# CHAPTER 8820 DEPARTMENT OF TRANSPORTATION PROGRAM MANAGEMENT DIVISION STATE-AID OPERATIONS

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45 DEGREE AND 60 DEGREE

DIAGONAL PARKING.

#### **8820.0100 DEFINITIONS.**

- Subpart 1. Scope. For purposes of parts 8820.0100 to 8820.3500 the terms in subparts 2 to 22 shall have the meanings given them.
- Subp. 2. Advance encumbrance. "Advance encumbrance" means the authorized expenditure of local funds, in lieu of state-aid funds, by a county or municipality for use on an approved state-aid project. By agreement with the commissioner, the local funds will be repaid to the county or urban municipality from future county or municipal state-aid allotments or from future county or municipal turnback funds.
- Subp. 3. City engineer. "City engineer" means a registered engineer employed as the city engineer or the director of public works-city engineer of each urban municipality.
- Subp. 4. Commissioner. "Commissioner" means the commissioner of transportation.
- Subp. 5. County engineer. "County engineer" means a registered engineer employed as the county engineer.
- Subp. 6. County-municipal account. "County-municipal account" means a separate record of that portion of the county state-aid highway funds allocated for expenditure solely within cities having less than 5,000 population.
- Subp. 7. Disaster account. "Disaster account" means the accounts provided by law for use in aiding a county or urban municipality that has suffered a serious damage to its county state-aid highway system or municipal state-aid street system from fire, flood, tornado, or other uncontrollable forces of

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such proportion that the cost of repairs to such county state-aid highway system or municipal state-aid street system is beyond the normal resources of the county or urban municipality.

- Subp. 8. Disaster committee. "Disaster committee" means a committee, appointed in accordance with the law, to investigate and report its findings and recommendations to the commissioner as to a county's or urban municipality's claim of a disaster or unforeseen event affecting its county state-aid highway or municipal state-aid street system and resulting in a financial hardship.
- Subp. 9. District engineer. "District engineer" means a district engineer of the Minnesota Department of Transportation or a registered engineer employed as his state-aid assistant.
- Subp. 10. Functional classification plan. "Functional classification plan" means a plan by which highways and streets are grouped into classes according to the character of service they are intended to provide.
- Subp. 11. Local highway or street departments. "Local highway or street departments" means the highway or appropriate department of each county and each urban municipality.
- Subp. 12. Local road research board. "Local road research board" means a board appointed in accordance with these rules to recommend specific research projects to the commissioner.
- Subp. 13. Needs report. "Needs report" means a report of the estimated construction cost required to improve a state-aid system to standards adequate for future traffic on a uniform basis.
- Subp. 14. Screening committee. "Screening committee" means the county or municipal committee, appointed in accordance with law, and authorized to recommend to the commissioner the mileage and money needs for each of their state-aid systems.
- Subp. 15. State-aid engineer. "State-aid engineer" means a registered engineer employed as the state-aid engineer of the Minnesota Department of Transportation.
- Subp. 16. Town bridge account. "Town bridge account" means the apportionment of county state-aid turnback funds for use in the construction or reconstruction of bridges on township roads.
- Subp. 17. Town bridge needs. "Town bridge needs" means the estimated construction costs required to improve or replace town bridges to standards adequate for future traffic on a uniform basis.
- Subp. 18. Township allotment. "Township allotment" means the county apportionment of county state-aid highway funds for use in the construction of township roads.
- Subp. 19. Trunk highway turnback. "Trunk highway turnback" means a former trunk highway or portion thereof that has reverted to a county or municipality in accordance with law.
- Subp. 20. Turnback accounts. "Turnback accounts" means the respective accounts provided by law for payment to the county for the restoration of or to the urban municipality for the reconstruction and improvement of former trunk highways that have reverted to the county or municipality and have become part of the state-aid system.
- Subp. 21. Urban municipality. "Urban municipality" means any city, having 5,000 or more population, determined in accordance with the provisions of law.
- Subp. 22. Variance committee. "Variance committee" means a committee appointed in accordance with these rules to investigate and make recommendations to the commissioner on requests for variances from these rules.

#### 8820.0300 PURPOSE AND SCOPE.

Subpart 1. Purpose. The purpose of parts 8820.0100 to 8820.3500 is to carry out the mandate of the legislature and to effectuate that mandate as set forth in Minnesota Statutes 1978, chapter 162, as amended.

Subp. 2. Scope. The scope of parts 8820.0100 to 8820.3500 is confined within the framework of and consistent with Minnesota Statutes 1978, chapters 161 and 162, as amended.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.0400 LOCAL HIGHWAY AND STREET DEPARTMENTS.

Each county and each urban municipality shall establish and maintain a highway or street department. Such departments shall be adequately organized, staffed, and equipped to administer for the county or urban municipality all matters relating to the operations of the state-aid program and to exercise all functions incidental thereto, in accordance with law. All preparation of plans and specifications, and the supervision of construction and maintenance, shall be under the control and direction of a professional engineer, registered in the state of Minnesota and employed or retained for that purpose.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.0500 FORMING AN INTEGRATED NETWORK.

The state-aid highways and streets designated to form the basis for a long-range improvement program shall, in general, be so selected as to form an integrated network of highways and streets in accordance with the provisions of 8820.0600 to 8820.0800.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.0600 SELECTION OF ROUTES.

Final selection of routes to be included in the respective county state-aid and municipal state-aid systems shall be subject to the approval of the commissioner.

The highway and street systems to be selected and designated in accordance with law are county state-aid highway systems not exceeding 30,000 miles in extent, excluding trunk highway turnback mileage, and municipal state-aid street systems not exceeding 2,500 miles in extent within urban municipalities, excluding trunk highway turnback mileage.

On 28-foot undivided one-way streets with no parking lanes, the chargeable mileage allowed for municipal state-aid street mileage purposes shall be one-half of the length of the one-way street.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.0700 SELECTION CRITERIA.

Subpart 1. Basis. State-aid routes shall be selected on the basis of the criteria in subparts 2 and 3.

- Subp. 2. County state-aid highways: criteria. County state-aid highways which:
- A. carry relatively heavier traffic volumes or are functionally classified as collector or arterial as identified on the county's functional plans as approved by the county board;
- B. and connect towns, communities, shipping points, and markets within a county or in adjacent counties, or provide access to rural churches, schools, community meeting halls, industrial areas, state institutions, and recreational areas, or serve as principal rural mail routes and school bus routes;
- C. and occur at reasonable intervals consistent with the density of population;

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- D. and provide an integrated and coordinated highway system, affording within practical limits a state-aid highway network consistent with traffic demands.
- Subp. 3. Municipal state-aid streets: criteria. Municipal state-aid streets which:
- A. carry relatively heavier traffic volumes or are functionally classified as collector or arterial as identified on the urban municipality's functional plan as approved by the urban municipality's governing body;
- B. and connect the points of major traffic interest within an urban municipality;
- C. and provide an integrated street system affording within practical limits a state-aid street network consistent with traffic demands.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.0800 ROUTE DESIGNATIONS.

- Subpart 1. Resolution and certification. All county state-aid highways and municipal state-aid streets shall be selected by resolution of the respective boards of county commissioners, or the respective governing bodies of urban municipalities. The highway or street designations, as contained in the resolution, shall be reviewed by the district engineer of that area, and his recommendation shall be filed with the commissioner. The commissioner after receipt of each such resolution and recommendation shall approve all or such part of said highway or street designations contained in the resolution, as complies with the criteria set out in these rules. The commissioner shall certify to the respective boards of county commissioners or governing bodies or urban municipalities the approved portion of the highway or street designation. All highways or streets so approved shall become a part of the county state-aid highway system or the municipal state-aid street system, subject to such additions or revisions as may be, from time to time, requested and approved.
- Subp. 2. Turnback designations. Prior to release of a former trunk highway to the jurisdiction of a county or urban municipality, the commissioner shall notify the board of county commissioners or the governing body of the urban municipality, through its county or city engineer, which portions of the turnback are eligible for designation as part of its state-aid system and which portions are eligible for restoration or reconstruction with turnback funds. Upon a request for the designation of such eligible portions from the board of county commissioners or the governing body of the urban municipality, the commissioner shall issue the official order for designation and notify the county or municipal screening committee of this action.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.0900 STATE-AID APPORTIONMENTS.

All state-aid apportionments shall be made from the county state-aid highway fund and the municipal state-aid street fund as provided by law. Apportionments to the respective counties and urban municipalities shall be released in accordance with parts 8820.1300 to 8820.2400.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1000 DETERMINING LOCAL MONEY NEEDS.

Subpart 1. Construction costs estimates. To provide data to implement the formulas for state-aid apportionment, each county engineer and city engineer shall prepare cost estimates of construction required to improve his county state-aid or municipal state-aid system to approved standards.

Subp. 2. **Incidental costs.** In addition to the direct construction or maintenance costs permitted under law, the cost of the following incidental items will be considered as eligible for inclusion in the total estimate of needs:

- A. county state-aid highways: automatic traffic control signals; lighting of intersections and bridges within approved standards; and proportionate share of all drainage costs within municipalities, to reflect the responsibility of the state-aid highway;
- B. municipal state-aid streets: right-of-way; automatic traffic control signals; lighting of intersections and bridges within approved standards; and proportionate share of all drainage costs, to reflect the responsibility of the state-aid street.
- Subp. 3. Deductible items. The respective screening committees shall consider reports from the commissioner, consisting of, but not limited to, the county state-aid allotments to townships, or the municipal state-aid payments on state trunk highways or county state-aid highways, covering all said allotments or payments made during the preceding year; and shall recommend to the commissioner the amount of deductions to be made in the money needs for each such county or municipality, in order to equalize their status with other counties or municipalities not making similar expenditures.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1100 SCREENING COMMITTEE REPORTS.

- Subpart 1. Annual reports. A detailed report of the state-aid mileage and cost estimates shall be tabulated and referred to the respective screening committees appointed pursuant to law. These committees shall investigate and review all such mileage, cost estimates, and the reports of those expenditures listed under deductible items, and shall, on or before the first day of November of each year, submit their findings and recommendations in writing to the commissioner as to the mileage and adjusted money needs for each of the governmental subdivisions represented by the respective committees.
- Subp. 2. Local road research account. Within the limitations provided by law, the respective screening committees shall annually determine, and recommend, the amount the commissioner shall set aside from the county state-aid highway fund or the municipal state-aid street fund, for the purpose of local road research. These funds, along with such federal funds as may be provided, shall be used for conducting research as provided by law. The use and proportionate share of such county and municipal funds shall be as specifically authorized in the project approval as provided for in part 8820.3200, subpart 3.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1200 COMPILATION AND NOTICE OF APPORTIONMENT.

- Subpart 1. Compilation of data by commissioner. The commissioner shall determine the apportionment percentage due each county and urban municipality in accordance with the formulas established by law.
- Subp. 2. Notice of annual apportionment. Not later than January 25 of each year, the commissioner shall certify the annual apportionment to each respective county or urban municipality.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1300 RELEASE OF ANNUAL APPORTIONMENTS.

Annual apportionments to the respective counties and to urban municipalities shall be released in the manner in parts 8820.1400 to 8820.2400.

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#### 8820.1400 MAINTENANCE APPORTIONMENTS.

- Subpart 1. Amounts. As soon as the annual county and urban municipal state-aid allotments have been determined, the commissioner shall apportion and set aside the following amounts:
- A. county regular account: 40 percent of the regular county state-aid allotment for the general maintenance of county state-aid highways;
- B. county municipal account: 40 percent of the county municipal account allotment for the maintenance of the county state-aid highways within municipalities of less than 5,000 population.
- Subp. 2. Revisions of county maintenance apportionments. The commissioner may, upon recommendation of the screening committee or upon receipt of a resolution from a county board and for good cause shown, increase or decrease the proportion to be used for maintenance under subpart 1, item A or B.
- Subp. 3. Urban account. Twenty-five percent of the total allocation, or \$1,500 per mile of improved municipal state-aid streets, whichever is the least, is the minimum allotment for the general maintenance of the approved state-aid system. The commissioner may modify the minimum payment to the extent necessary to accommodate the screening committee resolutions pertaining to trunk highway turnback maintenance allowances. Those municipalities desiring to receive an amount greater than the established minimum shall file a request not later than December 15 preceding the annual allocation and shall agree to file a detailed annual maintenance expenditure report at the end of the year.
- Subp. 4. Transfer of unexpended balance. Any unobligated balance remaining in the state-aid maintenance account to the credit of any county or urban municipality, after final settlement has been made for the annual maintenance expenditures, shall be automatically transferred to the construction account of said county or municipality.
- Subp. 5. Payment schedule. At the earliest practical date, after the allotments have been determined, the commissioner shall release the following amounts to the respective counties and urban municipalities:
- A. 50 percent of the maintenance allotment from the regular account of each county;
- B. 50 percent of the maintenance allotment from the municipal account of each county that has filed a request for advance payments prior to the annual apportionment in January of each year (such request shall include the estimate of the maintenance expenditures anticipated within said account during the calendar year);
- C. 50 percent of the maintenance allotment to each urban municipality.
- Subp. 6. Additional advances. On or about July 1 of each year, the commissioner shall release an additional advance from the respective maintenance accounts listed in subparts 1 and 3, in an amount not to exceed 40 percent of the total maintenance allocations. The commissioner shall retain the remaining amounts within said allocations pending determination of the final amount due, based upon a report of actual maintenance expenditures and receipt of the district engineer's certification of acceptable maintenance performance. Urban municipalities receiving the minimum maintenance allotment as outlined in subpart 3 will be eligible to receive the balance remaining in their maintenance account upon the commissioner's receipt of the district engineer's certification of acceptable maintenance.

#### 8820.1500 CONSTRUCTION APPORTIONMENTS.

- Subpart 1. Crediting to accounts. The construction portion of the annual allocation to each county and urban municipality shall be credited to their respective accounts and retained by the commissioner for payment on approved projects in accordance with the following procedure.
- Subp. 2. State-aid contracts. The commissioner, upon receipt of an abstract of bids and a certification as to the execution of a contract and bond therein, shall promptly release from the funds available to said county or urban municipality up to 95 percent of the state-aid portion of said contract. The commissioner, unless otherwise requested, shall retain the remaining percentage of the state-aid share of said contract, provided funds are available therefor, until the final cost is determined and the project accepted by the district engineer.
- Subp. 3. Federal-aid contracts. The commissioner, under authority of an agency agreement with the governing body of a county or urban municipality, and acting as its agent in federal-aid operations, will release from state-aid funds available therefor 95 percent of the county's or urban municipality's share of the entire contract obligation for immediate redeposit in an agency account, to be used in paying the county's or urban municipality's share of the partial estimates and for advancing the federal share of such estimate payments. The commissioner shall retain the remaining percentage of the contract cost of said project until the final cost is determined and the project accepted by the district engineer. Where other than state-aid funds are to be used for depositing in the agency account, 100 percent of the local governmental share of said contract amounts shall be deposited in the agency account prior to award of the contract.
- Subp. 4. Force account agreements. Partial estimates will be accepted on all projects approved for construction by local forces using the agreed unit prices for determining the value of the completed work. The commissioner shall promptly release from funds available therefor 95 percent of the cost of current accomplishments as reported by said partial estimates. Upon request of the county or urban municipality, the commissioner will set aside and retain their state-aid funds in an amount equal to the agreed total cost of the entire project to ensure final settlement of the completed construction when final estimate is submitted and upon acceptance by the district engineer.
- Subp. 5. Payment limitations. Approval of state-aid projects by the commissioner does not imply that state-aid payments will be made in excess of the construction funds available from current state-aid allotments. Any county or urban municipality having depleted their currently available funds during the calendar year will not be eligible for reimbursement from future allotments unless request for advance encumbrance has been approved or a project is completed in a subsequent year and funds are available.
- Subp. 6. Engineering costs. Requests for reimbursement of preliminary engineering costs shall be submitted with the report of state-aid contract or with the initial partial estimate on an approved force account project. The commissioner shall upon receipt of such request supplemented by such documentation as may be requested by the commissioner authorize the reimbursement for actual engineering costs, not to exceed eight percent of the total estimated contract or agreement amount.

Requests for payment of construction engineering costs shall be submitted along with the final estimate report. The commissioner shall, upon receipt of such request, authorize a construction engineering payment which will either be limited to five percent of the eligible construction costs where there are no unusual traffic or construction problems, or which may at the commissioner's discretion be paid in the maximum amount of ten percent of said construction costs on complex projects involving difficult construction features or the continuous movement of dense traffic.

- Subp. 7. Right-of-way. State-aid payments for right-of-way costs on approved projects shall be limited to 95 percent of the approved claim until the acquisition of all right-of-way required for the project is actually completed and the final costs established.
- Subp. 8. Advances from county funds. When the commissioner approves a request from the county board for the construction of an approved county state-aid project, which requires county state-aid highway funds in excess of the available allotment and which excess costs will be initially paid for from other local sources, then and in that event, the commissioner will, to the extent authorized by law, repay those locally financed expenditures out of subsequent construction apportionments to the county's state-aid accounts in accordance with the terms and conditions specified in the approved request.
- Subp. 9. Advance of county state-aid highway funds. Advance of county regular account funds to county municipal account fund. Where the commissioner approves a request from the county board for the advance of county regular account funds for use on a municipal section of an approved county state-aid highway project, and where repayments to the county regular account fund are to be made from subsequent accruals to the county municipal account fund, such repayments will be made by the commissioner, to the extent authorized by law, in the form of transfers from the county municipal account fund to the county regular account fund, in the amounts and at the time specified in the authorization.
- Subp. 10. Advances from urban municipal funds. When the commissioner approves a request from the governing body of an eligible urban municipality for the construction of an approved municipal state-aid street project, which requires funds in excess of the available allotment and which excess costs will be initially paid from other local sources, then and in that event, the commissioner will, to the extent authorized by law, repay these locally financed expenditures out of subsequent construction apportionments to the urban municipal account of that municipality in accordance with the terms and conditions specified in the approved request.
- Subp. 11. County or municipal bond account. Any county or urban municipality that resolves to issue bonds payable from the appropriate state-aid fund in accordance with law for the purpose of establishing, locating, relocating, constructing, reconstructing, or improving state-aid streets or highways under its jurisdiction shall certify to the commissioner within 30 days following issuance of the bond, the amount of the total obligation and the amount of principal and interest that will be required annually to liquidate the bonded debt. The commissioner shall set up a bond account therefor, itemizing the total amount of principal and interest involved and he shall annually certify to the commissioner of finance the amount needed from the appropriate state-aid construction fund to pay the principal due on the obligation, and the amount needed from the appropriate state-aid maintenance fund to pay the current interest. Proceeds from bond sales are to be expended only on approved state-aid projects and for items determined to be eligible for state-aid reimbursement. A county or urban municipality which intends to expend bond funds on a specific state-aid project shall notify the commissioner of this intent forthwith upon the award of contract or the execution of a force account agreement. Upon completion of each such project, a statement of final construction costs shall be furnished to the commissioner by the county or the urban municipality.
- Subp. 12. Municipal state-aid funds; county or trunk highway projects. The governing body of an urban municipality desiring to use a portion of its state-aid funds for improvements within its boundaries of any state trunk highway or county state-aid highway shall request such authorization by resolution. Before any such funds are released for said purposes, the resolution shall be approved by the commissioner. A copy of the approved resolution shall be filed with the

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state-aid engineer. This subpart does not apply to payments made for interest on bonds sold under Laws of Minnesota 1959, chapter 538.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1600 SEMI-ANNUAL STATEMENTS.

Within 30 days after the close of each six-month period, the commissioner shall submit to each county or urban municipality semiannual statements as to the status of its respective state-aid accounts.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1700 OTHER AUTHORIZED PAYMENTS.

Certain specific allotments or transfers of state-aid funds have been authorized by law. These will be processed as provided in parts 8820.1800 to 8820.2400.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

### 8820.1800 TRANSFERS FOR HARDSHIP CONDITIONS OR OTHER LOCAL USE.

The county board or governing body of any urban municipality desiring to use a part of its state-aid funds for this purpose shall certify to the commissioner either that all of its existing state-aid routes are improved to state-aid standards or that it is experiencing a hardship condition in regard to financing its local roads or streets, while holding its current road and bridge levy equal to or greater than said levy for previous years. Where a hardship transfer is requested, the commissioner shall act to authorize or deny the transfer of state-aid funds for use outside of the approved state-aid system. Upon approval of the requested transfer, the commissioner without requiring any progress reports, shall within 30 days authorize immediate payment of not less than 50 percent of the total amount authorized, with the balance to be paid within 90 days; or schedule immediate payment of the entire amount authorized if he determines there are sufficient funds available.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.1900 TOWNSHIP ALLOTMENTS.

Upon receipt of a certified copy of a county board resolution, allocating a specific amount of its county state-aid construction funds for aid to its townships, which resolution shall indicate compliance with the law governing such allocations and be forwarded to the commissioner on or before the second Tuesday of January each year, the commissioner shall authorize payment of the amount requested for distribution by the county for the construction of township roads.

**Statutory Authority:** MS s 162.02 subds 2,3,3a: 162.155

#### 8820.2000 CONSTRUCTION OF SELECTED PARK PROJECTS.

As provided by law, a portion of the county state-aid highway funds shall be set aside and used for the construction, reconstruction, and improvement of county state-aid highways which provide access to the headquarters of or the principal parking lot located within a state park. Such funds, so set aside, shall be expended for this purpose only on a request from the commissioner of natural resources. Projects so selected will be approved by the commissioner of transportation in accordance with the procedure established for other state-aid operations.

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#### 8820.2100 DISASTER ACCOUNT.

Any disaster appropriation approved by the commissioner for a county or urban municipality in accordance with law shall be promptly paid to the county or urban municipality for which such appropriation was authorized. The funds so allotted and paid to the county or urban municipality can only be spent for the purpose for which they were authorized, and within a reasonable time period specified by the commissioner. Forthwith upon completion of the work for which the disaster payment was made, or the expiration of the time specified for doing such work, whichever occurs first, the county or urban municipality shall file a report certifying the extent of the authorized work completed, and showing the total expenditure made therein. In the event the total disaster allotment was not required or used for the purpose specified, the remainder shall be promptly returned to the commissioner for redeposit in the county state-aid highway fund or the municipal state-aid street fund, as the case may be, and apportioned by law. Damage estimates submitted by a county or urban municipality must exceed ten percent of the current annual state-aid allotment to the county or urban municipality before the commissioner shall authorize the disaster committee to inspect the disaster area.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820,2200 RESEARCH ACCOUNT.

County and municipal state-aid funds that may be annually allocated to the research account shall be used solely for those research projects recommended by the local road research board and approved by the commissioner. Unexpended balances in this account shall at the end of each year be transferred back to the state-aid fund from which they were obtained.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.2300 TURNBACK ACCOUNTS.

- Subpart 1. County and municipal turnback accounts; county town bridge account. A percentage of the net highway user tax distribution fund has been set aside by law and apportioned to separate accounts in the county state-aid highway fund and the municipal state-aid street fund, and respectively identified as the county turnback account and the municipal turnback account. Further, a percentage of the county turnback account has been set aside and shall be used for replacement or reconstruction of town bridges ten feet or more in length, in those counties that have two or more towns, pursuant to the law. This latter account shall be known as the county town bridge account.
- Subp. 2. Town bridge monies allocation. The sums of moneys set aside for town bridges shall be allocated to the eligible counties on the basis of town bridge needs.
- Subp. 3. Surplus turnback funds. At any time the commissioner determines that either the county or municipal turnback accounts, notwithstanding the town bridge accounts, has accumulated a surplus not needed for turnback purposes, he shall properly notify the commissioner of finance requesting the transfer of such surplus to the respective county state-aid highway fund or municipal state-aid street fund for apportionment as provided by law.
- Subp. 4. Advances from county or urban municipal funds. When the commissioner approves a request from the governing body of a county or urban municipality for the construction of an approved county state-aid or municipal state-aid turnback project which will require funds in excess of the available turnback fund balance and which excess costs will be initially paid for from other sources, then and in that event, the commissioner will reimburse those locally financed expenditures out of subsequent apportionments to the county's or urban municipality's turnback fund in accordance with the terms and conditions specified in the approved request. The total of such advances to be

reimbursed from the respective turnback funds shall not exceed 40 percent of the last county or municipal turnback allotment. Any advances shall be repaid in accordance with the terms of the approved request from money accruing to the respective turnback funds.

- Subp. 5. Advances from town bridge account. When the commissioner approves a request from the governing body of a county for the replacement or reconstruction of a town bridge which will require funds in excess of the county's available town bridge account and which excess costs will be initially paid for from other sources, then and in that event, the commissioner will reimburse those locally financed expenditures out of subsequent apportionments to the town bridge account in accordance with the terms and conditions specified in the approved request. The total of such advances to be reimbursed from the town bridge account shall not exceed 40 percent of the last town bridge apportionment. Any advances shall be repaid in accordance with terms of the approved request from monies accruing to the respective town bridge accounts.
- Subp. 6. Release of turnback account funds. Upon receipt of an abstract of bids and a certification as to the execution of a contract and bond on an eligible project, the commissioner shall release to a county or urban municipality from turnback account funds up to 95 percent of the turnback share of said contract. The commissioner shall retain the remaining percentage of the turnback share of said contract, until the final cost is determined and the project accepted by the district engineer. On force account agreements partial estimates will be accepted on turnback projects approved for construction by local forces, using the agreed unit prices for determining the value of the completed work. The commissioner shall release from the respective turnback account 95 percent of the value as reported by said partial estimates on an eligible turnback project. Requests for reimbursement of preliminary and construction engineering costs on an eligible turnback project shall be submitted and payment will be authorized in accordance with part 8820.1500, subpart 6 engineering costs.
- Subp. 7. Release of town bridge account funds. Upon receipt of an abstract of bids and a certification as to the execution of a contract and bond on an eligible project, the commissioner shall release to a county, from town bridge account funds, up to 95 of the town bridge account share of said contract. The commissioner shall retain the remaining five percent until the final cost is determined and the project is accepted by the district engineer.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

## 8820.2400 TRANSFER OF ACCUMULATED COUNTY-MUNICIPAL ACCOUNT FUNDS TO COUNTY REGULAR ACCOUNT FUND.

Upon receipt of a certified copy of a county board resolution requesting the transfer of a portion of or the total accumulated amount in the county municipal account fund, to the county regular account fund, the commissioner shall transfer said funds, provided the county submits a written request to the commissioner and holds a public hearing within 30 days of the request to receive and consider any objections by the governing bodies of cities within the county having a population of less than 5,000 and no written objection is filed with the commissioner by any such city within 14 days of that hearing.

If within 14 days of the public hearing held by the county a city having a population of less than 5,000 files a written objection with the commissioner identifying a specific county state-aid highway within the city which is requested for improvement and the commissioner investigates the nature of the requested improvement and finds the identified highway is not deficient in meeting minimum state-aid street standards or the county has shown evidence that the identified highway has been programmed for construction in the county's five-year capital improvement budget in a manner consistent with the county's transportation plan or there are conditions created by or within the city beyond

#### 8820.2400 STATE-AID OPERATIONS

the control of the county that prohibit programming or reconstruction of the identified highway.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.2500 MINIMUM STATE-AID STANDARDS.

Subpart 1. Geometric design standards. The standards in part 8820.9910 shall apply to all rural design undivided roadways. The standards in part 8820.9911 shall apply to those roadways that meet indicated conditions. The standards in parts 8820.9912 and 8820.9913 shall apply to all urban design roadways. The minimum requirements in part 8820.9914 shall apply to rural roadways on resurfacing projects. The vertical clearances for underpasses in part 8820.9915 shall apply.

- Subp. 2. Specifications. Specifications for construction shall be the latest approved in Minnesota Department of Transportation specifications, except as modified by special provisions which set forth conditions or requirements for work or materials not covered by the approved specifications, or which set forth conditions or requirements to meet exigencies of construction peculiar to the approved project.
- Subp. 3. Right-of-way. The minimum widths of right-of-way for all state-aid routes shall be not less than 60 feet within municipalities and 66 feet in rural areas, except for conditions where modifications can be justified to the satisfaction of the commissioner. Prior to construction the counties shall acquire control of such additional widths of right-of-way in rural areas as may be necessary to properly maintain the ditch section.
- Subp. 4. Parking provisions. The criteria in part 8820.9916 must be used in establishing diagonal parking.

Diagonal parking provisions shall be established by cooperative agreement between the local road authority and the commissioner. The cooperative agreement shall indicate the angle of parking, provide for payment marking of the parking lanes and the provision that the road authority may alter parking provisions if traffic volumes exceed the design criteria.

The minimum design standards for roadways with parallel parking are shown in these rules under part 8820.9912.

Minnesota Statutes, section 169.34 must be adhered to in determining diagonal parking spacing.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.2600 SPENDING STATE-AID APPROPRIATIONS.

State-aid funds allotted to counties and urban municipalities shall be expended in accordance with the provisions of parts 8820.2700 to 8820.2900.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.2700 MAINTENANCE REQUIREMENTS.

- Subpart 1. Standards. The commissioner shall require a reasonable standard of maintenance on all state-aid routes within the county or urban municipality, consistent with available funds, the existing street or road condition, and the traffic being served. This maintenance shall be considered to include, but shall not be limited to:
- A. the maintenance of all road surfaces, shoulders, ditches, and slopes and the cutting of brush and weeds affecting the respective state aid systems;
- B. the maintenance and inspection of all bridges, culverts, and other drainage structures pursuant to Minnesota Statutes, section 165.03;
- C. The maintenance of all regulatory and direction signs, markers, traffic control devices, and protective structures in conformance with the current manual on uniform traffic control devices affecting the respective state-aid systems;

- D. the striping of all pavements of 22 feet or more in width, consistent with the traffic service provided, and for which there are no pending improvements;
- E. the exclusion of advertising signs, billboards, buildings, and other privately owned installations other than utilities of public interest from the right of way of any approved state-aid projects; and
- F. the installation of route markers on rural state-aid highways: route markers shall be a minimum of 16 feet by 16 feet square with black letters or numerals on a white background. Wherever county road authorities elect to establish and identify a special system of important county roads, the route marker shall be pentagonal shape and shall consist of a reflectorized yellow legend (county name, route letter, and number) and border on a blue background of a size compatible with other route markers.
- Subp. 2. Unsatisfactory maintenance. When, in the opinion of the commissioner, the maintenance of any county or municipal state-aid route is determined to be unsatisfactory, he shall retain up to ten percent of the current annual maintenance apportionment to the responsible county or urban municipality. Funds so retained shall be held to the credit of that county or urban municipality until the unsatisfactory condition has been corrected and a reasonable standard of maintenance is provided.
- Subp. 3. Biennial report. The commissioner's biennial report to the legislature shall enumerate all such funds retained more than 90 days, together with an explanation for this action.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820,2800 CONSTRUCTION REQUIREMENTS.

- Subpart 1. Engineer's duties. Survey, plans, and estimates for all state-aid projects shall be made by or under the immediate direction of the county or city engineer in accordance with standards as to form and arrangement prescribed by the commissioner.
- Subp. 2. Plans and estimates. Plans and estimates for each state-aid construction project must be submitted for review. Each plan shall show all subsequent stages required for the completion of the improvement, portions of which may be covered by later contracts or agreements. Only those projects for which plans are approved by the state-aid engineer prior to the award of contract or approval of a force account agreement shall be eligible for state-aid construction funds.
- Subp. 3. **Project identification numbers.** Approved projects will be assigned state-aid project numbers and shall be so identified in records of the Minnesota Department of Transportation and the local governmental unit.
- Subp. 4. Contract information. Upon award of a state-aid contract by any county or urban municipality the engineer thereof shall furnish the commissioner with an abstract of bids and a certification as to the specific contract and bond executed for said approved construction work.
- Subp. 5. Force account. Any county or urban municipality desiring to use funds credited to it on a force account basis shall have its engineer file a request with the commissioner for each construction project to be built by the county or urban municipality at agreed unit prices, which shall be based upon estimated prices for contract work, less a reasonable percentage to compensate for move-in, move-out, taxes, and contractor's profit. Such requests shall contain a complete list of pay items and the unit prices at which it is proposed to do the work. Prior to the approval by the commissioner, the district engineer shall file his recommendations with the commissioner as to the request and the cost estimate. Items of work other than those listed as a pay item or approved by supplemental agreements shall be considered incidental work not eligible for state-aid payment.

#### 8820.2800 STATE-AID OPERATIONS

- Subp. 6. **Project reports.** Prior to final acceptance of each construction project by the commissioner, the county engineer or the city engineer shall submit to the commissioner such final project records as the commissioner may deem necessary or desirable.
- Subp. 7. **Project payments.** On all state-aid construction projects payments will be made in accordance with part 8820.1500, subparts 1 to 5.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.2900 TURNBACK ACCOUNT EXPENDITURES.

- Subpart 1. Threshold requirements. The funds in the county and municipal turnback accounts shall be expended only as payments to a county or urban municipality for the approved reconstruction or improvement of those former trunk highways that have reverted to county or municipal jurisdiction and which meet the eligibility requirement as set forth herein. Further, a percentage of the county turnback account has been set aside, as provided by law, and shall be used for replacement or reconstruction of town road bridges that are ten feet or more in length in those counties that have two or more towns.
- Subp. 2. Eligibility. Any former trunk highway reverted to county or urban municipal jurisdiction subsequent to July 1, 1965, and which is part of the county state-aid highway or municipal state-aid street systems, shall be eligible for payment from the respective turnback account for all costs covering the restoration or the reconstruction and improvement of said highways as detailed on approved plans. Approval of plans for the initial construction of such projects shall be limited to a period of five years from the date of revision after plan approval for the construction of the initial part of a turnback project, plans for other portions of the same route must be approved within ten years from the date of reversion to be eligible for turnback funds. Each such approved project shall be advanced to construction status within one year after notification to the county or urban municipality that sufficient funds are available for the construction of said projects. Payment for such reconstruction and improvement of any section will terminate all eligibility for reconstruction and improvement of that section with turnback funds.

Any town bridge ten feet or more in length is eligible for replacement or reconstruction if after all pertinent data supplied by local citizenry, local units of government, the regional development commission, or the metropolitan council is reviewed by the county board and a formal resolution by the county board is adopted identifying the town bridge or bridges to be replaced or reconstructed. Payment to the counties will be limited to 95 percent of the cost of the bridge, and will be made in accordance with part 8820.2300, subpart 7.

- Subp. 3. Plan approval and construction requirements. Plans for all county or municipal state-aid turnback or town bridge projects must be submitted to the commissioner and be approved before any reconstruction or improvement work is undertaken. All of the state-aid rules that are consistent with the turnback regulations shall apply to all projects to be financed from the county or municipal turnback accounts or the town bridge account.
- Subp. 4. Construction authorization. As soon as the plans for a state-aid turnback or town bridge project are approved, the county or urban municipality shall be furnished either an authorization to proceed with construction or a notice that sufficient funds are not available within the applicable turnback account or town bridge account and that a priority has been established for said project for construction authorization as soon as funds are available. Where local funds are advanced by the county or urban municipality to construct an approved project for which sufficient funds are not available in the turnback account or town bridge account, authorization to proceed with construction will

be notification that the agreement for reimbursement of funds, in accordance with part 8820.2300, subpart 4 has been approved by the commissioner.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820,3000 ADDITIONAL CONTROLS ON EXPENDITURES.

- Subpart 1. Conformity. In addition to those provisions heretofore mentioned, expenditures of state-aid funds by any county or urban municipality shall conform to the following rules in subparts 2 to 7.
- Subp. 2. Legal requirements. State-aid construction projects shall comply with all federal, state, and local laws, together with all ordinances, rules, and regulations applicable to the work. Responsibility for compliance shall rest entirely with the local unit of government.
- Subp. 3. **Bridge plans.** Plans for all bridge construction or bridge reconstruction projects shall be approved by the bridge engineer of the Minnesota Department of Transportation prior to the approval by the state-aid engineer.
- Subp. 4. Reports and records. Annual reports, status maps, and all maintenance and construction reports and records shall be filed at the time and in the form specifically requested by the commissioner or his authorized representatives.
- Subp. 5. Noncompliance. The commissioner, upon determination that a county or urban municipality has failed to comply with the established state-aid requirements, other than for unsatisfactory maintenance, or has failed to fulfill an obligation entered into for the maintenance or improvement of any portion of a state trunk highway or interstate route, shall determine the extent of the failure and the amount of such county's or urban municipality's apportionment that shall be retained until such time as suitable compliance is accomplished, or the obligation fulfilled, as the case may be. The amount withheld shall reasonably approximate the extent of the noncompliance or the value of the unfulfilled obligation.
- Subp. 6. Defective work. Whenever unsatisfactory conditions are found to exist on an approved construction project, the district state-aid engineer can, if necessary, order the suspension of all work affected thereby until said condition is satisfactorily corrected. Failure to conform with such suspension order shall be considered willful noncompliance. All work or materials which fail to conform to the requirements of the contract or force account agreement shall be considered as defective. Unless the work is satisfactorily remedied or repaired before final acceptance is requested, the commissioner shall either withhold funds in accordance with subpart 5, or shall establish the reasonable value of the defective work as the basis for settlement with the county or urban municipality.
- Subp. 7. Engineering and technical assistance. The commissioner may, as authorized by law, execute agreements with any county or urban municipality for technical assistance from the Department of Transportation. These services, if furnished, shall be paid for by the governmental subdivision at the rates established by the Department of Transportation.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820,3100 EXPENDITURE LIMITATIONS.

- Subpart 1. Extent of state-aid. The extent of state-aid participation on special items shall be limited as in subparts 2 to 8.
- Subp. 2. Lighting hazardous areas. The lighting of hazardous or accident-prone locations, when concurred in by the traffic engineer of the Minnesota Department of Transportation shall be considered as eligible expense to the following extent:
- A. new construction: cost of complete lighting at approved locations only on multiple-lanes;

#### 8820,3100 STATE-AID OPERATIONS

- B. cost of lighting approved intersections on single-lane design;
- C. locations where the municipality would normally install lighting units are not considered as an eligible expense (the county or urban municipality shall furnish traffic information or other needed data to support its request);
- D. reconstruction: all costs incidental to the necessary revision or relocation of existing lighting facilities, up to and including the cost of completing the new base.
- Subp. 3. Traffic signals: state-aid projects. Plans for the construction or reconstruction of the electrical portion of traffic control signals shall be designed by a master electrician licensed in the state of Minnesota or by an electrical engineer registered in the state of Minnesota.

The district state-aid engineer shall review said plans upon submittal by the local engineer and make recommendations to the state-aid engineer. The state-aid engineer shall approve the electrical portion of said plan based on the certification of the master electrician or electrical engineer and the remainder of the plan based on the certification of a registered professional civil or highway engineer.

Plans for the construction or reconstruction of the electrical portion of traffic control signals not certified by a master electrician or electrical engineer shall be approved by the traffic engineer of the Minnesota Department of Transportation prior to the approval of the state-aid engineer.

- Subp. 4. Traffic signals: federal aid projects. Plans for the construction or reconstruction of traffic control signals shall be approved by the traffic engineer of the Minnesota Department of Transportation prior to the approval by the state-aid engineer.
- Subp. 5. Traffic signals: extent of participation. The extent of state-aid participation in signal installations shall be determined by the state-aid engineer in relation to the proportion of state-aid routes involved at each installation.
- Subp. 6. Right-of-way. The cost of any lands and properties required to accommodate the design width of the street or highway as governed by the state-aid standards, including necessary width for sidewalks, shall be considered as eligible expense. This cost shall include relocation and moving costs as provided by law and shall include damages to other lands if reasonably justified to the satisfaction of the commissioner.
- Subp. 7. Sidewalks. On county state-aid projects, sidewalks shall be considered as an eligible expense only where the proposed construction necessitates the alteration of existing walks. On municipal state-aid street projects, state-aid payment for sidewalk shall be made when requested by the urban municipality.
- Subp. 8. Storm sewers. Plans containing items for storm drainage shall be reviewed by the hydraulics engineer for the Minnesota Department of Transportation and his recommendations obtained as to design features and the proportionate share chargeable to the state-aid system. These recommendations along with those of the district engineer shall be considered in determining the maximum state-aid participation in said work.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.3200 LOCAL ROAD RESEARCH BOARD.

Subpart 1. Appointment. The commissioner shall appoint a local research board consisting of the following members: four county engineers, only one of whom may be from a county containing a city of first class; two city engineers, only one of whom may be from a city of first class; two Department of Transportation staff engineers; one University of Minnesota staff engineer; and one ex officio secretary, who shall be the department's research coordination engineer.

- Subp. 2. Terms. All appointments of county and city engineers, except for unexpired terms, shall be for three years. The other members shall serve at the will of the commissioner.
- Subp. 3. Operating procedure. The board shall initially meet on call from the commissioner, at which time they shall elect a chairman, and establish their own procedure for the selection of research projects to be recommended to the commissioner. Final determination on all such research projects shall be made by the commissioner, and the cost thereof shall be paid out of the state-aid research accounts provided for by law.

In the event that the board recommends a project covering research in methods of and materials for the construction and maintenance of both the county state-aid highway system and the municipal state-aid street system, the board shall also recommend to the commissioner the proportionate share of the cost of such project to be borne by the respective county state-aid highway research account, and the municipal state-aid street research account, based on the benefits to be realized by each system from such research project.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.3300 VARIANCES.

Subpart 1. Written requests. Any formal request by a political subdivision for a variance from these rules shall be submitted to the commissioner in writing. Contents of request:

- A. the specific rule or standard for which the variance is requested;
- B. the reasons for the request;
- C. the economic, social, safety, and environmental impacts which may result from the requested variance;
- D. effectiveness of the project in eliminating an existing and projected deficiency in the transportation system;
  - E. effect on adjacent lands;
  - F. number of persons affected; and
- G. safety considerations as they apply to pedestrians, bicyclists, motoring public, fire, police, and emergency units.
- Subp. 2. Notice of request. The commissioner shall publish notice of variance request in the State Register and shall request comments from all interested parties be directed to the commissioner within 20 calendar days from date of publication.
- Subp. 3. **Decision.** The commissioner shall base his decision on the criteria as specified in subpart 1 and shall notify the political subdivision in writing of his decision.
- Subp. 4. Contested case hearing. Any variance objected to in writing or denied by the commissioner is subject to a contested case hearing as required by law.

**Statutory Authority:** MS s 162.02 subds 2,3,3a; 162.155

#### 8820.3400 ADVISORY COMMITTEE ON VARIANCES.

- Subpart 1. Appointment. The commissioner may appoint a committee to serve as required to investigate and determine a recommendation for each variance. No elected or appointed official that represents a political subdivision requesting the variance may serve on the committee.
- Subp. 2. Membership. The committee shall consist of any five of the following persons: not more than two county engineers only one of whom may be from a county containing a city of the first class; not more than two city engineers only one of whom may be from a city of the first class; not more than

#### 8820.3400 STATE-AID OPERATIONS

two county officials only one of whom may be from a county containing a city of the first class; and not more than two city officials only one of whom may be from a city of the first class.

Subp. 3. Operating procedure. The committee shall meet on call from the commissioner at which time they shall elect a chairperson and establish their own procedure to investigate the requested variance.

The committee shall consider the economic, social, safety, and environmental impacts which may result from the requested variance, in addition to the following criteria:

- A. effectiveness of the project in eliminating an existing and projected deficiency in the transportation system:
  - B. effect on adjacent lands:
  - C. number of persons affected;
  - D. effect on future maintenance:
- E. safety considerations as they apply to pedestrians, bicyclists, motoring public, and fire, police, and emergency units; and
- F. effect that the rule and standards may have in imposing an undue burden on a political subdivision.
- Subp. 4. Recommendation. The committee after considering all data pertinent to the requested variance shall recommend to the commissioner approval or disapproval of the request.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.3500 BOARD AND COMMITTEE MEMBERS' PERSONAL EXPENSES.

The commissioner will authorize the payment of all necessary personal expenses in connection with meetings of board and committee members appointed by him for state-aid purposes. These expenses shall be reported on forms furnished by the commissioner and paid from the state-aid administrative fund.

# EXHIBITS, FIGURES, AND TABLES 8820.9910 RURAL UNDIVIDED GEOMETRIC STANDARDS.

Projected ADT	Lane Width	Shoulder Inglope Width		(2) Recovery	(3) Design Speed	Surfacing	Design Strength	New (4) Rehabilitated Bridges	Bridg	Bridges to Remain
								Width Curb-Curb	Width Curb-Curb	Structural Capacity
0-49	11,	1,	3:1	7,	30-50	Traffic Bound		24,	22,	H-15
60-99	111,	'n	3:1	'n	30-50	Traffic	I	28,	22,	H-15
100-399	12,	4	4:1	15'	40-50	Paved	7 Ton Ult. 9 Ton	32,	24,	H-16
400-749	12,	4	4:1	20,	40-60	Paved	7 Ton Ult. 9 Ton	32,	24,	H-15
750-999	12,	<b>.</b>	4:1	25,	40-60	Paved	7 Ton Ult. 9 Ton	36,	28,	H-15
1000 & Over	12'	88	4:1	30,	40-60	Paved	9 Ton	40,	30,	H-15

Applies to Slope Within Recovery Area Only.

Obstacle Free (Measured from edge of Traffic Lane) Culverts with less than 27" Vert, height allowed without protection in recovery sres. Minimum widths listed shall apply, except that lesser widths may be approved upon justification where the bridge length exceeds 200°

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#### 8820.9911 STATE-AID OPERATIONS

#### 8820.9911 SUBURBAN GEOMETRIC DESIGN STANDARDS.

Projected AD:T	Lane Width	Shoulder Width	Inslope(1)	Recovery(2) Design(3)	Design(3)	Structural	New & (4) Rehabilitated	Bridg	Bridges to
		·					Width Curb-Curb	Width Curb-Curb	Width Structural Curb-Curb Capacity
Less Than 1000	12,	.9	4:1	20,	40	9 Ton	36,	28,	H-15
1000 & Over	12,	88	4:1	20,	40	9 Ton	40,	30,	H-15
*This standard shall apply only when the project is located in an area where the following conditions exist:  1. A platted area or an area in a detailed development process, or  2. Physical restraints are present which prevent reasonable application of the Rural Design Standard	all apply onled area or an	y when the p area in a det re present wh	roject is locat ailed develop iich prevent ra	dard shall apply only when the project is located in an area where the following conditions exist: A platted area or an area in a detailed development process, or Physical restraints are present which prevent reasonable application of the Rural Design Standards.	here the follov r ation of the F	wing condition	ns exist: tandards.		
(1) Applies to slope within (2) Obstacle free (measuree (3) Desirable design speed (4) Minimum widths listed	Applies to slope within recovers.  Obstacle free (measured from e Desirable design speed 50 mph. Mishimum widths liked shall ap	Applies to slope within recovery area only.  Obstacle free (measured from edge of traffi Desirable design speed 50 mph.  Minimum widths listed shall apply, except	Applies to slope within recovery area only.  Obstacle free (measured from edge of traffic lane).  Desirable design speed 50 mph.  Minimum widths listed shall apply, except that less	er widths may b	e approved uf	on justificatic	Applies to slope within recovery area only.  Obstacle free (measured from edge of traffic lane).  Desirable design speed 50 mph.  Minimum widths listed shall apply, except that lesser widths may be approved upon justification where the bridge length exceeds 200'.	ge length exc	eeds 200'.

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#### 8820,9912 URBAN GEOMETRIC STANDARDS.

				_								-
	With 4' Median and Two Parallel	Parking Lanes			70	74			74	80		104
	Undivided, With Parallel Parking Lanes	Both Sides	04	46	64	89		48	89	72		96
	Undivid Parallel Par	One Side	34	36	26	09		88	09	62		98
TOTAL WIDTH IN FEET FACE TO FACE OF OUTER CURBS	With Median, No Parking Lanes	14' Median			09	64			64	89		6
		4' Median			20	54			54	58		. 83
	Undivided, No	Parking Lanes	28	32	46	20	-	36	. 09	52	•	76
		Density	Low	High	Low	High		Low	Low	High	-	High
	No. of	Through Lanes	2	(Collector)	4	(Collector)	23	(Arterial)	4	(Arterial)	9	(Arterial)

CLASSIFICATION	FACILITY FUNCTION	DESIGN CHARACTER	TYPICAL TRIP LENGTH	ADT RANGE
Collector (Low Density)	Serves as feeder facility from neighborhood and local streets to the collector/ arterial network. Also serves local access/parking func- tion for local business and residential development.	Low to moderate operating speeds of 20-25 mph.	Short-generally less than ¼ mile on this type facility.	200-3000 ADT
Collector (High Density)	Collects traffic from local and feeder streets and con- nects with arterials. Can serve local business districts.	Variable-should provide for equal service to access and mobility.	Variable	1000-7000 ADT
Arterial (Low Density)	Should serve intra-commu- nity travel. Augments high density arterial system.	Some access control with emphasis on mobility.	Variable	5000-10,000 ADT
Arterial (High Density)	Forms backbone of urban network along with freeway system. Serves as through facility. Also can serve major traffic generators such as shopping centers, stadiums, etc.	High. Must provide for through nature of traffic and also accounts for fre- quent turning movements. Control of access and width for separation of turning movements. Speeds gen- erally 30-50 mph.	Longer-usually greater than 1-2 miles.	80000 ADT and up

#### STATE-AID OPERATIONS 8820,9915

#### 8820.9914 SPECIAL RESURFACING PROJECTS.

(Overlays)

#### **COUNTY STATE AID HIGHWAYS**

(Minimum Requirements)

Present A.D.T.	Strength In Tons Per Axle	Surface Type Width	Shldr-Shldr Width	Design Speed
Under 100	7	Paved 22	26	35
100-749	7	Paved 22	<b>26</b> .	45 -
750-999	7	Paved 22	30	45
1000-2000	7	Paved 24	32	45
2001-Over	7 Ult 9	Paved 24	32	45

Widths of bridges to remain inplace must equal roadway pavement width.

Statutory Authority: MS s 162.02 subds 2,3,3a; 162.155

#### 8820.9915 VERTICAL CLEARANCES FOR UNDERPASSES.

	Rural-Suburban Design Vertical Clearance	Urban Design Vertical Clearance
Highway under roadway bridge	16'4"	14'6"
Highway under railroad bridge	16'4"	14'6"
Highway under pedestrian bridge	17'4"	14'6"
Highway under sign structure	17'4"	14'6"
Railroad under roadway	22'0"	22'0"

# **8820.9916 MINIMUM DESIGN STANDARDS FOR 45 DEGREE AND 60 DEGREE DIAGONAL PARKING.**

Parking Angle	Stall Width	Stall Depth	Traffic Aisle Width	Length along Curb	⅓ Roadway Width (Minimum)	Present ADT	Legal Speed Limit
450	9'	19.8'	13.2'	12.7'	33'	Less than	30 MPH or less
60°	9,	21.0'	18.0'	10.4'	39'	Less than 3000	30 MPH or less
450	9'	19.8'	25.2'	12.7'	45'	3000 and over	30 MPH or less
60°	9'	21.0'	30,	10.4	51'	3000 and over	30 MPH or less