</tr>
<tr>
<td>Anana Rd.</td>
<td>333</td>
<td>403</td>
<td>Gravel (21' Travel width)</td>
<td>Good</td>
<td>$5,100,000</td>
<td>2</td>
<td>300</td>
</tr>
<tr>
<td>Sandy Beach Rd.</td>
<td>1673 North of Lake Manor; 2868 East of Curtis Bridge</td>
<td>4388</td>
<td>Chip seal (20'-23' travel width)</td>
<td>Fair/Good</td>
<td>$3,350,000</td>
<td>2</td>
<td>1000</td>
</tr>
<tr>
<td>Lake Manor Rd.</td>
<td>1193</td>
<td>2713</td>
<td>Chip seal (21' travel width)</td>
<td>Good</td>
<td>$1,000,000</td>
<td>2</td>
<td>1000</td>
</tr>
<tr>
<td>Newport Rd.</td>
<td>703 East of tree farm; 794 East of Sugar Bottom (as of Oct. 28, 1999)</td>
<td>1134 (as of Oct. 28, 1999)</td>
<td>Chip Seal (23' travel Width)</td>
<td>Good</td>
<td>$3,300,000</td>
<td>2</td>
<td>1000</td>
</tr>
<tr>
<td>180th St.</td>
<td>2321</td>
<td>3491</td>
<td>Chip Seal (23' Travel Width)</td>
<td>Good</td>
<td>$2,800,000</td>
<td>2</td>
<td>1000</td>
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</tbody>
</table>