

Warning Messages and Fatal Error Messages

The TRAF model recognizes error conditions and then outputs error messages that identify the following elements:

- >The error message number
- > The name of the module that recognized the error
- >Up to four descriptive parameters.

The error message number and the name of the module that recognized the error will always be printed. The number of parameters that are printed varies with each message. In some cases, no parameters will be printed.

Messages that are numbered below 2000 are “warning messages,” which represent unusual conditions that may or may not indicate an error. The occurrence of a warning message will not abort the run. It is the user’s responsibility to verify the condition flagged by the warning message and to modify the inputs if necessary.

Messages that are numbered 2000 or above indicate “fatal error messages.” In those cases, after all inputs are checked, the run will abort, and the simulation will not be performed.

The software is designed to continue processing for certain categories of input errors. The user should note the following:

- > Some errors preclude the possibility of further processing. In those cases, the model will abort (with the appropriate messages) without completing the diagnostic testing of the entire input stream.
- > Some errors trigger several error messages. The TRAF diagnostic logic, like that of the FORTRAN compilers, is designed to test **all** of the symptoms of an error. Consequently, it is possible that the resolution of the first input error will eliminate many of the subsequent error messages.

WARNING MESSAGES

<u>Number</u>	<u>Warning Message</u>
202	Invalid random number seed. Value must be odd and not a multiple of 5. Value input was P 1. Check Entry P2 on Record Type 02.
203	Unusual start-up lost time, P3, on link (P1, P2).
204	Queue discharge headway P3 on link (P1, P2) is less than the acceptable minimum of 1.4 seconds. Value stored will be 1.4 seconds.
205	Link (P1 , P2 has an unusually high free-flow speed of P3 mph. Value stored internally will be P4 mph.
206	Specified time interval P1 lies outside the range of 50-200 seconds. Check Record Type 04.
207	A response to a diversion policy has been input for link (P1, P2) but no diversion policy was input. Check Record Type 11.
208	Lane P1 of exit interface link (P2, P3) was coded to service non-through movement(s). Because the link is an exit interface link, the lane will only service through traffic.
209	Duration of an incident on link (P1 ,P2) was incorrectly specified. The duration specified was P3. Check Entry 17 on Record Type 29.
210	Time of onset of an incident on link (P1, P2) was incorrectly specified. The time specified was P3, which occurs after the end of the simulation. Check Entry 16 on Record Type 29.
223	Dwell time was not specified for station P1 . Check Record Type 186s.
249	Lane alignment for link (P1 ,P2) in subnetwork P3 is not allowed. Values of Entries 28 and 29 on Record Type 11 are reset to zero.
251	Carpools, input for link (P1, P2). Carpools are not permitted in NETFLO 2 subnetworks.
252	Flow rate is zero but the percentage of trucks or Carpools is not zero. Check Record Type 50 for link (P 1 ,P2).
253	No flow rate was input for entry link (P1, P2) for a given time period. Check Record Type 50s.
258	Centroid number P1 not in range [2000,2999]. Check link (P2,P3) on Record Type 5 1.
259	Unusual flow rate, P3, specified for link (P1, P2) on Record Type 50.
260	Offset was specified for sign control at node P1 on Record Type 35.

- 279 A turn movement that does not have any permissive phase was specified from link (P1, P2) to link (P2,P3) on geometric records and Record Type 21 was not used to prohibit it.
- 284 Volume input on Record Type 176, P3, corresponding to origin node, P 1, and destination node, P2, was set to zero.
- 300 The time step P1, specified in Entry 2 on Record Type 4, exceeds 9 seconds.
- 301 Nominal capacity is outside bounds 1000-3000 for link (P1,P2). P3 is specified nominal capacity.
- 302 Free-flow speed for link (P1,P2) is outside bounds 25-75 mph. Value of speed input is P3.
- 303 Link (P 1 ,P2) has two through movements but only one has regular-use lanes. All regular-use traffic will be routed to the through link with regular-use lanes. P3 is 1 if first through movement has no regular lanes; 2 if second through movement has no regular lanes.
- 305 Incident is specified for link (P1,P2) but link is not in the database.
- 306 Number of regular lanes blocked by incident on link (P1,P2) exceeds the number of regular lanes. P3 and P4 are number of regular lanes and number of regular lanes blocked, respectively.
- 307 Number of special-use lanes blocked by incident on link (P1,P2) exceeds the number of special-use lanes. P3 and P4 are number of special-use lanes and number of special-use lanes blocked, respectively.
- 309 Link (P1,P2) has two exit links as through movements.
- 310 Entry link (P 1 ,P2) has no entry volume.
- 312 Link (P1 ,P2) is internal to the network but no turn operations data was specified even though there is either a second through movement or an off-ramp. Program asserts 100% through traffic for first through movement and 0% for second through movement.
- 339 Dummy on-ramp link (P1 ,P2) cannot be created because the link already exists.
- 340 Node P1 is used both as a entry and an exit node.
- 342 There are no Record Type 60s, but Entry 4 specified as P1 on Record Type 02 indicated that environmental rate tables would be modified.
- 345 Record Types 195 or 196 appear in the input stream but the graphics option has not been selected on Record Type 05.

- 400 An inconsistency exists between the length of link (P1,P2) input on Record Type 11 and the length of this link computed from node coordinate data input for nodes P1 and P2. The length input on Record Type 11 was P3, and the length computed from node coordinate data is P4. The percentage difference between the length input on the Record Type 11 and the computed length is between 10% and 20%. This may indicate an error.
- 500 Specified oncoming link (P1,P2) may not have been specified correctly. Its traffic opposes traffic on link (P3,P2), but no receiving link (P2,P3) was input. Check Record Type 11.
- 550 Unreasonable headway specified for route P1. Value input was P2. Check Record Type 189.
- 560 A name was input for link (P1,P2) on a Record Type 10, but link (P1,P2) was never defined by a Record Type 11.
- 561 Blockage factor P3 was input on Record Type 21 for link (P1,P2) in NETSIM subnetwork. Blockage factor is not an input for NETSIM, it will be ignored.
- 600 Cycle length for coordinated actuated controller is out of bounds. Value must be between 30 and 150 seconds. Value input was P1. Check Record Type 39 for node P2 and phase P3.
- 601 Columns 29-78 must be blank on Record Type 39. Check Record Type 39 for node P1. The P2 4-digit field on the record contains value P3 and should be blank. Value P3 is ignored.
- 602 Recall switch code should be blank for phase 1 when phase 1 was specified as nonactuated. Check Record Type 40 for node P1 phase P2.
- 603 Columns 21-76 on Record Type 40 should be blank. Any data in those columns is ignored. Check Record Type 40 for node P 1, phase P2.
- 605 Columns 65-76 on Record Type 41 should be blank. Any data in those columns is ignored. Check Record Type 4 1 for node P 1, phase P2.
- 606 Detectors should not be specified on Record Type 41 for node P1 and phase 1 because phase 1 was specified on Record Type 40 as non-actuated.
- 607 Value P1 input for lane switching lag (LSALAG) on Record Type 140 is unusual. Verify that this value is correct.
- 608 Value P1 input for speed of left turners (LEFTSP) on Record Type 140 is unusual. Verify that this value is correct.
- 609 Value P1 input for speed of right turners (ARTESP) on Record Type 140 is unusual. Verify that this value is correct.
- 610 Duration, P3, of short-term event specified for link (P1,P2) exceeds 60 seconds. Value input will be ignored. A duration of 60 seconds will be used.

- 611 Number of short-term events per hour must be S or more. The frequency input for link (P1,P2) on Record Type 54 is P3. Value input will be ignored and 8 events per hour assumed.
- 615 The specified mean number of parking maneuvers, P1 per hour, on link (P2,P3) is too low. At least 15 maneuvers per hour must be specified unless this is a subsequent time period specification in which case 0 is acceptable. The logic will automatically assert 15 maneuvers per hour whenever this message is triggered. Check Record Type 56 for link (P2,P3).
- 616 Parking zone specified along curb, P 1, of link (P2,P3) extends into a turn pocket. The parking zone therefore will begin at the tail of the pocket, P4, feet from the stop line. Check Record Type 56 for link (P2,P3).

P1	Curb
1	Right
2	Left

- 617 A parking zone cannot extend within 40 feet of the upstream intersection. Therefore, the length of the parking zone on side P1 of link (P2,P3) will be changed internally to P4 feet. Check Record Type 56 for link (P2,P3).

P1	Curb
1	Right
2	Left

- 618 No Record Type 50s (entry volumes) were specified for subnetwork, P1. Ensure that traffic enters subnetwork via source points (Record Type 5 1) or from adjacent subnetworks via interface nodes.

P1	<u>Subnetwork</u>
3	NETSIM
4	FREFLO
5	NETFLO 1
6	NETFLO 2

- 619 Calibration distributions for HDWPCT and LSTME arrays do not exist for link type P1 specified on the Record Type 11 for link (P2,P3). Either change the link type coded on Record Type 11 to existing types 1 or 2 or input these calibration arrays for link type, P1, on Record Type 149. Record Type 149 can only be coded if the NETSIM model is used. If Record Type 149 has been included for link type, P1, ignore this warning.
- 620 Node P1 appears in the origin-destination table for traffic assignment as either an origin or destination but not both. This could indicate missing Record Type 176s.
- 621 Queue discharge code P1 was input for link (P2,P3) on NETFLO 2 subnetwork. This code is not applicable to NETFLO 2 and will be ignored.
- 622 A pocket has been specified for movement P1 on link (P2,P3) but signal control does not service that movement. P1 is 0 for left turn movement and 2 for right turn movement. Check Record Type 11 for link (P2,P3) and signal indications for node P3 on Record Type 36.

- 656 Too many links have been named on Record Type 1 0S. The NETSIM model allows P1 links. Record Type 10 data for link (P2,P3) will be ignored.
- 657 Link (P1 ,P2) was named more than once within the set of Record Type 1 0S. Only the first reference for this link will be considered. Subsequent link name(s) will be ignored.
- 659 Graphics files will not be generated because no simulation is performed in this run and only fuel and emission statistics are computed.
- 660 During first time period, minimum main street green time is irrelevant and ignored by the model. Check Entry 20 on Record Type 35 for node P1 . Value specified was P2. This entry should be blank.
- 661 Signal transition was requested on Record Type 02, but no new traffic control pattern was specified on Record Types 35 and 36 during any subsequent time period.
- 663 The turn decisions for all traffic entering link (P1,P2) are specified on Record Type 22. Therefore, the turn movement distribution at the downstream end of link (P 1 ,P2) can differ from that specified on Record Type 2 1.
- 664 Unusually low minimum main street green for signal transition. Check Entry 20 on Record Type 3 5 for node P 1. Value specified was P2.
- 665 Detector data for phase P2 of actuated controller node P1 on Record Type 46 was specified. This warning will appear but will not signal a problem whenever a detector that is on an approach that does not directly approach its actuated node exists. If this is not the case, then this message signals two different problems that could cause this error: (1) No allowable movement Record Type 45 was input for phase P2. Check the set of Record Type 45s. (2) Incorrect approach or phase for detector was input on Record Type 46. Check Entries 2 and 4 on Record Type 47.
- 666 Traffic assignment results did not assign any flow to link (P1 ,P2). Turn percentages are determined by types and number of movements at downstream node. Turn movements created in Record Type 2 1 are generated by the program. Verify turn percentages if necessary and rerun the simulation (without traffic assignment).
- 667 A new traffic control pattern was specified during a subsequent time period via Record Type 35, but no signal transition algorithm was selected on Record Type 02. The program has defaulted to immediate signal transition.
- 675 Turn movement percentages (or vehicle counts) were input for upstream entering movement P3 to link (P1,P2). Record Type 21 does not specify a turn percentage entering link (P1 ,P2) from direction P3. In other words, there is no Record Type 2 1 that describes a link with downstream node P1 with a turn percentage in direction P3. Code P3 is defined as (1,2,3,4) for (left, through, right, diagonal) movements, respectively. Check Record Type 22.
- 700 Link (P 1 ,P2) was defined in interchange P3 more than once.
- 701 Destination link (P 1 ,P2) and turn code P3 for interchange P4 is a duplicate.

- 702 The specified position for the off-ramp warning sign, for the off-ramp at node P1 is P2 feet upstream from the off-ramp gore. This is upstream from the start of the freeway. Therefore, the warning sign is positioned at the start of the freeway P3 feet upstream from the off-ramp.
- 704 Both node coordinates and the angle of link (P1,P2) were input. The angle will be ignored.
- 705 A shared lane channelization code of 7 was entered for lane P1 on link (P2,P3) where no diagonal or through receiver exist. The lane will therefore only service right-turning traffic.
- 706 A shared lane channelization code of S was entered for lane P1 on link (P2,P3) where no diagonal or through receiver exist. The lane will therefore only service left-turning traffic.
- 708 Movement defined by code P3 was specified as a receiver to link (P1,P2) in interchange P4. Check signal codes servicing link (P1,P2). Check Record Types 95 and 96 for interchange P4 and Record Type 36 for node P2.

P3	<u>Movement</u>
0	Left
1	Through
2	Right
3	Diagonal

- 709 Link (P1,P2) is an approach to a micronode and services left-turn movements onto link (P2,P3). No opposing node has been specified. Results will be incorrect if there is an oncoming approach that has not been properly specified.
- 710 If through traffic from link (P1 ,P2) opposes left-turners originating from (P3,P4), you must specify node P1 as the opposing node on Record Type 11 for link (P3,P4).
- 711 The specified freeway capacity for meter at node P1 is P2. The common value for capacity is 900-2,200 vphpl.
- 713 A lane drop warning sign for the lane drop on link (P1,P2) is specified at P3 feet upstream from the lane drop. This is upstream of the start of the freeway. Therefore, the warning sign will be placed at the start of the freeway, P4 feet upstream from the lane drop.
- 714 An incident blockage warning sign for the incident on link (P1 ,P2) is specified at a distance P3 feet from the upstream end of the incident. This is upstream of the start of the freeway, so the warning sign will be placed at the start of the freeway, P4 feet upstream from the incident.
- 715 An anticipatory warning sign is positioned at the beginning of the freeway segment, P1 feet from the on-ramp, which is shorter than the usual distance of 1,500 feet.
- 716 Entry P1 on Record Type P2 is specified as 0 or a blank. This will not be interpreted as a request for the default value, and will be read literally.

- 717 For micronode P1, the angle between the approach (from node P2) and the opposing link (from node P3) is less than the angle between the opposing link (from node P3) and its through or left-diagonal receiving link (to node P4).
- 720 While processing lane drop warning sign P2, which corresponds to lane drop P 1, vehicle P3 no longer has a candidate lane on which to travel. If this leads to unacceptable numbers of missed exits, reassigned vehicles or unreasonable delays the user can check off-ramp, incident, and other lane drop warning signs for placement and eliminate contradictions. Currently, vehicle P3 will continue on its current lane P4.
- 721 While processing incident warning sign P2, which corresponds to incident P1, vehicle P3 no longer has a candidate lane on which to travel. If this leads to unacceptable numbers of missed exits, reassigned vehicles or unreasonable delays the user can check off-ramp, lane drop, and other incident warning signs for placement and eliminate contradictions. Currently, vehicle P3 will continue on its current lane P4.
- 723 While processing the beginning of an auxiliary lane P1 on link (P3,P4), vehicle P2 no longer has a candidate lane on which to travel. If this leads to unacceptable numbers of missed exits, reassigned vehicles or unreasonable delays, the user can check incident, lane drop, and other off-ramp warning signs for placement and eliminate contradictions. Currently, vehicle P2 will continue on its current lane.
- 725 While traveling on lane P2 on link (P3,P4), vehicle P1 no longer has a candidate lane on which to travel. If this leads to unacceptable numbers of missed exits, reassigned vehicles or unreasonable delays, the user can check incident, lane drop, and other off-ramp warning signs for placement and eliminate contradictions. Currently, vehicle P2 will continue on its current lane.
- 800 A Record Type 21 and a Record Type 23 were input for link (P1,P2). All turn movements input on Record Type 23 will be used, and all turn movements input on Record Type 2 1 will be ignored.
- so1 A Record Type 50 or 5 1 and a Record Type 53 were input for link (P1 ,P2). All volumes input on Record Type 53 will be used, and all volumes input on Record Type 50 or 5 1 will be ignored.
- 901 An inconsistency exists between the length of link (P 1 ,P2) input on Record Type 11 and the length of this link computed from node coordinate data input for nodes P1 and P2. The length input on Record Type 11 was P3, and the length computed from node coordinate data is P4. The percentage difference between the length input on Record Type 11 and the computed length must be less than or equal to 20% for links greater than 500 feet. The input and computed link lengths can differ by no more than 100 feet.

FATAL ERROR MESSAGES

Number	Fatal Error Message
2000	Invalid run identification number. Value must be greater than or equal to 0. Value input was P 1, Check Record Type 0 1.
2001	An incorrect time slice was specified. The time slice must be greater than 1 and less than 5 seconds. A value of P2 was specified for the time slice. The time interval must be an integer multiple of the time slice. The time interval was specified as P1. The number of time slices per time interval must be less than or equal to 50. The number of time slices in the specified time interval is P3.
2002	No Record Type P1 was input.
2003	End-of-input file found unexpectedly. This means that the necessary records are missing, that a Record Type 210 indicates there is another time period but data for the time period is missing, or that Record Type 02 indicates an additional case study is expected but no data records for the case are included in the input stream.
2004	Input records out of sequence. A Record Type P1 follows a Type P2.
2005	Record Type P1 is not recognized by the TRAF model. Check input stream.
2006	Data records missing. Record Type P1 follows Record Type P2.
2007	Next time period code input on a Record Type 2 10 is invalid. Code must be zero (blank) or 1.
200s	Record Type 170 is missing between Record Types P1 and P2.
2009	Required Record Type P1 is missing from the data records for subnetwork type P2, where: <div style="margin-left: 40px;"> P2 = 2 for ROADSIM 3 for NETSIM 4 for FREFLO 5 for NETFLO 1 6 for NETFLO 2 8 for FRESIM </div>
2010	Record Type P1 is not permitted as an input record during time period P2 for subnetwork type P3. Time period and subnetwork type are identified from either Record Type 02 or the Record Type 170 or 2 10 that immediately precedes this section of data. (P3 is defined the same as P2 in error message 2009.)
2011	Two delimiter Record Type P1s occur in a row. This is not permissible. Check input stream.
2012	Run type code, P1, specified on Record Type 02 indicates traffic assignment is to be performed but no TA records, P2, were input.

- 2013 Traffic assignment records, P1, were input but traffic assignment not specified for this run on Record Type 02.
- 2014 Data specifications for time period, P1 includes data for subnetwork type, P2. However, no data was given for subnetwork type P2, during time period 1. A new subnetwork cannot be introduced after time period 1. (P2 is defined the same as in message 2009.) Check Record Types 170 and 210 for time period, P1.
- 2015 Input stream is not partitioned properly. Data for subnetwork type P1, appears in more than one section of the input stream within specifications for time period, P2. Specifications for any subnetwork can appear only once within each time period. (P1 is defined the same as P2 in message 2009.) Check Record Types 170 and 2 10 for time period, P2.
- 2016 Mass transit records incomplete. P1 indicates the following errors:
- 1 Incomplete station and route data. A Record Type 185 was input, but one or more of the following records are missing: 186, 187, 188, 189.
 - 2 Stations not defined by a Record Type 185, but they are referenced on a Record Type 186 or 188 (or both).
 - 3 Incomplete route data. Routes are defined by Record Type 187, but no Record Type 189s were input.
 - 4 No stations or routes defined by Record Types 185, 186, and 187, but either stations or routes were referenced on a Record Type 188 or 189.
- 2017 Record Type P1 is not permitted as an input record during time period P2. (Check whether Record Types 03, and 2 10 are coded to indicate that time period P2 exists.)
- 201s More than one Record Type 175 was input.
- 2019 More than one Record Type P1 was input.
- 2020 Code specifying environmental option selected is invalid. Value input was P 1. Permitted values are 0-17. Check Entry 4 on Record Type 02.
- 2021 Code indicating if another run follows this run is invalid. It must be zero (blank) or 1. Value input was P 1. Check Record Type 02.
- 2022 Simulation type code is invalid. It must be - 1, -2, -3, +1 , +2, or +3. Value input was P 1. Check Record Type 02.
- 2023 Code indicating if calculation of fuel consumption and vehicle emissions is to be performed for CORFLO is invalid. It must be 0 or 1. Value input was P1 . Check Record Type 02.
- 2024 Subnetwork type code is invalid. Value input was P1 . Refer to description of Record Type P2 for valid subnetwork codes.
- 2025 Clock time specifying start of simulation is invalid. It cannot be negative or greater than 2359. Value input was P1 Check Record Type 02.

- 2026 Initialization time of zero not allowed. Check Record Type 02.
- 2027 More than one Record Type 05 was entered.
- 202s For a CORSIM dataset, the FRESIM time step must be an integer. The time step entered was P1 (in tenths of a second).
- 2030 Invalid time period length for time period number P 1. Value must be at least 10 seconds. Value input was P2. Check Record Type 03.
- 203 1 Number of Time Intervals between successive outputs is invalid. This value must be positive. Check Record Type 05.
- 2040 More than one Record Type 81 was entered in the input stream.
- 2056 There were P1 time periods specified on Record Type 03 and P2 time periods in the input stream. P1 must equal P2. Check input stream and Record Type 03.
- 2059 All entry links in subnetworks for either NETSIM, or NETFLO 1 and NETFLO 2 must have zero length. Entry link (P1, P2) was assigned a length of P3 (feet). Check Record Type P4.
- 2060 A node number defining link (P1,P2) is invalid. Internal node numbers must be > 0 and less than or equal to the maximum allowable internal node number, P3. Entry node numbers must range from 8000 to 8999. Interface node numbers must range from 7000 to 7999. No exit links (i.e., P2 greater than or equal to SOOO) can be specified unless exit link is part of a rural road (ROADSIM) subnetwork. Check Record Type P4.
- 2061 Invalid link length on link (P1,P2). Value must be greater than or equal to 50 feet for links on all subnetworks except macro freeway (FREFLO). FREFLO links must be greater than or equal to 100 feet in length. In addition, if link (P1,P2) is a link in a NETSIM subnetwork it must be less than or equal to 4,000 feet. Value input was P3. Check Record Type P4.
- 2062 Invalid pocket length on link (P1,P2). The minimum pocket length permitted is 20 feet. In addition, the pocket length must be less than or equal to 1,000 feet if link (P1,P2) is in a NETSIM subnetwork or less than or equal to 90% of the link length if a NETFLO 1 or NETFLO 2 subnetwork. Value input was P3. Check Record Type 11. If P4 > 0, then P3 must be greater than the effective link length (P4).
- 2063 Invalid number of lanes specified for link (P1,P2). Value must be in the range [0,7], inclusive for links in a NETSIM subnetwork and [0,6] inclusive for links in a NETFLO 1 or NETFLO 2 subnetwork. Value input was P3. Check Record Type 11.
- 2064 Invalid number of lanes specified for a pocket on link (P1 ,P2). Value must be 1 or 2. Value input was P3. Check Record Type 11.
- 2065 Invalid number of lanes have been specified on link (P1 ,P2). The sum of full and pocket lanes must be less than or equal to 7 for links in a NETSIM subnetwork or 6 for links in a NETFLO 1 or NETFLO 2 subnetwork. Check Record Type 11.
- 2066 Invalid grade value specified for link (P1 ,P2). Value must lie between -9 and +9. Value input was P3. Check Record Type 11.

- 2067 Invalid queue discharge code on link (P1 ,P2). Value must be 0-4. Value input was P3. Check Record Type 11.
- 2068 Invalid channelization code input for link (P1,P2) and lane P3. Value must be 0-6. Value input was P4. Check Record Type 11.
- 2069 Either downstream node of link which receives traffic from link (P 1 ,P2) or upstream node of opposing link is invalid. Node numbers must be greater than 0 and less than or equal to the maximum allowable internal number, P3, or be an interface or entry-exit node number (7000-8999, inclusive). Value input was P4. Check Record Type 11.
- 2070 Invalid start-up lost time on link (P1 ,P2). Value must be 0 or greater and < 10 seconds. Value input was P3. Check Record Type 11.
- 2071 Invalid queue discharge headway on link (P 1 ,P2). Value must be 0 or greater and < 10 seconds. Value input was P3. Check Record Type 11.
- 2072 Invalid free-flow speed input for link (P1 ,P2). Speed must be at least 10 mph and should not exceed 65 mph. Free-flow speed should not be input for entry links. Value input was P3. Check Record Type 11.
- 2073 Invalid RTOR code input on link (P1 ,P2). Value must be 0 or 1. Value input was P3. Check Record Type 11.
- 2074 Invalid pedestrian code input for link (P 1 ,P2). Value must be 1,2 or 3. Value input was P3. Check Record Type 11.
- 2075 Invalid diversion movement code input for link (P1,P2). Value must be 0, 1,2,3, or 4. Value input was P3. Check Record Type 11.
- 2076 Invalid diversion response code input for link (P1 ,P2). Value must be 0-10, inclusive. Value input was P3. Check Record Type 11.
- 2078 No receiving nodes were specified for internal link (P1 ,P2). Check Record Type 11.
- 2079 Link (P1,P2) is an exiting interface link. No receiving nodes should be specified. Check Record Type 11.
- 2080 Turn pockets specified for link (P1,P2). Pockets cannot be input on entry links. Check Record Type 11.
- 2081 A turn pocket length was specified and its corresponding number of lanes was not, or vice versa. Both length and lanes for pocket must be input if a pocket is desired. Check Record Type 11 for link (P1,P2).

- 2082 Movement indicated by diversion movement code is not allowed by geometry. Check Record Type 11 for link (P1,P2).
- 2083 Illogical channelization code for lane P1 of link (P2,P3). Check Record Type 11.
- 2084 Channelization code, P1, input for lane, P2, on link (P3,P4). Lane specified does not exist on this link. Check Record Type 11.
- 2085 No unrestricted lanes exist on link (P1 ,P2). Check Record Type 11.
- 2086 Link (P1 ,P2) is not defined correctly. A link must have at least one node which is not an entry or interface node (i.e., one node must be less than 7000). Check Record Type P3.
- 2087 Storage exceeded for random number seed array XLSEED. Maximum array size is P 1. The value P1 is defined as $IMXLNK * 2$, where IMXLNK is the maximum number of links in the subnetwork. Reduce the number of entry links, entry interface links, and/or links with source/sink nodes such that: $(\text{Number of entry links} + \text{Number of entry interface links}) * 4 + \text{Number of source/sink nodes} < \text{Dimension of XLSEED}$.
- 2088 More than one lane channelized with code 9 on link (P 1 ,P2).
- 2089 A left receiver was specified for link (P1,P2) but the lane channelizations do not accommodate the left-turn movement.
- 2090 The graphics output option has been selected on Record Type 05 but node coordinate data has not been input on Record Type 195.
- 2091 A diagonal receiver was specified for link (P1 ,P2) but the lane channelizations do not accommodate the diagonal turn movement.
- 2092 A through receiver was specified for link (P1 ,P2) but the lane channelizations do not accommodate the through movement.
- 2093 Link (P1 ,P2) has two interior lanes with channelization codes of zero and has both a through and diagonal receiver. When both a through and diagonal receiver are specified for a link, only one interior lane can have a channelization code of zero. Check Record Type 11 for this link.
- 2094 A right receiver was specified for link (P1,P2) but the lane channelizations do not accommodate the right turn movement.
- 2095 The code locating a long-term event within an intersection on link (P1,P2) is incorrect. The value specified is P3. The code must be 0 or 1. Check Entry 5 on Record Type 55.
- 2096 For a long-term event on link (P1 ,P2), the lane number of a lane blocked on a cross street is incorrect. The lane specified is P3. Valid lane numbers are 1-7. Check Entry 6 on Record Type 55.

- 2097 A long-term event was specified to occur in the intersection of link (P1,P2), but the downstream node P2 was not specified as a micronode. If an event is to occur in the intersection, then the downstream node of the link must be a micronode. Check Entry 5 on Record Type 55.
- 2099 The effective length (street length) of link (P1,P2) should be greater than or equal to at least one vehicle length (20 ft). The link length entered by the user on Record Type 11 is P3 feet and the computed street length (link length minus intersection width) is P4.
- 2100 No internal links specified for NETFLO 2 subnetwork. Revise inputs.
- 2101 FRESIM off-line incident detection code specified on Record Type 02 must be a 0 or a 1. The current entry is P 1.
- 2105 Channelization code, P1, not allowed on a NETFLO 2 subnetwork. Check Record Type 11 for link (P2,P3).
- 2106 Diversion policies not allowed on a NETFLO 2 subnetwork. Revise Record Type 11 for link (P1,P2).
- 210s The combination of design speed and link length for link (P1,P2) is unacceptable for NETFLO 2 logic. The (link length) / design speed (converted to fps) should not exceed one time interval as defined on Record Type 04. The minimum time interval required to satisfy this condition is P3 seconds. Either increase design speed or the interval duration, or decrease link length. Check Record Type 11. If an acceptable combination is not feasible, insert a "dummy" node and create two links.
- 2109 Dimension of FUTENT array (for NETFLO 2) exceeded. Size must be greater than or equal to P1 . The current size is P2.
- 2110 Link (P 1 ,P2) input on a Record Type 11 during a time period other than the first was never defined on a Record Type 11 during the first TP.
- 2190 Traffic exits subnetwork type P1 through interface node P2, but no subnetwork receives traffic through node P2. Subnetwork type code P2 defined in the description of Record Type 170.
- 2191 Interface node P1 is an entry and exit point to the same subnetwork. All interface nodes must be unidirectional. Subnetwork type is P2. Definition of subnetwork type code, P2 appears in description of Record Type 170.
- 2192 Traffic enters subnetwork type P1 through interface node P2, but no subnetwork discharges traffic into node P2. Definition of subnetwork type code, P1 appears in description of Record Type 170.
- 2193 Multiple interface exit links were specified for the same interface node P1 . Only one interface exit link is allowed for an interface node. Check geometry records.

- 2194 Multiple interface entry links were specified for the same interface node P1 . Only one interface entry link is allowed for an interface node. Check geometry records.
- 2200 Station number P1 referenced on a Record Type P2 is invalid. Value must be between 1 and P3.
- 2201 Lane P1 occupied by buses servicing station P2 on link (P3,P4) is invalid. Station must either be protected (i.e., lane number = 0) or located in lane 1. Check Record Type 185.
- 2202 Either upstream or downstream node, P1, defining link station P2 occupies is invalid. Upstream and downstream node numbers must be > 0 and less than or equal to P3 or in the range 7000-7999. Check Record Type 185.
- 2203 Location P1 (feet), of bus station P2 is invalid. Station distance from the stop line must not be negative. Check Record Type 185.
- 2204 Capacity, P1, of station P2 is invalid. Value input must be in the range 1-6 buses. Check Record Type 185.
- 2205 Station type, P1, for station P2, is invalid. Value must be 1-6, inclusive. If zero, a default is assumed. Check Record Type 185.
- 2206 Station P1 extends past the upstream end of link (P2,P3). Check station position and capacity on Record Type 185.
- 220s Placement of station P1 interferes with right turn pocket on link (PZ,P3). Station must be located upstream of the pocket at least P4 feet from the stop line. Check Record Type 185.
- 2209 Link (P 1 ,P2) has not been defined in any subnetwork. Node P 1 is in subnetwork type P3 and node P2 is in subnetwork type P4 where:

<u>P3 and P4</u>	<u>Subnetwork Type</u>
0	Node not found in any subnetwork
2	ROADSIM
3	NETSIM
4	FREFLO
5	NETFLO 1
6	NETFLO 2

- 2210 Station P1 referenced on a Record Type P2 was not defined previously (by a Record Type 185).
- 2211 Dwell time, P1, specified for station P2, is outside range 1 to 500 seconds. Check Record Type 186.
- 2212 Percent of buses passing station P1 is not in range 1 to 100. Value input was P2. Check Record Type 186.
- 2213 Station P1 has been defined on more than one Record Type 186.

- 2214 Route number P1 referenced on a Record Type P2 is invalid. Value must be between 1 and P3.
- 2215 Invalid node number, P 1, referenced on Record Type 187 for route P2. Node number must be between 1 and P3 or between 7000 and 8999.
- 2216 First node, P1, of a route sequence must be an entry node. Check Record Type 187 for route P2.
- 2217 More than one route sequence has been input for route P1 . Check Record Type 187s.
- 221s Node sequence for route P1 is incomplete. Check Record Type 187.
- 2219 A node number of zero was input in node sequence for route P 1. Check Record Type 187.
- 2220 No exit node specified in node path for route P1 . Check Record Type 187s.
- 2221 During checking of Record Type 187, the maximum number of links, P1, in all bus routes has been exceeded. Reduce the number of links in bus routes.
- 2222 Node P1 appears after the exit node in the node sequence for route P2. Check Record Type 187.
- 2223 Route number, P1 , referenced on a Record Type P2, was not defined as a route (on a Record Type 187). Check Record Types P2 and 187.
- 2224 A zero station number was specified in station path for route P1 . Check Record Type 188.
- 2225 More than one station sequence has been input for route P1 . Check Record Type 188s.
- 2226 During checking of Record Type 188, the maximum number of stations on all bus routes has been exceeded. Reduce the number of bus stations.
- 2227 Headway for route P1 has been input on more than one Record Type 189.
- 222s Headway input for route P1 is invalid. Value input was P2. Check Record Type 189.
- 2229 Unprotected bus stations cannot be placed on links with only one lane. Revise Record Type 185 for station P1 located on link (P2,P3).
- 223 1 Headway was not specified for route P1 . Check Record Type 1 89s.
- 2232 Station P1 overlaps, or is upstream of, station P2. Either station sequence input on Record Type 188 or node sequence input on Record Type 187 for route P3 is incorrect. In addition, check Record Type 185 for stations P1 and P2.
- 2233 Station P1 exists in station sequence for route P2 but the link it occupies does not appear in link sequence for route P2. Check Record Types 187 and 188 for route P2.

- 2235 Node sequence for route P3 is incorrect. The link (P1 ,P2) does not receive traffic from the link defined by the node preceding node P 1. Check Record Type 187 for route P3.
- 2236 Capacity of MANUVR array has been exceeded. Checking of inputs will continue but simulation will be aborted. Increase array dimension to at least P1 .
- 2237 Buses on route P1 traveling on link (P2,P3) cannot execute turn movement P4 since no phase services that movement.
- | P4 | <u>Movement</u> |
|----|-----------------|
| 0 | Left |
| 1 | Through |
| 2 | Right |
| 3 | Diagonal |
- 2240 A bus station cannot be located within a ROADSIM or FREFLO subnetwork. Therefore, station P1, located on link (P2,P3) must be removed. Check Record Type 185.
- 2241 More than one Record Type 64 was input. Only one Record Type 64 is allowed.
- 2242 Surveillance detectors should be specified on Record Type 42 for collecting the surveillance data if Record Type 64 is specified for frequent output of surveillance information.
- 2300 Invalid link curvature code, P1, input for link (P2,P3) on Record Type 196.
- 2301 One of the nodes defining the underpass number P1 for link (P2,P3) is invalid. The invalid node number is P4. Check Record Type 196 for link (P2,P3).
- 2303 Link (P1 ,P2) was specified as an underpass more than once on the Record Type 196 for link (P3,P4).
- 2304 More than one Record Type 196 has been input for link (P1,P2). Only one can be input.
- 2305 A unique hierarchy of links cannot be determined from the underpass data specified on Record Type 196. This could happen if, for example, a link was an underpass and overpass of the same link.
- 2306 Link curvature was specified for link (P1,P2) but node coordinates are missing for node P3.
- 2307 Curvature was specified for link (P1,P2). Curvature cannot be specified for entry links.
- 2308 Link (P1,P2) is specified as an underpass for more than four links. Up to four are permitted. Revise Record Type 196s.
- 2501 More than one Record Type P3 has been specified for link (P1 ,P2) for this time period.
- 2521 For link (P1,P2) a turn percentage for movement P3 was specified but no receiving link for that movement exists. Turn movement (left, through, right, diagonal) is specified by P3 (1,2,3,4). Check Record Type 2 1.

- 2522 P1 percent of the traffic on link (P2,P3) is specified as executing turn movement P4. This movement is also specified as prohibited. Check movement P4 on Record Type 2 1 for link (P2,P3). Turn movement P4 is defined as (left, through, right, diagonal) for values (1,2,3,4).
- 2523 Link (P 1 ,P2) input on Record Type 2 1 does not correspond to any existing link.
- 2525 The downstream node of a link must not be an exit node. A node number of P1 was input on a Record Type 2 1.
- 2526 Percentage or count of vehicles executing a turn movement is negative for link (P 1 ,P2). Value input was P3. Check Record Type P4.
- 2527 Turn prohibition code input for link (P1,P2) is not zero or 1. Value input was P3. Check Record Type 2 1.
- 2528 A Record Type 11 was specified for link (P1,P2) but the Record Type 21 for this link is missing. [If a Record Type 21 exists for this link, the implication is that more than one Record Type 11 exists for link (P1,P2).]
- 2530 Link (P1 ,P2) referenced on a Record Type 21 or 50 was not previously defined by geometry.
- 253 1 Link input on a Record Type 50 is not an entry link. Upstream node of link in error is P1 . Upstream nodes of entry links must be in range 8000 to 8999.
- 2532 Downstream node P1, of an entry link identified on a Record Type 50 is invalid. Downstream node must be an internal node numbered in the range 1 to P2.
- 2533 Negative flow rate, P3, input on Record Type 50 for link (P 1 ,P2).
- 2534 Percentage of entering volume that is trucks is invalid. Check Record Type 50 for link (P1 ,P2). Value input was P3.
- 2535 Percent of entering volume that is Carpools is invalid. Check Record Type 50 for link (P1 ,P2). Value input was P3.
- 2536 Sum of turn movements is zero and traffic assignment not specified. Check Record Type 2 1 for link (P1,P2).
- 2539 Blockage factor for link (P1,P2) is invalid. It should be less than or equal to 1/(number of lanes). Value input is P3. Check Record Type 21.
- 2567 Node number, P1, used to define a link (P2,P3) with a source/sink point is invalid. Source/sink points can only be specified on internal links with node numbers between 1 and the maximum allowable internal node number, P4, or, on entry interface links (upstream node numbers 7000-7999) or on exit interface links (downstream node numbers 7000-7999). Check Record Type 5 1 for link (P 1 ,P2).
- 2568 Link (P1 ,P2) defined on Record Type 5 1 does not correspond to a previously defined link.
- 2570 Percentage of trucks and cat-pools greater than 100. Check Record Type 50 for link (P 1 ,P2) and percentage of trucks (P3) and car-pools (P4).

- 2573 Vehicle occupancy outside allowed range. Value input was P1 . Vehicle Type was P2. Check Record Type 52.
- 2575 Blockage factor not specified as a percentage (not within range [0,100]) for link (P 1 ,P2). Value input is P3. Check Record Type 2 1.
- 2600 Node P1 is defined as an approach to node P2 but link (P 1 ,P2) does not correspond to a previously defined link. Check Record Type 35.
- 2601 Node P 1 lies outside the range of valid node numbers (1 ,P2), permitted to be specified on Entry 1 of Record Type 35.
- 2602 Specified offset, P1 seconds, for node P2 is negative. Check Record Type 35.
- 2603 Approach node P1 to node P2 is listed as negative on Record Type 35.
- 2604 Approach node P1 to node P2 is listed out of sequence by having a zero approach node number listed prior to Entry P3 on Record Type 35.
- 2605 Duration of interval P 1 for node P2 is negative on Record Type 3 5.
- 2606 Interval P1 of node P2 is listed out of sequence by having a zero interval duration listed prior to Entry P3 on Record Type 35.
- 2607 The sum of the interval durations (P1 seconds) is less than the specified offset (P2 seconds) for node P3. Check Record Type 3 5.
- 2608 Another Record Type 35 was previously read for node P1 during the same time period.
- 2609 An inconsistency exists between specifications on Record Types 35 and 36 for node, P1 . The Record Type 35 identifies P2 approaches to this intersection while the Record Type 36 specifies signal control codes for P3 approaches.
- 2610 Node P 1 specified in Entry 1 of Record Type 3 5,36,39,40,4 1, or 43 does not correspond to any existing node.
- 2611 More than one signal interval was specified for the sign control at node P1 . Check Entry P2 on Record Type 36 for node P 1.
- 2612 A non-zero control code was specified for interval P1 of the fixed time control at node P2, but the duration of interval P1 was specified as zero. Check Record Types 35 and 36.
- 2613 No signal control is specified for approach P1 for the fixed time controller at node P2. Check Record Type 36.
- 2614 Too few signal intervals are specified for approach P1 to node P2. Check Record Type 36.
- 2615 No approaches were specified for node P1 on Record Type 36.
- 2616 A prior Record Type 36 was specified for node P 1.

- 2617 Node P 1 lies outside the range of valid node numbers specified as (1 ,P2) Check Record Type 36,44,45,47, or 48.
- 2618 There should be no blanks within the sequence of control code specifications on Record Type 36. Control code in Entry P1 cannot be non-zero when the prior two interval codes for approach P2 are zero. Check Record Type 36 for node P3.
- 2619 Record Type 36 was not input for node P 1.
- 2620 Less than two intervals were specified for the fixed time controller at node P 1.
- 2622 No more than P1 signal intervals are allowed for node P2 on subnetwork P3 (P3 = 3 for NETSIM, 5 for NETFLO 1, and 6 for NETFLO 2). Check data on Record Type P4.
- 2623 No Record Type 35 was input for node P1 listed on Record Type 36.
- 2624 Invalid control code of P1 was specified for sign control for node P2 in Entry P3 on Record Type 36. (Code must be 0 or 5.)
- 2625 The geometry specifications on Record Type 11 imply that additional approaches exist and must be specified on Record Type 35 for node P1.
- 2626 Specified duration of P1 seconds on Entry P2 of the Record Type 35 for node P3 should not exceed 120 seconds.
- 2627 A duration cannot be specified for interval P1 on Record Type 35 for node P2 when no control codes exist for that interval on Record Type 36.
- 2628 Control code P1 must be between 0 and 9. Check Entry P2 on Record Type 36 for node P3.
- 2629 A single interval duration has been specified for node P1 . More than one duration must be specified if any. Check Record Type 35.
- 2630 Movement defined by code P4 was specified with turn percentage, P3, but control does not service this movement. Check signal codes serving link (P 1 ,P2). Check Record Type 2 1 for link (P1,P2) and Record Type 36 for node P2. P4 is 0 for left, 1 for through, 2 for right, and 3 for diagonal.
- 2631 Dimension, P1, for NETFLO 2 array XSRVS is insufficient.
- 2632 Phase movement code, P 1, for node P2 is invalid. Valid phase movement codes are 0,6-9, 11, and 14-16.
- 2633 All red clearance interval P1, input for node P2 is too large. Up to a 15 second clearance is permitted, P3 seconds was specified. Check Record Types 35 and 36 for node, P2.
- 2634 A code of P1 was entered for Entry 64 for node P2 which is out of bounds. If the node is to be modeled as a micronode the entry must be 1. Otherwise, it must be left blank or zero. Check the Record Type 36 for this node.

- 2640 Node P 1 is defined as the upstream node of an approach to node P2 but link (P1 ,P2) does not correspond to a previously defined link. Check Record Type 39.
- 2641 Two identical approach nodes were specified to actuated controller node, P1. Check Entries 2-6 on Record Type 39.
- 2642 An insufficient number of approaches was specified to actuated controller node P 1 on Record Type 39. Record Type 11 data implies more approaches exist than were specified on Record Type 39.
- 2643 Node P1 cannot be specified as an actuated controlled intersection (Record Type 39) because it was previously defined as having a fixed time controller, stop or yield sign on Record Type 35.
- 2644 Duplicate actuated controller records (Type 39) were specified for node P 1. Only one Record Type 39 is permitted for each controller.
- 2645 Actuated controller node P1 lies outside the range of valid node numbers specified as (1 ,P2). Check Record Type 39.
- 2646 Upstream node number to an actuated controlled intersection is out of bounds. Node number must lie between 1 and P1, inclusive, or between 7000 and 7999, inclusive. Value input was P2. Check Entry P3 of Record Type 39 for node P4.
- 2647 A zero approach node number cannot be followed by a non-zero value. Check Entries P1 and P2 of Record Type 39 for node P3.
- 2648 Yield interval or minimum initial interval P1 for coordinated controller cannot exceed cycle length P2. Check Entry 5 on Record Type 40 for node P3, phase P4 and check Entry 7 on Record Type 39 for node P3.
- 2649 Entry 4, force-off point, green extension, or phase duration) of phase P1 at actuated controller P2 is out of bounds. Value must be between 1 and 150 seconds, inclusive. Input value was P3. Check Entry 4 on Record Type 40 for node P2, phase P1 .
- 2650 Too many actuated controllers specified. There cannot be more than P1 Record Type 39 specified.
- 265 1 Actuated controller node P1 specified on Entry 1 of Record Type 40, does not correspond to any of the actuated controllers defined on Record Type 39. Check Record Types 39 and 40 for node P1 and phase P2.
- 2652 An extra Record Type 40 was specified for node P1 and phase P2. Only one Record Type 40 is permitted for a given node and phase.
- 2653 Specified phase P1 for node P2 **must** be an actuated phase. Check phase actuation code on Record Type 40 for node P2. (Only phase 1 can be nonactuated.)
- 2654 A coordinated actuated controller cannot be specified as having an actuated phase 1. Check Entries 2,3 and 7 on Record Type 40 for node P 1 and phase 1.

- 2655 Record Type 40 is missing for node P1 and phase P2. A separate Record Type 40 **must** be specified for each of phases 1 and 2 (and any others if they exist) for each node identified on Record Type 39 as having an actuated controller.
- 2656 The duration of time from the yield point to the force-off point for phase 2 at coordinated actuated controller node P1 must equal or exceed the yield interval P2 sec. plus the minimum initial interval, P3 sec. Specified duration from yield point to force-off point of phase 2 is P4 sec. Check Record Type 40s for node P1 and phases 1 and 2.
- 2657 The duration of time from the yield point to the force-off point for phase, P 1, at coordinated actuated controller node, P2, must equal or exceed the force-off point for phase, P3, plus the minimum initial interval for phase P1 . Specified duration from yield force-off point of phase P1 is P4. Check Record Type 40s for node P2 and phases P1 and P3.
- 2658 Record Type 40 is missing for node P2 and phase P3. A Record Type 40 must be specified for phase P3 since one was specified for phase P1 . Check set of Record Type 40s.
- 2659 Yield point or force-off point, P1, for coordinated controller cannot exceed cycle length, P2. Check Entry 4 on Record Type 40 for node P3, Phase P4 and check Entry 7 on Record Type 39 for node P3.
- 2660 Actuated controller node P1 lies outside the range of valid node numbers specified as (1 ,P2). Check Record Type 40.
- 2661 Phase numbers for actuated controllers must be between 1 and 4. Value specified was P 1. Check Entry 2 of Record Type 40 for node P2, phase P 1.
- 2662 Phase actuation code for an actuated phase must be 0 or 1. Value input was P1 . Check Entry 3 of Record Type 40 for node P2, phase P3.
- 2663 Minimum initial interval for actuated phase P1 at actuated controller node, P2, is out of bounds. Value must be between 5 and 100 seconds inclusive. Input value was P3. Check Entry 5 on Record Type 40 for node P2, phase P1 .
- 2665 Yield point for non-actuated phase 1 of coordinated actuated controller P1 is out of bounds. Value must be between 10 and 100 seconds inclusive. Value input was P2. Check Entry 4 on Record Type 40 for node P 1, phase 1.
- 2666 Duration of yield interval for coordinated actuated controller P1 is out of bounds. Value must be between 5 and 40 seconds inclusive. Specified value was P2. Check Entry 5 on Record Type 40 for node P1, phase 1.

- 2668 Entry 5 on Record Type 40 must be blank for non-actuated phase 1 at a non coordinated actuated controller. Value specified was P1 . Check Record Type 40 for node P2, phase P3.
- 2669 Recall switch code must be 0 or 1. Value input was P 1. Check Record Type 40 for node P2, phase P3.
- 2670 Actuated controller node P1 lies outside the range of valid node numbers specified as (1 ,P2). Check Record Type 4 1.
- 2671 Phase numbers for actuated controllers must be between 1 and 4. Value specified was P 1. Check Entry 2 of Record Type 4 1 for node P2, phase P 1.
- 2673 Signal control code facing an approach to an actuated controller is invalid. Control code must be between 0 and 4, inclusive, or 6 and 9, inclusive, for phases 2,3, or 4. Value must be between 1 and 4, inclusive, or 6 and 9, inclusive, for phase 1. Value input was P1 . Check Entry P2 on Record Type 4 1 for node P3, phase P4.
- 2674 A detector was specified with an invalid approach number to actuated node P1 . Approach number must be between 1 and 5 inclusive. Value input was P2. Check Entry P3 on Record Type 4 1 for node P1, phase P4.
- 2675 A detector was specified as being located in an invalid lane. Lane numbers must be between 1 and 6 inclusive. Value input was P1. Check Entry P2 on Record Type 41 for node P3, phase P4. Determine actual number of lanes for subject approach as specified on Record Type 11. Do not exceed that number of lanes.
- 2676 The specified distance of a detector from its stop line is out of bounds. Distances in general must fall between 0 and 500 feet inclusive. Value input was P1. Check Entry P2 of Record Type 41 for node P3, phase P4. Determine actual link or pocket length for subject approach as specified on Record Type 11. Do not exceed link length or 500 feet if detector is in a full lane, or pocket length if detector is in a pocket.
- 2680 Actuated controller node P1 specified on Entry 1 of Record Type 41 does not correspond to any of the actuated controllers defined on Record Type 39. Check Record Types 39 and 41 for node P1 and phase P2.
- 2681 An extra Record Type 41 was submitted for node P1 and phase P2. Only one Record Type 41 is permitted for a given node and phase.
- 2682 A non-zero signal control code must be specified for approach P1 (Entry P2) on Record Type 41 for phase P4 of node P3. Approach P1 was defined for node P3 on Record Type 39. Check Record Types 39 and 4 1 for node P3 and phase P4.
- 2683 A signal code was specified for a nonexistent approach, P1 (Entry P2) on Record Type 41 for node P3. Either signal code must be removed from Record Type 41 or an approach P1 must be indicated on Record Type 39 for node P3. Check Record Types 39 and 41 for node P3 and phase P4.

- 2684 Three entries must be specified to describe each detector on Record Type 4 1. An approach number was not specified for one of the detectors for node P1 but at least one of the other entries was. The detector was specified as being in lane P2, at P3 feet from the stop line. Either complete the set of entries or remove the partial specification. Check Record Type 41 for node P1 and phase P4.
- 2685 A detector was specified for approach P 1 to node P2 on Record Type 4 1. No such approach was defined for node P2 on Record Type 39. Check Record Types 39 and 41 for node P2 and phase P3.
- 2686 A detector was specified in lane P 1 of approach P2 to node P3 on Record Type 4 1. According to the specifications of approach P2 indicated on Record Types 39 and 11, that link does not have a lane P 1. Check Record Type 41 for node P3 and phase P4. Also check Record Type 39 to get upstream node of approach P2. Then check number of full and pocket lanes specified on Record Type 11 for link (upstream node, P3).
- 2687 A detector was specified on Record Type 4 1 for node P 1 and phase P2 and approach P3. The detector was specified on one of the full lanes, at a distance P4 feet from the stop line. According to the specifications for approach P3 on Record Types 39 and 11, that link is not P4 feet long. Check Record Type 41 for node P1 and phase P2. Also check Record Type 39 for node P1 to get upstream node number of approach P3. Then check link length specified on Record Type 11 for link (upstream node, P1).
- 2688 A detector was specified on Record Type 41 for node P1, phase P2 and approach P3. The detector was specified in a right turn pocket lane at a distance P4 feet from the stop line. According to the specifications for approach P3 on Record Types 39 and 11, that link does not have a pocket P4 feet long. Check Record Type 4 1 for node P1 and phase P2. Also check Record Type 39 for node P 1 to get upstream node number of approach P3. Then check right turn pocket length specified on Record Type 11 for link (upstream node, P1).
- 2689 A detector was specified on Record Type 41 for node P1, phase P2 and approach P3. The detector was specified in a left turn pocket lane at a distance, P4 feet from the stop line. According to the specifications for approach P3 on Record Types 39 and 11, that link does not have a left turn pocket P4 feet long. Check Record Type 41 for node P1 and phase P2. Also check Record Type 39 for node P1 to get upstream node number of approach P3. Then check left turn pocket length specified on Record Type 11 for link (upstream node, P1).
- 2690 A detector was incompletely described to specified approach, P1, on Record Type 4 1 for node P2 and phase P3. Lane number where detector is located is missing. Check Record Type 4 1 for node P2 and phase P3.
- 2691 A detector was incompletely described to specified approach P1 on Record Type 41 for node P2 and phase P3. Detector distance from stop line is missing. Check Record Type 4 1 for node P2 and phase P3.
- 2692 Entries 8-3 1 on Record Type 41 cannot have a blank or zero entry followed by a non-zero entry. Check Record Type 41 for node P1 and phase P2.

- 2693 At least one detector must be specified on Record Type 41 for an actuated phase. Check Record Type 41 for node P1 and phase P2.
- 2694 A Record Type 4 1 is missing for phase P1 of node P2.
- 2695 Phase 1 of actuated controller P1 was specified as an actuated phase on Record Type 40 but no detector was specified for phase 1 on Record Type 4 1. Check Record Types 40 and 4 1 for phase 1, node P 1.
- 2696 A Record Type 40 was specified for phase P1 of node P2 but a Record Type 4 1 for the same node and phase was omitted. Either Record Type 41 should be added for phase P1, node P2 or Record Type 40 for that node and phase should be removed.
- 2697 A Record Type 4 1 was specified for phase P1 of node P2 but a Record Type 40 for the same node and phase was omitted. Either Record Type 40 should be added for phase P1, node P2 or Record Type 41 for that node and phase should be removed.
- 2699 The force-off point, P2, for the final phase servicing the coordinated actuated controller at node P1 cannot exceed the cycle length, P3, specified on Record Type 39. Check the last Record Type 40 pertaining to node P1 .
- 2700 Control type (signal record) was not specified for node P1. Type of control is specified by Record Types 35,36,39,40 and 41.
- 2701 Link (P2,P3) receiving P4 turning traffic from link (P1 ,P2) is missing. Check Record Type 11. Note: P4 = (1,2,3,4) for left, through, right, diagonal.
- 2702 Node P1 has been specified on Record Type 11 as an opposing node to a link whose downstream node number is P2. This implies that a link (P1,P2) exists. However, no Record Type 11 was specified to define link (P1,P2). Either specify a Record Type 11 for link (P1,P2) or remove P1 as an opposing node.
- 2703 More than one bus lane was specified on link (P1,P2). Check Record Type 11.
- 2704 More than one car-pool lane was specified on link (P1,P2). Check Record Type 11.
- 2705 Capacity of node arrays has been exceeded. Decrease the number of nodes in the network.
- 2706 The total number of micronodes specified, P1, exceeds the maximum allowable number of micronodes, P2. Refer to Record Types 36 and/or 43.
- 2707 Capacity of link arrays has been exceeded. Link (P1 ,P2) cannot be accommodated. The maximum number of links in this version is P3.
- 2708 Interface node number P1 has been found more than once while checking Record Type 11 s.
- 2709 Capacity of interface arrays for NETFLO 1 has been exceeded. Too many interface (entry) links have been specified.

- 2710 Node number P1 was specified on a link record for subnetwork type P2 and also on a link record for subnetwork type P3. Each node number can only be used in a single subnetwork. Subnetwork type codes, P2, and P3 correspond to codes defined on Record Type 170.
- 2711 Incorrect permissive period code was specified. Check permissive period code for period P3 on Record Type 44 for phase P2 of actuated controller node P1. Valid codes are 0 and 1.
- 2712 Incorrect overlap phase code was specified on Record Type 47. Check overlap phase code P4 on Entry 26 for phase P2 of actuated controller node P1 on Record Type 47. Valid codes are 0 and 1. Value input was P3.
- 2713 When initial interval code is 0 or 2, minimum green time must be less than or equal to maximum initial interval. Check Entries 4 and 10 on Record Type 47 for phase P2 of actuated controller node P 1.
- 2715 A link can receive traffic from up to 4 other links. Five links have been identified as discharging traffic onto link (P1 ,P2). Check Record Type 11 for all links whose downstream node number is P 1 and which have node P2 specified as a receiving node in Entries 18-2 1.
- 2716 Node P1 lies outside the allowable range (1,P2), inclusive, or (7000,7999), inclusive. Check Entry P3 on Record Type P4.
- 2717 Node P1 cannot be specified as an actuated controller intersection (Record Type 43) because it was previously defined as having a fixed-time controller, stop or yield sign on Record Type 35.
- 2718 Too many actuated controllers specified. There cannot be more than P1 actuated controller intersections.
- 2719 Node P1 specified on Record Type P2 does not correspond to an existing NETSIM subnetwork node.
- 2720 An approach node number of zero cannot be followed by a nonzero value. Check Entries P2 and P3 of Record Type 43 for node P1 .
- 2721 Nodes P1 and P2, defined as the upstream and downstream nodes of an approach served by the actuated controller at node P3 do not correspond to a previously defined link. Check Record Type 43.
- 2722 An insufficient number of approaches was specified to the actuated controller at node P 1 on Record Type 43. Record Type 11 data implies more approaches exist than were specified on Record Type 43.
- 2723 The sequence of approaches to node P1 on Record Type 43 is incorrect. Links with downstream node P1 should be specified first.
- 2724 More than one Record Type 43 with sequence number P1 on Entry 12 for actuated controller node P2 was input.

- 2725 Two identical approach links were specified for actuated controller node P1 . Check Record Type 43.
- 2726 Phase P1 lies outside the allowable range (1,8), inclusive. Check Entry P2 on Record Type P3 for actuated controller node P4.
- 2727 Incorrect allowable movement code P1 was specified. Check Record Type 45 for actuated controller node P2 and phase P3. Movement specific codes are as follows:

- 1-Movement allowed
- 2-Movement not allowed

- 2728 Actuated controller node P1 , specified on Entry 1 of Record Type P3, does not correspond to any of the actuated controllers defined on Record Type 43. Check Record Type P3 for node P 1 and phase P2.
- 2729 An allowable movement entry of zero cannot be followed by a nonzero value. Check Entries P1 and P2 of Record Type 45 for actuated controller node P3 and phase P4.
- 2730 No movement specific code was specified for approach number P1 . Record Types 43 and 11 imply that the approach exists. Check Record Type 45 for actuated controller node P2 and phase P3.
- 273 1 Movement defined by code P4 for approach number P3 during phase P2 for actuated controller node P1 was not previously defined by the geometric inputs. Check Record Type 45.

P4	<u>Movement</u>
-ii-	Left
1	Through
2	Right
3	Left diagonal
4	Right diagonal

- 2732 Invalid detector group type P1 was specified. Check Record Type 46 for actuated controller node P2 and phase P3. Valid detector types are 1 or 2.
- 2733 Invalid approach number P1 was specified. Check Record Type 46 for actuated controller node P2 and phase P3. Approach number should be between 1 and P4.
- 2734 Invalid lane number P1 was specified. Check Entry P4 of Record Type 46 for actuated controller node P2 and phase P3. Allowable range is (1,7), inclusive, or 9.
- 2735 Invalid distance between the trailing edge of the detector and the stop line was specified. The input value was P1 . Check Entry P4 of Record Type 46 for actuated controller node P2 and phase P3. The input distance indicates that the detector is either placed inside the intersection of outside the link boundaries.

- 2736 Negative delay time of P1 tenths of a second was specified. Check Entry P4 of Record Type 46 for actuated controller node P2 and phase P3.
- 2737 Negative carryover time of P1 tenths of a second was specified. Check Entry P4 of Record Type 46 for actuated controller node P2 and phase P3.
- 2738 Invalid sensor length for the detector was specified. Valid range is between 0 to the length of the street segment. The input value was P1 tenths of a foot. Check Entry P4 on Record Type 46 for actuated controller P2, phase P3.
- 2739 Type III limit time can only be specified on type III detectors and must be nonnegative. An input value of P1 tenths of a second was incurred. Check Entry P4 on Record Type 46 for actuated controller P2, phase P3.
- 2740 Invalid pulse flag for the detector was specified. The input flag was P4. Check Entry P3 on Record Type 46 for actuated controller P2, phase P1. Valid input flags are as follows:
- O-Presence
I-Passage
- 2742 Detector data for approach number P 1, phase P2, for actuated controller node P3 was specified. No actuated controller specification Record Type 43 was input for this approach. Check the set of Record Type 43 input data records.
- 2743 A detector was specified for lane P3 of approach P4 to actuated controller node P1 during phase P2 on Record Type 46. Geometric input data indicates that the lane does not exist.
- 2744 The specified distance of the trailing edge of the detector and sensor length are out of bounds. Check Entries P4 and P3 for actuated controller node P1, for phase P2, on Record Type 46. The sum of the distance of the trailing edge of the detector and the sensor length must be between zero and the street segment length of the link if the detector is in a through lane. If the detector is placed in a pocket lane this sum should be between zero and the pocket length.
- 2745 Record sequence number P1 on Entry 12 of Record Type 43 for actuated controller node P2 is invalid. Permitted values are 0 to P3.
- 2746 Too many detectors are specified for link (P1,P2). P3 detectors were specified. There cannot be more than a total of P4 actuated control and surveillance detectors on a single link.
- 2747 Too many detectors are specified by the set of Record Type 46s. There cannot be more than P1 detectors.
- 2748 Entry P4 on Record Type 47 for actuated controller P2 for phase P3 is invalid. Input value was P1.

- 2749 Invalid initial interval option code was specified. Check Entry P3 of actuated controlled node P1 for phase P2 on Record Type 47. Valid input values are as follows:
- O-Extensible initial interval
 - 1-Added initial interval
 - 2-Computed initial interval
- 2750 Invalid gap reduction option code was specified. Check Entry P3 of actuated controlled node P1 for phase P2 on Record Type 47. Valid input values are as follows:
- O-Reduce by/reduce every
 - 1-Reduce by every second
 - 2-Time to reduce to minimum gap
- 2751 Phase operation data for phase P2 of actuated controlled node P1 on Record Type 47 was specified. No allowable movement in Record Type 45 was input for phase P2. Check the set of Record Type 45s.
- 2752 Both maximum green time and maximum extension time were specified. Check Record Type 47 for actuated controller node P1 for phase P2. Maximum green time or maximum extension can be specified for NEMA-type controllers. Maximum extension time should be specified for Type 170 controllers.
- 2753 A minimum green time greater than the maximum green time was specified. Check Record Type 47 for actuated controller node P1, phase P2.
- 2754 Extensible initial interval option was specified, however, Entry 9 has a nonzero value. Check Entries 7 and 9 on Record Type 47 for actuated controller node P 1, phase P2.
- 2755 Computed initial interval option was specified, however, Entry 8 has a nonzero value. Check Entries 7 and 8 on Record Type 47 for actuated controller node P 1, phase P2.
- 2756 Computed initial interval option was specified but one of the Entries 9 or 10 has a nonzero value. Both entries must contain nonzero value. Check Entries 7, 9, and 10 on Record Type 47 for actuated controller node P1, phase P2.
- 2758 A maximum initial time greater than the maximum green or maximum extension was specified. Check Record Type 47 for actuated controller node P1, phase P2.
- 2759 To reduce every second gap reduction option was specified, however, Entry 13 has a nonzero value. Check Entries 11 and 13 on Record Type 47 for actuated controller node P1, phase P2.
- 2760 The time to reduce to minimum gap option was specified, however, Entry 12 has a nonzero value. Check Entries 11 and 12 on Record Type 47 for actuated controller node P1, phase P2.
- 2761 A maximum gap smaller than the minimum gap was specified. Check Record Type 47 for actuated controller node P 1, phase P2.

- 2762 A minimum gap greater than unit extension was specified. Check Record Type 47 for actuated controller node P 1, phase P2.
- 2764 A maximum gap equal to the minimum gap was specified. If the controller is not of volume-density type, then the vehicle extension should also be equal to the maximum and minimum gap. Check Entries 5, 14, and 15 on Record Type 47 for actuated controller node P1, phase P2.
- 2765 Both red and yellow lock were specified. When yellow lock is set, vehicle actuations during the yellow change and red intervals are remembered and serviced during the green. Check Entries 18 and 19 on Record Type 47 for actuated controller node P1, phase P2.
- 2766 Both maximum and minimum recall flags were set. Check Entries 22 and 23 on Record Type 47 for actuated controller node P1, phase P2.
- 2767 Red rest and maximum recall, or minimum recall, flags were set. Check Entries 22, 23, and 24 on Record Type 47 for actuated controller node P1, phase P2.
- 2768 Both phases of the phase pair P2 and P3 were designated either as lagging or leading phases. Check Entry 25 on Record Type 47 for actuated controller node P1 for phases P2 and P3.
- 2769 More than two phases were designated as overlapping phases for an overlap. Check the set of Record Type 47s for node P1 for the overlap phase pair P2.
- 2770 The added initial interval option was specified for at least one phase P2 of the actuated controller node P1 on Record Type 47 while a different option was specified for at least one other phase. If this option is required for one phase, it must also be specified for all other phases of actuated controller node P1 . Check Entry 11 of Record Type 47 for actuated controller node P1 for all phases.
- 2771 Negative entry on Record Type 48 is specified. Input value was P1 . Check Entry P4 on Record Type 48 for actuated controller node P2, phase P3. The entry must be positive.
- 2772 Pedestrian actuation data for phase P2 on Record Type 48 was specified. No phase operations Record Type 47 was input. Exclusive pedestrian phases cannot be modeled. Check the set of Record Type 47s for actuated controller node P1 .
- 2774 Both pedestrian stochastic and deterministic arrivals were specified. Check Entries 5 and 6 of Record Type 48 for actuated controller node P 1, phase P2.
- 2775 Stochastic pedestrian arrivals were specified, however, Entry 7 has a nonzero value. Initial pedestrian arrival times can only be specified for deterministic arrivals. Check Entries 5 and 7 of Record Type 48 for actuated controller node P 1, phase P2.
- 2776 Both pedestrian recall and pedestrian rest flags were set. Check Entries 8 and 9 of Record Type 48 for actuated controller node P1, phase P2.
- 2777 An end time equal or smaller than the begin time for pedestrian constant demand period P3 was specified. Check Record Type 48 for actuated controller node P1, phase P2.

- 2778 A zero begin and end time for pedestrian constant demand period P3 was followed by nonzero entries for constant demand period P4. Check Record Type 48 for actuated controller node P 1, phase P2.
- 2779 End time for constant demand period P3 is greater than the begin time of a succeeding period. Overlapping constant demand periods cannot be specified. Check Record Type 48 for actuated controller node P 1, phase P2.
- 2780 Too many pedestrian phases were specified. Maximum of P1 pedestrian phases can be specified. Check the set of Record Type 48s.
- 2781 Too many pedestrian constant demand periods were specified. Maximum of P1 pedestrian constant demand periods can be specified. Check the set of Record Type 48s.
- 2782 Invalid cycle length was specified. Check Entry 2 of Record Type 44 for actuated controlled node P1.
- 2783 Invalid offset was specified. Offset time must be less than the cycle length. Check Entries 2 and 3 of Record Type 44 for actuated controlled node P 1.
- 2784 Invalid begin time for permissive period number P2 was specified. Begin time must be non-negative and less than the cycle length. Check Entry P3 of Record Type 44 for actuated controlled node P 1.
- 2785 Invalid end time for permissive period number P2 was specified. End time must be non-negative and less than the cycle length. Check Entry P3 of Record Type 44 for actuated controlled node P1.
- 2786 Invalid force-off time for phase P2 was specified. Force-off time must be non-negative and less than the cycle length. Check Record Type 44 for actuated controlled node P 1.
- 2787 Permissive period P2 has an end time which is smaller than the begin time. Check Record Type 44 for actuated controlled node P1 .
- 2788 Pedestrian flag on Record Type 48 has incorrect setting. Current setting is P1 . Check Entry P4 on Record Type 48 for actuated controller P2, phase P3. The entry must be 0 or 1.
- 2790 When coordinated operation is specified, permissive period flags for phase P2 must be zero. Check Record Type 44 for actuated controller P 1.
- 2791 Coordination data for node P 1 has been previously defined by another Record Type 44.
- 2792 More than one source/sink node is located on link (P1 ,P2). Only one is permitted. Both source/sink nodes P3 and P4 are located on this link.
- 2796 Traffic assignment cannot be requested for a run that includes a FRESIM subnetwork.

- 2797 No Record Type 21s were input for subnetwork type P1 . Record Type 2 1s are required for each link input on Record Type 11s because traffic assignment was not requested.
- | P1 | <u>Subnetwork</u> |
|----|-------------------|
| 3 | NETSIM |
| 5 | NETFLO 1 |
| 6 | NETFLO 2 |
- 2798 Link (P1,P2) does not have any allowed turn movement. Check consistency among geometric records, signal records and prohibition records.
- 2799 Node P1 appears as a destination node more than once in the list of destination nodes for origin node P2. Check Record Type 176s for node P2.
- 2800 The location of source/sink node, P1, is specified more than once on the set of Record Type 177s. The second location given for source/sink node, P1, is link (P2,P3). An source/sink node must be located on only one internal link and its location must be specified only once. Check Record Type 177s.
- 2801 Origin node number, P 1, input on Record Type 176 was not defined in network geometry.
- 2802 Too many source/sink nodes have been input on Record Type 176. P1 have been specified, up to P2 are allowed. Reduce number of source/sink nodes to P2.
- 2803 Destination node number, P 1, input on Record Type 176, was not defined in network geometry.
- 2804 The Record Type 176 for origin node P1 is out of sequence. Record Type 176s must be in ascending order by origin node.
- 2805 Origin node, P1, input on Record Type 176 is not valid. Origin nodes must be either between 2000 and 2999, inclusive, or 8000 and 8999, inclusive.
- 2806 Destination node, P2, input on Record Type 176 for origin node, P1, is not valid. Destination nodes must be either between 2000 and 2999, inclusive, or 8000 and 8999, inclusive.
- 2807 Destination volume input on Record Type 176 for origin node, P1, to destination node, P2, is not valid (is negative).
- 2808 The location of source/sink node P1 was not defined on any Record Type 177. The location is required for every source/sink node input on Record Type 176s.
- 2809 Link (P1,P2) was not defined by the network geometry. This link is given as the location of source/sink node P3 on Record Type 177.
- 2810 Source/sink node number, P1, input on Record Type 177, is not valid. Source/sink node numbers must be between 2000 and 2999, inclusive.

- 2811 Upstream node number, P1, defining link (P1,P2) locating source/sink node, P3 is invalid. Source/sink nodes can only be specified on links with node numbers between 1 and the maximum allowable internal node number, P4, on entry interface links (upstream node numbers 7000-7999) or on exit interface links (downstream node numbers 7000-7999). Check Record Type 177 for link (P 1 ,P2).
- 2812 Downstream node number, P1, defining link (P2,P1) locating source/sink node, P3, is invalid. Source/sink nodes can only be specified on links with node numbers between 1 and the maximum allowable internal node, P4, on entry interface links (upstream node numbers 7000-7999), or on exit interface links (downstream node numbers 7000-7999). Check Record Type 177 for link (P2,P1).
- 2813 Source/sink node number, P1, input on Record Type 177 was not input on Record Type 176.
- 2814 Cannot find a path between origin P 1 and destination P2. Check data on Record Type 176.
- 2815 There are too many links in the network. At least P1 links have been specified. The sum of all links from each subnetwork cannot exceed P2. Reduce network size to P2.
- 2816 There are too many destination nodes specified on Record Type 176 for origin node, P 1. P2 nodes were specified, up to P3 nodes are permitted. Number of destination nodes from origin node P1 should be reduced to P3.
- 2817 Network geometry requires the traffic assignment model to create more Nodes/Links than can be accommodated by the model. Maximum defined sizes for path Nodes/Links are IMXPND/IMXPTH: P 1, P2. Required path Nodes/Links to represent the given geometric network are P3, P4.
- 2820 A volume, P1, was input but the destination node is missing on Record Type 176 for origin node P2.
- 2822 An entry node must have a single link associated with it. Entry node P1 has more than one associated entry link. Check network geometry records.
- 2823 An exit node must only have one link associated with it. Exit node, P3, has upstream nodes P1 and P2 specified for it. Check receiving nodes on link geometry record.
- 2824 Entry node P1 for subnetwork type P2 was specified as an exit node for another subnetwork type P3.
- 2836 Source/sink node: P1 was specified for link (P2,P3), which is not allowed on P4 subnetwork, where
- P4 = 1 FRESIM
2 ROADSIM
4 FREFLO
- 2840 Record Type P1 is not permitted for a traffic assignment run. Truck and Carpool percentages must be specified on Record Type 176. (Entry link volumes and source/sink flows should not be specified for TA run.)

- 2841 Truck percentage, P2, or Carpool percentage, P3, input on Record Type 176 for origin node, P 1, was not within permitted range of 0-100.
- 2843 For origin node, P 1, which is an entry node, the sum of truck percentages, P2, and carpool percentages, P3, is greater than 100. Check Record Type 176.
- 2844 For origin node, P 1, which is an Source/Sink Node, the sum of truck percentages, P2 and car-pool percentages P3, was not equal to zero. (Truck percentages and Carpool percentages should be left as zero for Source/Sink Nodes.) Check Record Type 176.
- 2846 Record Type 177s were input but no source/sink nodes were specified on Record Type 176. Record Type 176s may be missing.
- 2847 Record Type 177s were not input and source/sink nodes were specified on Record Type 176. Record Type 177s are missing.
- 3003 Downstream node of link (P1,P2) is an interface node but through movement nodes are specified.
- 3004 Upstream, downstream, and through movement nodes for link (P1,P2) are not distinct.
- 3005 When traffic assignment is requested, each FREFLO link must have at least one regular-use lane. Link (P1,P2) has none. Check Record Type 15.
- 3007 Error in specifying number of regular or special-use lanes for link (P1,P2). Number of regular and special-use lanes given as P3 and P4, respectively.
- 3008 Improper link type for link (P1,P2). Link type number is P3.
- 3009 Special purpose lanes are specified for link (P1,P2), but restriction code is invalid. Code must be either 2 (buses only), 5 (carpools only) or 6 (both buses and Carpools only). Code given was P3.
- 3010 Free flow speed for link (P1,P2) is not greater than zero.
- 3011 Downstream node number of link receiving 1st or 2nd through traffic from link (P1,P2) is invalid. Node number must be either 0 or between 1 and P3 inclusive, or be an interface or exit node number in range (7000-8999) inclusive. Value input was P4. Check Record Type 15.
- 3012 Record Type 15 for freeway link (P 1 ,P2) defines an on- or off-ramp that is not to be modeled dynamically by FREFLO. Such ramps must represent entry-exit links. The node number defining such a ramp must be in the range 8000-8999 inclusive. If there is no ramp, this entry should be 0 or blank. Value input was P3. Ramps that interface traffic to/from FREFLO to another TRAF model (i.e., node numbers in range 7000-7999) must be modeled dynamically and specified as a separate link on another Record Type 15. Such ramps are identified as first or second through feeders or receivers and are not referenced as on- or off-ramps on the Record Type 15 for link (P 1 ,P2).

- 3013 Nonpositive number specified for nominal link capacity on link (P1,P2).
- 3015 Link (P1,P2) cannot be put in database because maximum number of links has been exceeded.
- 3017 Through link for link (P1,P2) is not in database. P3 and P4 specify nodes of through link which has not been placed in database.
- 3018 Upstream node number, P1, is an entry or interface link which is connected to more than one link.
- 3019 Link (P1,P2) is internal to network but has no link feeding it.
- 3020 Link (P1,P2) has more than two links feeding it.
- 3021 Turn percentages for link (P1,P2) are improper.
- 3022 Turn percentages are specified for link (P1,P2), but link is not in database.
- 3023 Through link on turn movement for link (P1,P2) is not in database. P3 is through target node.
- 3024 Through link on turn movement record for link (P1,P2) is different than through link on link specification record. P3 is 1 for first movement error, 2 for second movement error, and 3 for off-ramp error.
- 3025 Link (P1,P2) with regular-use lanes has no through movement links with regular-use lanes.
- 3026 One of the freeway parameters TEE, VEE, or SLIFRE are less than 0. P1, P2, and P3 are TEE, VEE, and SLIFRE, respectively.
- 3027 Error made in trying to find density at capacity for link (P1,P2).
- 3028 Equilibrium speed for link (P1,P2) is zero.
- 3029 Overflow in computing equilibrium speed factor for link (P1,P2).
- 3030 A dummy link to be created will cause maximum number of links to be exceeded.
- 3031 Maximum number of interface nodes exceeded.
- 3032 Upstream interface or entry node, P1, is on more than one link.
- 3033 Sum of truck and carp001 percentages (P3 and P4) is greater than 100% on link (P1,P2).
- 3034 Link specification record for subsequent time period specifies link (P1,P2) not in database.
- 3035 Link specification record for subsequent time period specifies wrong movement nodes for link (P1,P2). P3 is 1 for through nodes and 2 for ramp nodes.
- 3036 Dummy link (P2,P3) should not be specified on Record Type 15 since it is internally created by the model, inferred from the specifications on Record Type 15 for link (P1,P2).

- 3037 Entry volume specified for link (P1,P2) which is not in database.
- 3050 Restriction code is non-zero but there are no special purpose lanes on link (P1,P2).
- 3053 Node P1 defined on Record Type P2 has not been previously defined as an actuated node.
- 3054 Node P1 is an actuated node. Record Type 47 for phase P2 of this node is not specified or has wrong entries.
- 3060 A diverge exists at the downstream end of the link (P 1 ,P2) where one or both of the through receivers are exit nodes. When the graphics output option is selected, both receivers must be nonexits.
- 3061 Two links converge at the upstream end of link (P1,P2) but one or both of the through feeder links are entry links. When the graphics output option is selected, both feeders must be non-entry links.
- 3070 Incident specification record specifies more than one incident for link (P1,P2). P3 and P4 indicate numbers of incidents for same link.
- 3100 A negative node coordinate value was entered for node P2. Node coordinates must be greater than or equal to 0. Revise Record Type P1 for node P2.
- 3101 An inconsistency exists between the length of link (P1,P2) and the length of this link computed from node coordinate data input for nodes P1 and P2. The length input was P3, and the length computed from node coordinate data is P4. The percentage difference between the length input and the computed length must be less than or equal to 20% for links greater than 500 feet. The input and computed link lengths can differ by no more than 100 feet.
- 3102 Code indicating if files for graphics are to be produced is invalid. Value input was P1 . Permitted values are 0 (blank) or 1. Revise Record Type 05.
- 3103 A request has been made on Record Type 05 to generate files for the graphics software, but the input stream contains data for a model for which graphics data is not available. To generate the necessary graphics files, the input stream must contain data for only the NETSIM or CORFLO models.
- 3104 A request has been made on Record Type 05 to generate files for the graphics software, but the case name is missing from Record Type 05.
- 3105 A code of P1 was entered for Entry 15 for node P2 which is out of bounds. If the node is to be modeled as a micronode the entry must be 1. Otherwise, it must be left blank or zero. Check the Record Type 43 for this node.

- 3110 Node P 1 lies outside the range of valid node numbers specified as (1 ,P2), 7000-7999 or 8000-8999. Check Record Type 195.
- 3111 Coordinates for node, P1, were input on more than one Record Type 195. Check Record Type 195s.
- 3112 Coordinates for node, P1, were not input on any Record Type 195.
- 3113 Node, P1, input on Record Type 195 does not appear as a valid node in any subnetwork.
- 3114 The input stream contains data for both NETSIM and CORFLO. At this time, graphics cannot be produced for a case that executes both models simultaneously.
- 3116 It is not possible to display link (P1,P2) as a curved link because the input link length P3 is less than the link length P4 computed from the node coordinates.
- 3200 More than P1 records were specified for link (P2,P3). Check Record Type P4.
- 3201 A node number defining link (P1 ,P2) is invalid. Internal node numbers must be greater than 0 and less than or equal to the maximum allowable internal node number, P3. Entry node numbers must range from 8000 to 8999. Interface node numbers must range from 7000 to 7999. No exit links (i.e., P2 is greater than or equal to 8000) can be specified unless the exit link is part of a rural road (ROADSIM) subnetwork. Check record number P4 on Record Type 23.
- 3202 A node number defining link (P1 ,P2) is invalid. Internal node numbers must be greater than 0 and less than or equal to the maximum allowable internal node number, P3. Entry node numbers must range from 8000 to 8999. Interface node numbers must range from 7000 to 7999. No exit links (i.e., P2 is greater than or equal to 8000) can be specified unless the exit link is part of a rural road (ROADSIM) subnetwork. Check record number P4 on Record Type 53.
- 3203 Link (P1 ,P2) has an invalid downstream node number. Downstream node numbers must be an internal node number that ranges from 1 to P3. Check Record Type P4.
- 3204 The elapsed time input for link (P1 ,P2) is negative. Check the elapsed time of P3 on Record Type P4.
- 3205 For record number P1 of link (P2,P3), a code was not specified in Entry P4 to indicate whether vehicle counts or hourly volumes were entered on this record. Check Record Type 53.
- 3206 On record number P3 for link (P1 ,P2), a turn percentage was specified, but a receiving link for that movement does not exist. Check Entry P4 on Record Type 23.
- 3207 On record number P3 for link (P1 ,P2), a turn movement is specified, but it is also specified as prohibited on Record Type 2 1. Check Entry P4 on Record Type 23.

- 3208 On record number P3 for link (P1,P2), an elapsed time was input, but turn movements were not specified. Check Entry P4 on Record Type 23.
- 3209 On record number P4 for link (P1,P2), turn movements were input, but an elapsed time was not specified. Check Entry P3 on Record Type 23.
- 3210 On record number P4 for link (P2,P3), the elapsed time in Entry P1 is less than or equal to the prior elapsed time specified. The elapsed times must be in ascending order. Check Record Type 23.
- 3211 On record number P1 for link (P2,P3), a negative volume was entered for an entry link. Check Record Type 53.
- 3212 On record number P4 for link (P2,P3), a volume was entered, but an elapsed time was not specified. Check Entry P1 on Record Type 53.
- 3213 On record number P4 for link (P2,P3), the elapsed time in Entry P1 is less than or equal to the prior elapsed time specified. The elapsed times must be in ascending order. Check Record Type 53.
- 3214 On record number P1 for link (P2,P3), there is a gap between the entries specified for volumes and elapsed times. Check Entries 3-1 8 on Record Type 53.
- 3215 On record number P1 for link (P2,P3), there is a gap between the entries specified for times and turn percentages. Check Entries 3-1 7 on Record Type 23.
- 3216 One or more Record Type P3s were previously specified for link (P1,P2). Check Record Type P3.
- 3217 The input code that defines the distribution to be used when determining vehicle headways is invalid. The code must be 0 or 1, but it was set to P1 . Check Record Type 02.
- 3218 The input code that defines the Erlang distribution to be used when determining vehicle headways is invalid. The code must be 1-4, but it was set to P1 . Check Record Type 02.
- 3219 The type P1 of Erlang distribution was specified, but a normal distribution was requested. Check Entries 8 and 9 on Record Type 02.
- 4000 A section of intermediate output must begin after the previous section of intermediate output ends and before the run ends. Section P1 of intermediate output is requested to start P2 seconds into the run. The previous output ends at P3 seconds and the run terminates after P4 seconds. Check Record Type 05.
- 4001 The span of time for which a section of intermediate output is produced must be positive and the span plus the start time of the output cannot exceed the run duration. Section P1 of intermediate output is requested to start P2 seconds into the run and last for P3 seconds. The duration of the run is P4 seconds. Check Record Type 05.

- 4002 The duration of time (seconds) between intermediate outputs (within a section of output) must be positive and less than the span of time over which the section of output is produced. Section P1 of intermediate output is scheduled for P2 seconds at a frequency of 1 every P3 seconds. Check Record Type 05.
- 4003 Code, P1, requesting movement-specific output is invalid. Code must be either 0 or 1 if such output (is not, is) requested. Check Record Type 05.
- 4004 More than one short-term event specified for link (P1,P2). Check Record Type 54.
- 4005 Link (P 1 ,P2), input on Record Type P3 was not defined by the network geometry.
- 4006 Upstream node of link (P1,P2) specified on Record Type 42 is invalid. A detector must be specified on an internal link, with an upstream node number between 1 and P3.
- 4007 Downstream node of link (P1,P2) specified on Record Type 42 is invalid. A detector must be on an internal link, with a downstream node number between 1 and P3.
- 400s Duration, P3, of short-term event specified for link (P1,P2) on a Record Type 54 is zero or less.
- 4009 Upstream node of link (P1,P2) specified on Record Type, P3, is invalid. Events can only appear on internal links with upstream node numbers between 1 and P4. Check Record Type, P3, for link (P1,P2).
- 4010 Short-term events specified incorrectly on Record Type 54 for link (P1 ,P2). For the frequency input in Entry 3, the event duration input in Entry 4 must be less than P3.
- 4011 Downstream node of link (P 1 ,P2) specified on Record Type P3 is invalid. Events can only appear on internal links with downstream node numbers between 1 and P4. Check Record Type P3 for link (P1,P2).
- 4012 Lane number, P3, indicating the location of a long-term event for link (P1,P2) was not defined by the geometry for that link. Check Record Type 55 and geometry of link (P1 ,P2).
- 4014 Elapsed time to commencement of long-term event for link (P1 ,P2) is invalid. Value input is P3. Check Record Type 55.
- 4015 Duration of long-term event specified for link (P1 ,P2) must be greater than 0. Value input is P3. Check Record Type 5 5.
- 4016 Lane number indicating location of long-term event is invalid. Check Record Type 55 for link (P1,P2). Value input was P3. A lane must be numbered 1-7.
- 4025 Index, P2, to LTJGAP array input in Entry P1 of Record Type 140 is invalid. Permitted index values are 1-7, inclusive.
- 4026 Value, P1, input for left turn probability is invalid. Value input was for location P2 of LTJGAP array. Permitted values are 0-1 00, inclusive.

- 4027 Value, P2, input for Entry P1, of SPLPCT array is invalid. Value must be 0-1 00, inclusive. Check Record Type 14 1.
- 4029 Value, P2, input in Entry P 1 on Record Type 14 1 is invalid. Permitted values for this entry, vehicle length, are 20 feet (6 meters) through 75 feet (23 meters) inclusive.
- 4030 Invalid value, P2, input for NSGAP array in Entry P1 on Record Type 142. Value input should be between 15 and 75 inclusive.
- 403 1 Invalid value, P2, input for FSGAP array in Entry P1 on Record Type 143. Value input should be between 10 and 75 inclusive.
- 4032 Invalid value, P2, input for AMBER array in Entry P1 on Record Type 144. Value input should be between 2 and 30, inclusive.
- 4033 Entry P1 on Record Type 145 contains value P2 to be entered in TRNGAP array. Value P2 is invalid. Permitted values for TRNGAP array elements are 10-1 00, inclusive.
- 4034 Code, P 1, input on Record Type 146 to define portion of PDLY array to be modified is invalid. Permitted values are zero (blank) and 1.
- 4035 Entry P1 on Record Type 146 contains value P2 to be entered in the PDLY array. Value P2 is invalid. Permitted values for PDLY array elements are 0-50, inclusive. If P3 is 0, then the invalid entry is on the first Record Type 146. If P3 is 1, then the invalid entry is on the second Record Type 146.
- 4036 Value P2 to be stored in PPER array is negative. Revise Entry P1 on Record Type 146.
- 4037 Value P2 to be stored in UFPCT array is negative. Revise Entry P1 on Record Type 147.
- 4038 Value, P2, input in Entry P1 on Record Type 141 is invalid. Permitted values for this entry (LTLAGP array), are 0-1 00, inclusive.
- 4039 Code, P1, input on Record Type 145 to define the portion of TRNGAP array to be modified is invalid. Permitted values are zero (blank) and 1.
- 4040 The sum of distribution elements input on Record Type P2 must total 1000. Actual sum of inputs is P1 . Revise Record Type P2.
- 4041 Value P2 to be stored in STEPCT array is negative. Revise Entry P1 of Record Type 148.
- 4042 Entry 1 on Record Type 149 is invalid. Value input was P1. Permitted values are 1-4, inclusive.
- 4043 Entry 2 on Record Type 149 is invalid. Value input was P1 . Permitted values are zero (blank) and 1.
- 4044 Entry P1 on Record Type 149 is negative. Value input in Entry P1 is P2. Check Record Type 149 for link type P3.

- 4047** Code, P1, input on Record Type 150 to define portion of DWLPCT array to be modified is invalid. Permitted values are 1-6, inclusive.
- 4048** Entry P1 on Record Type 150 is negative. Value input was P2. Revise Record Type 150 that modifies distribution P3 of the DWLPCT array.
- 4049** Lane alignment for link (P1 ,P2) was specified incorrectly. Either Entry 28 or 29 (P3 and P4) on Record Type 11 is zero (but not both). If the user specifies lane alignment both entries must be input. If both entries are zero, the default will be assumed.
- 4050** Lane number, P3, input on Record Type 11 for link (P1 ,P2) to specify lane alignment is invalid. Permissible values are 1-7 or 0 if the default of 1 is to be used.
- 4052** Lane, P3, on link (P1,P2) specified for lane alignment was not defined for link (P1,P2). The number of lanes defined for this link is P4. Check Record Type 11.
- 4053** Lane P3, specified for lane alignment on the link receiving through traffic from link (P1 ,P2) is not a defined lane on the receiving link. Check Record Type 11 for link (P1,P2) and the geometry of its through receiving link.
- 4054** Movement-specific output for the NETSIM subnetwork was requested on Record Type 05. However, this version of the TRAF Integrated Model does not contain the logic for this feature. Set Column 48 on Record Type 05 blank or zero.
- 4055** Dimension of array DURINT, containing durations of each signal interval of every node in NETSIM subnetwork, has been exceeded.
- 4056** Diversion information input on Record Type 11 for link (P 1 ,P2) in NETSIM subnetwork. Diversion strategies are not performed by NETSIM. Revise Record Type 11.
- 4057** Value P2 to be stored in SLCDIS array is negative. Revise Entry P1 on Record Type 152.
- 4058** Value P2 to be stored in DRVFAM array is not valid. Entries must be greater than 0. Revise Entry P1 on Record Type 153.
- 4059** Values to be stored in DRVFAM array are not valid. Entries must sum to 100. The entries sum to P1 . Check all entries on Record Type 153.
- 4060** Program cannot accommodate the number of long-term events specified in input stream. Event for link (P1,P2) will not be stored.
- 4065** Arrays DTCTR1, DTCTR2, DTCTR3 and DTCTR4 are full. Increase the dimension of these arrays to at least P1 . Also set scalar MAXD to the value of the new dimension.
- 4068** More than 3 closed lanes were present on link (P1,P2). Revise Record Type 11.
- 4069** Link (P1 ,P2) is the leg of a T-intersection and contains more than 6 lanes. Only 6 lanes can be accommodated by the database for a T-intersection (because only 6 lanes can be channelized). Revise Record Type 11.

- 4070 More than 3 lanes were channelized left or right on link (P1,P2), a T-intersection. Revise Record Type 11. The left channelized lanes are P3 and the right channelized lanes are P4.
- 4072 Index, P1, to PPER array input in Entry P2 of Record Type 146 is invalid. Permitted index values are 1-3, inclusive.
- 4100 Code, P1, input on Record Type 60 to identify data contained on data records for fuel option is invalid. Permitted values are 0-3, inclusive.
- 4105 Vehicle type, P1, input on Record Type 60 is invalid. Permitted values are 1-3, inclusive.
- 4110 Value, P1, input on a Record Type 60 for the fuel option is negative. The negative value is in Entry P2 on the data record.
- 4115 Speed, P1, input on a Record Type 60 for the fuel option is invalid. Permitted values are 0-70, inclusive.
- 4120 The acceleration/deceleration flag in Entry 4 on Record Type 60 must be 0 or 1.
- 4121 On Record Type 60, Entry 14 is nonzero (P1), and Entry 4 is P2. This is not allowed.
- 4125 Code, P1, describing the system of units used in preparing the dataset must be either (0 or 1) for (English or Metric) units. Check Record Type 02.
- 4126 Code, P1, requesting the system of units to be used for model output is invalid. Value must be (0, 1,2, or 3) for (same as input, English, metric, or both) units. Check Record Type 02.
- 4150 Too many Record Type 58s were input. There were P1 Record Type 58s submitted, up to 16 are permitted.
- 4151 Vehicle type number, P1, is out of bounds. Value must be between 1 and 16 inclusive. Check Entry 1 on Record Type 58.
- 4152 A duplicate Record Type 58 was specified for vehicle type P1. Only 1 Record Type 58 is allowed for each vehicle type.
- 4153 Vehicle length of P1, feet for vehicle type, P2, is out of bounds. Vehicle lengths must be between 10 and 125 feet inclusive. Check Entry 2 on the Record Type 58 for vehicle type, P2.
- 4154 Maximum acceleration of P1, tenths of a mph/set, for vehicle type P2 is out of bounds. Maximum acceleration must be between 20 and 86 tenths of a mph/sec, inclusive. Check Entry 3 on the Record Type 58 for vehicle type, P2.
- 4155 Maximum speed of P 1, mph for vehicle type, P2 is out of bounds. Maximum speed must be between 25 and 125 mph inclusive. Check Entry 4 on the Record Type 58 for vehicle type, P2.
- 4156 Queue discharge multiplicative factor, P1, for vehicle type P2, is out of bounds. Factor must either be blank or be between 50% and 500% inclusive. Check Entry 5 on the Record Type 58 for vehicle type, P2.

- 4157 Fleet component percentage, P1, is out of bounds. Value must be between 0% and 100% inclusive. Check Entry P2 on Record Type 58 for vehicle type P3.
- 4158 Average person occupancy, P1, (in hundredths) is too low. Value input must be at least 100. Check Entry 10 on Record Type 58 for vehicle type, P2.
- 4159 P1 percent of fleet component P2 was defined by Record Type 58s. P1 must be either 0 or 100. Check set of Record Type 58s for component P2.

<u>Fleet Component</u>	<u>Value of P2</u>
Auto	1
Truck	2
carpool	3
Bus	4

- 4160 Parking activity is not permitted on entry or entry interface links. Therefore, upstream node number, P1, must be between 1 and P2. Check first entry on Record Type 56 pertaining to link (P1 ,P3).
- 4161 Parking activity is not permitted on exit links. Therefore, downstream node number, P2, must be between 1 and 7999. Check second entry on Record Type 56 pertaining to link (P1,P2).
- 4162 Specified distance, P1, feet from the stop line to the front of the parking zone along curb, P2, of link (P3,P4) is out of bounds. Value must be between 0 and 1000 feet inclusive. Check Record Type 56 for link (P3,P4).

P2	Curb
1	Right
2	Left

- 4163 Specified length, P1, of a parking zone along curb, P2, of link (P3,P4) is out of bounds. Value must be between 0 and 2000 feet, inclusive. Check Record Type 56 for link (P3,P4).

P2	Curb
1	Right
2	Left

- 4164 Specified mean duration, P1, tenths of a second for parking maneuvers on link (P2,P3) is out of bounds. Value must be between 10 and 1000 tenths of a second, inclusive, but can be 0 if this a subsequent time period. Check Record Type 56 for link (P2,P3).
- 4165 Upstream and downstream node numbers, (P1,P2) specified on Record Type 56 do not correspond to any link previously defined on Record Type 11. Check Record Type 56.
- 4166 A duplicate Record Type 56 was specified for link (P1,P2). Only one Record Type 56 is permitted per link during a single time period. Check the set of Record Type 56s.
- 4167 Distance to front of parking zone on link (P1,P2) was specified but parking zone length was omitted. Check Entries P3 and P4 on Record Type 56 for link (P1,P2).

- 4168 When a Record Type 56 is specified during the first time period, or when included during a subsequent time period with a specified number of parking maneuvers per hour, it is implied that parking activity exists on that link. However no zones were specified where parking is permitted. Check Record Type 56 for link (P1,P2).

- 4171 A parking zone cannot be specified on the left side of link (P1,P2) since there is no curb on that side (i.e., link (P2,P1) exists). Check Record Type 56 for link (P1,P2) and Record Types 11 and 21 for link (P2,P1).

- 4172 During a subsequent time period, when either parking duration P 1, or parking frequency, P2, is non-zero, they both must be non-zero. Check Record Type 56 for link (P3,P4).

- 4173 There are too many vehicle types specified by the set of Record Type 58s considering the number of fleet components which they describe. The program guarantees through the use of default values that each fleet component is always represented by at least one vehicle type. The number of Record Type 58s plus the number of unspecified fleet components for which default types are asserted must not exceed 16. Fleet component, P 1, is not represented on any Record Type 58 and there are already 16 vehicle types for other components. Either remove 1 Record Type 5 8 or change the existing records to include fleet component, P 1.

<u>Value of P1</u>	<u>Fleet Component</u>
1	Auto
2	Carpool
3	Truck
4	Bus

- 5194 A node number defining link (P1,P2) is invalid. Internal node numbers must be > 0, and less than or equal to the maximum allowable node number, P4. Value input was P3. Check Record Type 22.

- 5196 The upstream movement, P4, to link (P1,P2) has a downstream turn movement, P3, specified but no receiving link for the downstream movement exists. Upstream and downstream movements (left, through, right, diagonal) are specified by (1,2,3,4). Check Record Type 22.

- 5197 Storage exceeded for conditional turn movement array when processing link (P1,P2). Maximum array length is P3. The value P3 is expressed by $IUP + IUP * 4$, where IUP is the maximum allowable number of upstream turn movements on the subnetwork that can affect downstream turn movements. The expression $IUP * 4$ represents the 4 downstream turn movements for each upstream movement. Check Record Type 22 (i.e., P3/5 is the maximum allowed number of links with conditional turn movements).

- 5200 Turn movement data specified on Record Types 2 1 and 22 for link (P1,P2) is inconsistent. Specifications on Record Type 22 imply that some traffic will execute turn movement P3 from link (P1,P2), while specifications on Record Type 21 indicate no traffic will perform this movement. P3 = (1,2,3,4) for (left, through, right, diagonal) traffic, respectively.

- 5201 Turn movement percentages (or vehicle counts) were input for upstream entering movement P3 to link (P1,P2). Record Type 11 does not specify link (P1,P2) as a receiving link from direction P3. In other words, there is no Record Type 11 that describes a link with downstream node, P1, as having a receiver node P2 from direction P3. Code P3 is defined as (1,2,3,4) for (left, through, right, diagonal) turn movements, respectively. Check Record Type 22.
- 5203 Signal transition code for NETSIM is invalid. Permitted values are 0-3, inclusive. Value input was P1 . Check Entry 10 on Record Type 02.
- 5204 Minimum main street green time during signal transition is invalid. Value must be greater than 1 .0. Value specified was P2. Check Record Type 35 for node, P 1.
- 5205 Node P1 is defined as approach number P2 to node P3 during a subsequent time period. The order in which approaches are input to a node must be the same for each time period. Check Entry P4 on Record Type 35 for node P2 for current time period and first time period.
- 5206 A Record Type 35 for node P1, input in a subsequent time period, is missing an approach node. Approach nodes from one time period to another cannot change. Approach number P2 (Entry P3) was specified on Record Type 35 for time period 1 but is missing in subsequent time period specifications.
- 5207 Dimension of array PDURNT, containing durations of each signal interval of every node in NETSIM subnetwork in a subsequent time period, has been exceeded. The dimension of array PDURNT is MAXINT. Increase MAXINT to at least P1 to change dimension of PDURNT.
- 5208 A Record Type 35 for node P1 exists in a subsequent time period but a Record Type 36 for this node is missing. There must be a Record Type 36 specified for each Record Type 35.
- 5209 A Record Type 35 for node P1 is missing. If at least one Record Type 35 was specified for a subsequent time period, a Record Type 35 must be specified for every signalized node.
- 5211 Traffic control patterns for subsequent time periods can only be input for fixed time controllers and do not apply to uncontrolled intersections. Therefore, Record Types 35 and 36 cannot be input for node P1 during time period, P2. Entry 8 on Record Type 35 for node P 1 cannot be zero.
- 5214 Signal transition is not allowed in subnetwork P1.
- | | |
|----|--------------|
| P1 | <u>Model</u> |
| 4 | FREFLO |
| 8 | FRESIM |
- 5300 Duration of lane change maneuver, P1, input on Record Type 81 is out of bounds. Permissible range is between 1 and 8 (seconds), inclusive.
- 5301 Mean reaction time, P1, input on Record Type 8 1 is out of bounds. Permissible range is between 1 and 30 (tenths of a second), inclusive.

- 5302 Time required for successive lane changes, P1, input on Record Type 8 1 is out of bounds. Permissible range is between 10 and 100 (tenths of a second), inclusive.
- 5303 Deceleration at beginning of lane change maneuver, P1, input on Record Type 8 1 is out of bounds. Permissible range is between 1 and 10 (feet per second squared), inclusive.
- 5304 Difference in vehicle's deceleration over the distance between its position when it begins to respond to an obstruction and the position of the obstruction for a mandatory lane change, P1, input on the Record Type 81 is out of bounds. Permissible range is between 5 and 15 (feet per second squared), inclusive.
- 5305 Difference in vehicle's deceleration over the distance between its position when it begins to respond to an obstruction and the position of the obstruction for a discretionary lane change, P1, input on the Record Type 81 is out of bounds. Permissible range is between 5 and 15 (feet per second squared), inclusive.
- 5306 Panic deceleration rate of lead vehicle for computation of car-following law, P 1, input on the Record Type 8 1 is out of bounds. Permissible range is between 10 and 15 (feet per second squared), inclusive.
- 5307 Panic deceleration rate of follower vehicle for computation of car-following law, P 1, input on the Record Type 81 is out of bounds. Permissible range is between 10 and 15 (feet per second squared), inclusive.
- 5308 Driver type factor used to compute driver aggressiveness, P 1, input on Record Type 8 1 is out of bounds. Permissible range is between 15 and 50, inclusive.
- 5309 Urgency threshold, P1, input on Record Type 81 is out of bounds. Permissible range is 0 and 5 (10*seconds squared/feet), inclusive.
- 5310 Safety factor for computation of perceived risk of lane change, P 1, input on Record Type 8 1 is out of bounds. Permissible range is between 6 and 10 (factor * lo), inclusive.
- 5311 Percent of drivers who cooperate with a lane-changer, P1, input on Record Type 8 1 is out of bounds. Permissible range is between 10 and 100 (%), inclusive.
- 5312 Headway below which all drivers will attempt to change lanes, P1, input on Record Type 8 1 is out of bounds. Permissible range is between 1 and 30 (tenths of a second), inclusive.
- 5313 Headway above which no driver will attempt to change lanes, P 1, input on Record Type 8 1 is out of bounds. Permissible range is between 30 and 100 (tenths of a second), inclusive.
- 53 14 Longitudinal distance, P 1, over which drivers decide to perform one lane change, on the Record Type 81 is out of bounds. Permissible range is between 50 and 450 (feet), inclusive.
- 5316 Approach link, (P1,P2) to micronode, P2 specified on a Record Type SO is an entry link. This is prohibited.
- 5317 For micronode P1 specified on Record Type SO, there are angles of approaches missing. If angles of approach links to a micronode are specified rather than node coordinates, then all approach angles must be specified.

- 5318 Micronode P1 has link (P1,P2) as a receiver. Receiver links to a micronode cannot be exit links.

- 5319 For micronode P1 specified on Record Type SO, there are angles of receivers missing. If angles of receiver links to a micronode are specified rather than node coordinates, then all receiver angles must be specified.

- 5321 Neither node coordinates nor angles were specified for node P1, which is either directly upstream or downstream to a micronode, P2.

- 5322 Link (P1,P2) defined on a Record Type SO does not correspond to a link previously defined on a Record Type 11.

- 5323 Angle for link (P1,P2) and its parallel link (P2,P1) are not the same. Check the Record Type 80s for these two links.

- 5324 Width of parking lane for link (P1 ,P2) was entered on Record Type SO, but either parking was not defined on Record Type 56 for link (P1,P2) or parking zone does not extend up to stop line.

- 5326 Lane width of lane P1 which does not exist on link (P2,P3) was entered for that link.

- 5327 Node P2 is to be modeled as a micronode but node coordinates are missing for either node P1 or P2 or both when link (P1,P2) is an approach link to micronode P2.

- 5328 For micronode P1 specified on Record Type SO, the angle from the approach node P2 is missing. If angles of approach links to a micronode are specified rather than node coordinates, then all approach angles must be specified.

- 5329 For micronode P1 specified on Record Type 80, the angle from the receiving node P2 is missing. If angles of receiver links to a micronode are specified rather than node coordinates, then all receiver angles must be specified.

- 5331 Lane width of Entry P1 for link (P2,P3) on Record Type SO is out of bounds. Range is between 8 and 15 feet, inclusive.

- 5332 Longitudinal distance in feet from stop line to the near curb, Entry P1 on Record Type SO for link (P2,P3) is out of bounds. Range is between 3 and 35 feet, inclusive.

- 5333 Forward sight distance at stop line, P1 on Record Type SO for link (P2,P3) is out of bounds. Range is between 50 and 5,000 feet, inclusive.

- 5334 Angle of subject link (P1 ,P2) relative to due north, Entry P3 on Record Type SO is out of bounds. Range is from 1 to 360 degrees, inclusive.

- 5335 More than one Record Type SO was entered for link (P1,P2).
- 5336 Link (P1,P2) in interchange, P3 does not have a receiver link within the same interchange and is not a receiver link to another link within the same interchange.
- 5337 A source/sink node was located on link (P1,P2), which is part of an interchange. Source/sink nodes are not allowed within interchanges.
- 5338 Link (P1,P2) defined on a Record Type 95 for interchange, P3, was not previously defined by a Record Type 11.
- 5339 Interchange number, P1 is invalid. Range is from P2 to P3, inclusive.
- 5340 Node P1 is invalid. Range is from P2 to P3, inclusive.
- 5341 Record Type 95s for interchange P1 exist out of sequence. Records for a single interchange must be grouped together.
- 5342 Link (P1,P2) was defined in more than one interchange.
- 5343 Interchange, P1 was not previously defined on a Record Type 95.
- 5345 Approach link (P 1 ,P2) was not defined to be part of interchange, P3 on a Record Type 95.
- 5346 Link (P1 ,P2) defined as an approach link to interchange P3 on Record Type 96 is not an approach link to interchange P3. That is, all feeder links to link (P1 ,P2) are part of interchange, P3.
- 5348 Link (P 1 ,P2) was not defined by a Record Type 95 to be part of interchange P3.
- 5349 Link (P 1 ,P2) defined on Record Type 96 to be a destination link of interchange P3 is not a destination link; that is, all of its receivers are part of interchange P3.
- 5350 No turn code was entered for destination link (P1 ,P2) of interchange P3.
- 5351 No turn percentage was entered for destination link (P 1 ,P2) and turn code P3 of interchange P4.
- 5352 Turn code, P1, specified on Record Type 96 for destination link (P2,P3) of interchange, P4 is invalid. The turn movement is not possible given the geometry defined on the Record Type 11s.
- 5356 A turn code on Entry P1 of a Record Type 96 for interchange P2 was entered when no destination link was defined on the previous two entries.
- 5357 A turn percentage on Entry P1 of a Record Type 96 for interchange P2 was entered without a corresponding destination link.

- 5358 A Record Type 22 was entered for link (P1,P2), which was defined as part of interchange P3. Links within an interchange cannot have a Record Type 22.
- 5361 Node P1 on Entry P2 of a Record Type 96 is invalid. Range is from P3 to P4, inclusive.
- 5362 A Record Type 2 1 was entered for link (P 1 ,P2) which was defined as part of interchange P3. Links within an interchange should not have a Record Type 2 1.
- 5363 Turn code P1 on Entry P2 of a Record Type 96 is invalid. Range is from P3 to P4, inclusive.
- 5364 Turn percentage P1 on Entry P2 of a Record Type 96 is invalid. Range is from P3 to P4, inclusive.
- 5365 A Record Type 96 for interchange P1 was input out of order. All Record Type 96s for a particular interchange must be grouped together.
- 5366 More than one Record Type 96 for destination link (P1,P2) and turn code P3 from interchange P4 was entered.
- 5367 Not all paths through interchange P1 were defined. Either a Record Type 95 is missing or the path could not be computed for the O-D pair defined on the P2 Record Type 96 for this interchange. Hint: Check that it is possible to travel from origin to destination in at most 11 links.
- 5368 There is no corresponding Record Type 96 for origin link (P1,P2) to interchange P3 input on the Record Type 95s.
- 5369 Percentages of traffic making various turn movements for origin link (P1 ,P2) do not equal 100%. Check Record Type 96s.
- 5370 A Record Type 2 1 was not entered for link (P 1 ,P2), which was also not defined to be part of an interchange. [If a Record Type 2 1 exists for this link, the implication is that more than one Record Type 11 exists for link (P 1 ,P2).]
- 5371 Neither a Record Type 2 1 nor a trip table was entered for link (P1 ,P2) of interchange P3.
- 5372 An entry pertaining to force-off time extension was specified for node, P1 . To select a force-off time extension, Entries P2 and P3 must both be specified. Check Record Type 44.
- 5373 A force-off extension time was specified for node P 1, but no force-off time was specified. A force-off time must be specified for the phase number, Entry P2, selected for extension time. Check Record Type 44.
- 5374 A force-off extension time was specified for a sync phase (phase 2 or 6) for node, P1 . Only phases 1,3,4, 5, 7, or 8 can have force-off times specified. Check Entry P2 on Record Type 44.
- 5375 An invalid phase number, P2, was input for node, P1 . Force-off time extensions can only be selected for phases 1,3,4,5, 7, or 8. Check Entry P3 on Record Type 44.

- 5376 An invalid force-off time extension was input on Record Type 44 for node P1 . Extension time must be greater than or equal to 0, time input was P2.
- 5380 If the conditional service feature is requested, Entries P3 and P4 must both be specified. Check Record Type 47 for node P1 and phase number P2.
- 5381 The conditional service feature cannot be specified for a node that has a coordinated controller. Node P1 has the conditional service feature selected for phase number P2, but this node has a coordinated controller. Check Entries P3 and P4 on Record Type 47.
- 5382 The conditional service feature cannot be specified for a node that has a lag phase controller. Node P1 has the conditional service feature selected for phase number P2, yet this node has a lag phase controller. Check Entries P3 and P4 on Record Type 47.
- 5383 A node must have an coordinated actuated signal if the lag phase hold feature is selected. The signal at node P1, is not coordinated yet the lag phase hold feature was selected for phase number P2. Check Entry P3 on Record Type 47.
- 5384 Invalid lag phase hold code input for node, P1, for phase number, P2. Code must be either 0 or 1. Check Entry P3 on Record Type 47.
- 5385 Invalid code (specifying whether gapout or maxout must expire before termination of phase) was input for node, P1, for phase number, P2. Code must be either 0 or 1. Check Entry P3 on Record Type 47.
- 5386 Invalid code for conditional (dual) service feature was input for node, P1, for phase number, P2. Code must be either 0 or 1. Check Entry P3 on Record Type 47.
- 5387 Duplicate phase numbers for node, P1, were selected for force-off time extensions. Check Entries P2 and P3 on Record Type 44.
- 5388 Both a right pocket and a protected station at the stop line were input for link (P1,P2).
- 5389 Too many sections were defined for link aggregations. A total of P1 sections can be input. Check Record Type 90s.
- 5390 No link exists for nodes P1 and P2 which were defined to be part of a link aggregation. Check Record Type 90 for section number P3.
- 5391 Too many links were defined to be contained within sections defined on Record Type 90s. A total of P1 links can be contained within all sections specified for link aggregation.
- 5392 An invalid node was specified as part of a section on Record Type 90. Values must be between 1 and P1, inclusive, or 7000-7999, inclusive. Check Record Type 90 for section P2.
- 5393 The detector location has been specified in entries P3 and P4 on link (P1,P2). Check Record Type 28.
- 5394 The detector location on lane P3 of link (P1,P2) has not been specified correctly. The proper value for the detector location should be greater than zero and less than the link length. Check Record Type 29.

- 5600 The specified number of seconds between successive outputs of NETSIM second-specific data that is to be sent to a real-time traffic control algorithm is invalid. The number of seconds allowed ranges from 0 to 30. The value input was P1. See Entry 10 on Record Type 02.
- 5601 An invalid value was input for the time-interval-specific data flag. Only the values 0 and 1 are allowed. See Entry 11 on Record Type 02.
- 5602 An invalid value was input for the time-period-specific data flag. Only the values 0 and 1 are allowed. See Entry 12 on Record Type 02.
- 5603 An invalid value was input for the second-specific debugging data flag. Only the values 0 and 1 are allowed. See Entry 13 on Record Type 02.
- 5604 The NETFLG.DBG control file that specifies which variables NETSIM is to send to a file for debugging purposes is missing.
- 5605 At least one of the following entries was specified on Record Type 02: Entry 11, 12, and/or 13. Therefore, NETSIM has been informed that it is being used to interface with a real-time traffic adaptive control system. In this case, Entry 10 on Record Type 02 must be specified.
- 5606 The NETFLG.SEC control file that specifies which variables NETSIM is to send to a real-time traffic control algorithm is missing.
- 5607 An invalid value was input for the flag that specifies whether the data files generated by NETSIM for a real-time traffic control algorithm are to be in debugging format. See Entry 10 on Record Type 02.
- 6000 The total number of links specified on Record Type 10 exceeds the maximum allowable number of links which is P1 . The error was detected while reading the name card for link (P2,P3).
- 6001 Both the upstream and downstream node numbers are larger than 7000. Check Record Type P3 for link (P 1 ,P2).
- 6002 The auxiliary lane specification is out of sequence. A zero value precedes a non-zero value. Check Record Type P3 for link (P 1 ,P2).
- 6003 The specification for the right hand lane of a pair separated by a physical barrier is invalid. The specified lane, P1, does not exist on link (P2,P3). Check Record Type P4 for this link.
- 6004 Lane identification number for the auxiliary lane is invalid. The specified identification number is P1 . Check Record Type P4 for link (P2,P3).

- 6005 The auxiliary lane type code is invalid. The specified type code is P1 . Check the type code for the auxiliary lane with identification number P2 for link (P3,P4) on Record Type 19.
- 6006 The auxiliary lane length is invalid. The specified value is P4 feet. Check the specifications for auxiliary lane with identification number P1 link (P2,P3).
- 6007 The specified length for the full auxiliary lane is invalid. The length of a full auxiliary lane must be equal to the link length. The specified length is P1 . Check Record Type P4 for link (P2,P3).
- 6008 Invalid number of through lanes P1 is specified for freeway link (P2,P3) on Record Type P4. The number of through lanes for a freeway link should be in the range (1,5) inclusive.
- 6009 The node number for link (P1,P2) on Record Type P3 is outside the allowable range (1,8999).
- 6010 Invalid downstream node number is specified for internal link (P1,P2) on Record Type P3.
- 6011 The downstream node number P2 of the link that receives the through moving traffic from link (P1,P2) is invalid. The node number shall be in the range (1,8999) inclusive. Check Record Type P3.
- 6012 The specified link length P3, for link (P1,P2) is invalid. Check Record Type P4.
- 6013 Invalid link type code P3 is specified for link (P1,P2) on Record Type P4. Valid codes are as follows:

Code	<u>Description</u>
0	Freeway link
1	Ramp link

- 6014 Invalid auxiliary lane identification number P1 is specified for link (P2,P3) on Record Type P4. Valid auxiliary lane identification numbers are as follows:

Code	<u>Description</u>
6	First auxiliary – left side
7	Second auxiliary – left side
8	Third auxiliary – left side
9	First auxiliary – right side
10	Second auxiliary – right side
11	Third auxiliary – right side

- 6015 Invalid auxiliary lane type code P1 is specified for the auxiliary lane with identification number P2. Check Record Type 19 for link (P3,P4).
- 6016 Invalid auxiliary lane length P4 is specified for the auxiliary lane with identification number P1 . Check Record Type 19 for link (P2,P3). The length of the auxiliary lane should be greater than zero and less than or equal to the link length.

- 6017 Identification number P 1 for the lane receiving traffic from lane number 1 of link (P2,P3) is invalid. Check Record Type P4 for link (P2,P3). Lane identification number should be in the range (1,11), inclusive.
- 6018 Identification number of the lane which feeds lane 1 of the downstream off-ramp is invalid. The specified number is P1 . Check Record Type P4 for link (P2,P3).
- 6019 Invalid number of through lanes P1 is specified for ramp link (P2,P3) on Record Type P4. The number of through lanes for a ramp link should be in the range (1,3), inclusive.
- 6020 Link length should not be specified for an entry link. Check link (P2,P3) on Record Type P4. The specified link length is P1 .
- 6021 The downstream node number for link (P1,P2) on Record Type P3 is outside the allowable range (1,7999). The exit links should not be specified on Record Type P3.
- 6022 The capacity of node arrays is exceeded. A maximum of P1 nodes is allowed in the FRESIM subnetwork.
- 6023 Node P1 has been previously declared for another subnetwork. Check Record Type P2s.
- 6024 The capacity of link arrays is exceeded. A maximum P1 links is allowed in the FRESIM subnetwork.
- 6025 Node P3 which is specified to receive through traffic from freeway link (P1 ,P2) is also receiving traffic from another freeway link. Two freeway links cannot feed the same link. Check geometry Record Type 19s.
- 6026 Node P3 is specified as the downstream node of the link receiving through traffic from link (P1,P2). No Record Type 19 was specified for link (P2,P3).
- 6027 Lane P4 on link (P2,P3) is designated as the lane that receives traffic from lane 1 of link (P1,P2). Record Type 19 for link (P2,P3) indicates that lane P4 does not exit.
- 6028 No approaches are specified by the geometry cards for node P 1.
- 6029 Node P3 which is specified as the downstream node of the link receiving through traffic from ramp link (P1 ,P2) is also receiving traffic from another ramp link. Two ramp links cannot feed the same link. Check geometry Record Type 19s.
- 6030 Link (P1,P2) on Record Type 20 was not previously specified on the link geometry Record Type 19.
- 6031 Off-ramp warning sign should only be specified for an off-ramp link. Check Entry P3 of Record Type 20 for link (P1,P2).
- 6032 The specification for the number of lanes to which trucks are biased or restricted, P3, exceeds the number of through lanes on the link. Check Entry P4 on Record Type 20 for link (P1 ,P2).

- 6033 The distance between the freeway data station and the upstream node exceeds the link length. The specified value is P3 feet. Check Entry P4 on Record Type 20 for link (PI ,P2).

- 6034 The capacity of the data station arrays is exceeded. Maximum allowed number of stations is P3. Delete the data station specification on Record Type 20 for link (PI,P2).

- 6035 The upstream node number is invalid. The upstream node number must be in the range (1 ,P3) or (7000,8999) inclusive. Check Record Type P4 for link (PI ,P2).

- 6036 Link (PI,P2) defined in Record Type 19 has no Record Type 20 to define its operations. A Record Type 20 must be present in the first time period for every non-exit link defined.

- 6037 The specified value for the link grade is invalid. The specified value is P3. The maximum allowable grade is 10%. Check Record Type 20 for link (PI ,P2).

- 6038 The specified value for the link superelevation is invalid. The specified value is P3. The maximum allowable superelevation is 12 %. Check Record Type 20 for link (PI ,P2).

- 6039 The specified value for the radius of curvature would result in more than 19 degrees curvature. The specified value is P3. Check Record Type 20 for link (PI,P2). The degree of curvature is computed as follows:

$$\text{Degrees} = \frac{5279.6}{\text{Radius}}$$

- 6040 The specified value for the pavement type code is invalid. The specified value is P3. Check Record Type 20 for link (PI,P2). The valid pavement type codes are as follows:

<u>Type Code</u>	<u>Pavement Type</u>
0 (default)	Dry concrete
1	Dry concrete
2	Wet concrete
3	Dry asphalt
4	Wet asphalt

- 6041 Mean queue discharge headway is larger than 6 seconds. The specified value is P3. Check Record Type 20 for link (P 1 ,P2).

 - 6042 The truck movement code is invalid. The specified code is P3. Check Record Type 20 for link (PI,P2). Valid codes are as follows:
- | <u>Code</u> | <u>Description</u> |
|-------------|--|
| 1 | Trucks are biased to certain lanes |
| 2 | Trucks are restricted to certain lanes |
- 6043 The specified value for the number of through lanes to which trucks are biased or restricted is invalid. The value should be in the range (1,5) inclusive. The specified value is P3. Check Record Type 20 for link (P 1 ,P2).

- 6044 Invalid entry. The specified value P2 is negative. Check Entry P 1 on Record Type P3.
- 6045 The specified directional code for truck movement is invalid. The specified value is P3. Check Record Type P4 for link (P1,P2). Valid codes are as follows:
- | Code | <u>Description</u> |
|------|---|
| 0 | Trucks are biased/restricted to the right side of the freeway |
| 1 | Trucks are biased/restricted to the left side of the freeway |
- 6046 Link (P1,P2) specified on Record Type P3 was not previously specified on the link geometry Record Type 19.
- 6047 Link (P1 ,P2), which is identified as the link that receives the through traffic from a link on Record Type P3, was not previously specified on the link geometry on Record Type 19.
- 6048 The off-ramp link (PZ,P3) which is identified as the link receiving the exiting traffic from link (P1,P2) was not previously specified on the link geometry Record Type 19. Check Record Type P4.
- 6049 The traffic traveling on link (P1,P2) has no destination. That is, neither the through receiving link nor the exiting link is specified. Check the specifications on Record Type P3.
- 6050 The sum of the percentages of through moving traffic and the exiting traffic for link (P 1 ,P2) on Record Type P3 do not add up to 100%.
- 6051 P1 percent of traffic on link (P2,P3) is specified to continue along the through movement but no through receiving link is identified on Record Type P4.
- 6052 P1 percent of traffic on link (P2,P3) is specified to exit at the downstream off-ramp. No off-ramp link is identified on Record Type P4.
- 6053 Invalid upstream node number. Check Record Type P3 for link (PI ,P2).
- 6054 Invalid downstream node number. Check Record Type P3 for link (P 1 ,P2).
- 6055 The downstream node number PI of the through receiving link is invalid. The node number must be in the range (1,8999) inclusive. Check Record Type P4 for link (P2,P3).
- 6056 The downstream node number of the off-ramp link, receiving the exiting traffic is invalid. The node number must be in the range (1,8999) inclusive. Check Record Type P4 for link (P2,P3).
- 6057 The turn fraction is less than zero. The specified percentage or volume is P1 . Check Record Type P4 for link (P2,P3).
- 6058 Link (P1,P2) specified on Record Type P3 was not previously specified on the link geometry Record Type 19.
- 6059 The lane identification number P1 at which the detector is located is inconsistent with the data (number of through lanes and the auxiliary lanes) specified on link geometry Record Type 19. Check Record Type P4 for link (P2,P3).

- 6060 Distance between the downstream end of the detector and the upstream node is specified as P1 feet. This distance is greater than the length of the link (P2,P3) on which the detector is located. Check Entry 4 on Record Type P4.
- 6061 A loop length of P1 feet is specified for the Doppler radar. Check Entries 5 and 7 on Record Type P4 for link (P2,P3).
- 6062 Distance separating coupled pair is specified incorrectly for a Doppler radar detector. Check Entries 6 and 7 on Record Type P4 for link (P2,P3). The specified distance is P1 feet,
- 6063 A short loop detector or a coupled pair of short loops is specified with zero loop length. Check Record Type P3 for link (P1 ,P2).
- 6064 The detector has been identified as a short loop but the distance separating a coupled pair of short loops has a non-zero P1 value. Check Record Type P4 for link (P2,P3).
- 6065 A coupled pair of short loops is specified but the distance separating the pair has a zero value. Check Record Type P3 for link (P 1 ,P2).
- 6066 The detector station P1 specified on link (P2,P3) has been previously specified. Check all Record Type P4s for duplicate detector station number P1 .
- 6067 The detector located on lane P3 of link (P1 ,P2) has been previously specified. Check all Record Type P4s.
- 6068 The identification number P1 of the lane containing the detector is invalid. Identification number must be in the range (1,11), inclusive. Check Record Type P4 for link (P2,P3).
- 6069 The specified distance between the upstream node and the trailing edge of the detector is invalid. The specified value is P1. Check Record Type P4 for link (P1,P2).
- 6070 The specified loop length for the short loop detector is invalid. The specified value must be in the range (0,50) inclusive. The value specified is P1. Check Record Type P4 for link (P1,P2).
- 6071 The distance separating coupled pairs of short loop detectors must be in the range (0-20). The specified value is P1 . Check Record Type P4 for link (P2,P3).
- 6072 The detector type code is invalid. The specified code is P1, check Record Type P4 for link (P2,P3). Valid codes are as follows:
- | Code | <u>Description</u> |
|------|-----------------------------|
| 0 | Doppler radar |
| 1 | Short loop |
| 2 | Coupled pair of short loops |
- 6073 The detector data station number is invalid. The specified value is P1 . Check Record Type P4 for link (P2,P3).
- 6074 The capacity of detector-specific arrays is exceeded. P1 detectors were specified. The maximum allowable number of detectors is P2. Check Record Type P3s.

- 6075 Link (P1 ,P2) specified on Record Type P3 has not been previously specified on a link geometry Record Type 19.
- 6076 Rubbernecking factor or incident blockage is specified for lane P3 on link (P1,P2). The link geometry specifications indicate that the lane does not exist. Check Entry P4 of Record Type 29.
- 6077 The specified distance P3 between the upstream end of incident and the upstream node is greater than the link length. The distance should be smaller than P4. Check Record Type 29 for link (P1,P2).
- 6078 An incident blockage warning sign is specified but none of the lanes has an incident blockage. Check Entries 3-14 on Record Type 28 for link (P1,P2).
- 6079 Rubber necking factor is specified but none of the lanes has a reduction in capacity because of rubbernecking. Check Entries 3-14 on Record Type 29 for link (P 1 ,P2).
- 6080 Too many incidents are specified for the FRESIM subnetwork. Maximum allowable number of incidents is P1 . Remove all Record Type 29s for link (P2,P3) and beyond.
- 6081 The specified node number is invalid. The node number must be in the range (1 ,P3) inclusive. Check Record Type P4 for link (P1,P2).
- 6082 The specified incident code is invalid. Check Entry P3 of Record Type 29 for link (P 1 ,P2). Valid codes are a follows:

<u>Code</u>	<u>Description</u>
0	No effect (normal)
1	Rubbernecking
2	Incident blockage
- 6083 Invalid entry. The specified value is negative. Check Entry P3 on Record Type 29 for link (P1,P2).
- 6084 The rubbernecking factor exceeds 100%. The specified value is P3. Check Record Type 29 for link (P1,P2).
- 6085 Link (P1 ,P2) on Record Type P3 has not been specified previously on a link geometry Record Type 19.
- 6086 The distance between the upstream node and the lane add/drop is larger than the link length. Check Entry P3 on Record Type 32 for link (P1,P2).
- 6087 The lane added/dropped has an identification number P3 which is greater than the maximum number of through lanes P4 on link (P1,P2). Check Record Type 32.
- 6088 The sequence of lane add/drop results in either no available through lanes or more than maximum 5 through lanes. Check the sequence of lane add/drop specifications on Record Type 32 for link (P1,P2).

6089 A warning sign should not be specified for a lane add. Check Record Type 32 for link (P1,P2).

6090 The specified lane add/drop code is invalid. Check Entry P3 on Record Type 32 for link (P1,P2). Valid codes are as follows:

Code	<u>Description</u>
1	Lane add
2	Lane drop

6091 The number of links which contain detectors serving metering node P3 is exceeding the allowed number P4 links. Error occurred while processing Record Type 38 for link (P1,P2). Check Record Type 38s prior to this card.

6092 The total number of detectors serving the metering signal at node P1 exceeds the maximum allowable number P2. Check Record Type 38.

6093 Node P1 is incorrectly specified for a metering signal. Either it was not previously specified by the geometric data, or it is the downstream end of an entry or interface link. Check Record Type 37.

6094 Another Record Type 37 for node P1 exists. Check all Record Type 37s for duplicates.

6095 Time of onset and metering headway must be input for clock-time metering. Time of onset and headway were input as P2 and P3, respectively. Check Entries 2,3, and 4 on Record Type 37s for node P 1.

6097 The first speed threshold must be specified for speed control metering. Check Entries P2 and P3 on Record Type 37 for metering signal at node P1 .

6098 The minimum acceptable gap is not specified for gap acceptance merge control metering. Check Entries P2 and P3 on Record Type 37 for the metering signal at node P1 .

6099 The capacity of the metering arrays is exceeded. The maximum allowed number of metering signals is P 1.

6100 The speed threshold specification on Record Type 37 is out of sequence. When more than one threshold is specified the speeds should be in descending order. Check Entries 6, 8, and 10 on Record Type 3 7 for node P 1.

6101 The specified node number P1 on Record Type P4 is invalid. The node number must be in the range (P2,P3) inclusive.

6102 Invalid metering type code. The specified code is P2. Check Record Type 37 for the metering signal located at node P1. Valid codes are as follows:

Code	<u>Description</u>
1	Clock time ramp metering
2	Demand/capacity metering
3	Speed control metering
4	Gap acceptance merge control metering

- 6103 Invalid entry on Record Type 37. The specified value is P2. Check Entry P3 for metering signal at node P 1.
- 6104 The specified value of P2 for metering headway is invalid. The metering headway should be in the range (0,60 seconds) inclusive. Check Entry P3 on Record Type 37 for metering signal at node P 1.
- 6105 Invalid entry on Record Type 37. The specified value is P2. Check Entry P3 for metering signal at node P1.
- 6106 The metering signal at node P1 was not previously specified on a Record Type 37. Check Record Type P2.
- 6107 Link (P2,P3) containing detectors which are used for measuring freeway performance was not previously specified on a link geometry Record Type 19. Check Record Type 38 for metering signal at node P 1.
- 6108 The lane identification number P4 indicates a nonexiting lane on link (P2,P3). Check Record Type 38 for the metering signal at node P1 .
- 6109 The distance between the detector and the upstream node of link (P2,P3) is invalid. Check Entry P4 on Record Type 38 for the metering signal at node P1 .
- 6110 The detector on link (P2,P3) has not been previously specified on the surveillance Record Type 28. Check Entry P4 on Record Type 38 for the metering signal at node P1 .
- 6111 The specified node number P1 on Record Type P4 is invalid. The node number must be in the range (P2,P3) inclusive.
- 6112 The lane identification number P3 is invalid. The lane identification number should be in the range (1,11) inclusive. Check Entry P3 on Record Type 38 for metering signal at node P1 .
- 6113 Invalid entry on Record Type 38. The specified value is P2. Check Entry P3 for metering signal at node P 1.
- 6114 The detectors specified for metering signal at node P1 are out of sequence. Entry P2 on this card is followed by a blank or zero specification and then followed by non-zero specification for another detector.

- 6115 The entries on Record Type P1 are out of sequence. Zero entry for the entry link is followed by non-zero entries.
- 6116 The entry link (P1,P2) on Record Type 50 was not previously specified on the link geometry Record Type 19.
- 6117 The upstream node number P1 on Record Type P3 for entry link (P1,P2) is invalid. The upstream node number should be greater than or equal to 8000.
- 6118 The downstream node number P2 on Record Type P3 for entry link (P1,P2) is invalid. The downstream node number should be in the range (1 ,P3) inclusive.
- 6119 A negative value is specified as the flow rate for the entry link (P2,P3) on Record Type P4. The specified negative value is P 1.
- 6120 The specified percentage P1 for trucks on entry link (P2,P3) on Record Type P4 is invalid. The specified value should be in the range (0,100) inclusive.
- 6121 A nonzero percentage for Carpool vehicles is specified on Record Type P3 for entry link (P1 ,P2). Carpools are not simulated by the FRESIM model.
- 6122 Record Type 62 should follow Record Type 6 1. Record Type P1 was not found in the dataset.
- 6123 An invalid parameter is specified for incident detection algorithm P2. Check incident detection parameter P 1 on Record Type P3.
- 6124 More than two Record Type P1s are input. Check for duplicate Record Type P1 in the input stream.
- 6125 On-line incident detection is requested, but there are no Record Type P1 in the input stream.
- 6126 The detector station number on Record Type P2 is invalid. The detector station number on this card either has a negative value or is greater than the maximum allowable number of detector stations, which is 50. The specified value is P1 .
- 6127 The total number of incident detection detector stations exceeds the maximum allowed P2 stations. A total of P1 stations is specified on Record Type P3.
- 6128 There are no detectors connected to detector station P1, which is specified on Record Type P2. Check the detector station specification on Record Type P2.
- 6129 Duplicate detector data station number P1 on Record Type P2.
- 6130 The sequence of detector data stations on Record Type P1 is invalid. Disjoint freeway segments should be separated by a zero station number. A non-zero station number follows two successive zero station numbers. Two successive zero station numbers indicate the end of input data for detector data stations.
- 6131 The polling frequency should be in the range (0,100) inclusive. The specified value is P 1. Check Record Type P2.

6132 The specified analog/digital flag P1 is invalid. Check Record Type P2. Valid codes are as follows:

Code	Description
0	Digital mode
1	Analog mode

6133 Invalid negative or zero Entry P 1. Check Entry P2 on Record Type P3.

6135 When off-line incident detection is specified, the time-step duration on Record Type 04 should be set to 1 second. The specified time-step duration on Record Type 04 is P1 . Also check Record Type P2.

6136 Polling frequency should be zero for analog detectors. Check Entries P 1 and P2 on Record Type P3.

6137 Off-line incident detection was not requested, but a Record Type 65 exists in the input stream. Check Record Type P1 .

6138 Record Type 65 exists in the input data, but no Record Type 64 was found. Record Type 64 is required for off-line incident detection. Check the input stream and supply the missing Record Type P 1.

6139 Invalid algorithm number. The specified algorithm number is P1 . Check Record Type P2.

6140 The specified algorithm number P1 on Record Type P2 is invalid. MOE estimation algorithm number should be in the range (0,3) inclusive.

6141 An invalid parameter value is specified for MOE estimation algorithm P1 on Record Type P2. The value is negative, or the algorithm number is zero and a parameter value is specified.

6143 The algorithms are specified out of sequence. Check Entries P1, P2, and P3 on Record Type P4. A non-zero algorithm number follows a zero entry.

6144 MOE estimation is not requested, but Record Type 66 is supplied in the input stream. Remove Record Type P1 from the input data.

6145 MOE estimation is requested, but no Record Type 66 is supplied in the input stream. Supply the missing Record Type P1.

6146 Off-line incident detection, point processing, and/or MOE estimation is requested, but there is no Record Type 64 in the input stream.

6148 Time period for reevaluating off-line incident detection has a negative or zero value. The specified value is P1 . Check Record Type 64.

6149 Neither point processing nor MOE estimation is requested on Record Type 64. Additionally, no algorithm number is provided for off-line incident detection that indicates that off-line incident detection is not desired. Check Entries 5-10 of Record Type 64.

6150 The point processing code is invalid. The specified value is PI. Check Entry P2 on Record Type 64. Valid codes are :

Code	<u>Description</u>
0	Point processing is not desired
1	Point processing is desired

6151 The MOE estimation code is invalid. The specified value is PI . Check Entry P2 on Record Type 64. Valid codes are:

Code	<u>Description</u>
0	MOE estimation is not desired
1	MOE estimation is desired

6152 The algorithm number for offline incident detection is invalid. The specified value is PI. The algorithm number must be in the range 1-3 inclusive. Check Record Type 64.

6153 When only offline incident detection is requested (Entries 9 and 10 are set to zero), the evaluation frequency (Entry 3) should be equal to offline reevaluation time period (Entry 4). Check Entries 3 and 4 on Record Type 64 and set them equal.

6154 The sequence of the offline incident detection algorithm number is incorrect. A zero algorithm number precedes a non-zero number. Check Entries P1, P2 and P3 of Record Type P4.

6155 Invalid Entry P1 for pavement friction an Record Type P2. The pavement friction factor should be in the range (0, 100) inclusive.

6156 Invalid negative Entry P 1 on Record Type P2.

6157 The total fleet percentage for either cars, P1, trucks, P2, or buses, P3, does not add to 100. Correct entry: Record Type 7 1 s.

6158 No entries are specified on Record Type P1 . Check and remove the data card if not needed.

6159 Percent value input should be in the range (0,100) inclusive. Check Entry P1 on Record Type P2.

6160 The vehicle type code is invalid. Vehicle type code is a numeric index in the range (1,16) inclusive. Check Entry P1 on Record Type P2.

6161 The jerk value on Record Type P2 is invalid. Check Entry P1. The specified value should be less than 100.

6162 The specified maximum deceleration as Entry P1 on Record Type P2 is invalid. Allowable values are in the range (0,150) inclusive.

6163 The specified fleet percentage as Entry P1 on Record Type P2 is invalid. The value should be in the range (0,100) inclusive.

6164 The data identification code, P1, is invalid. Valid codes are as follows:

Code	Description
0	Fuel consumption data
1	HC emission rate
2	CO emission rate
3	NOx emission rate

Check Entry 1 of Record Type 72.

6165 Vehicle performance type code P1 in Entry P2 on Record Type 72 is invalid. Vehicle performance type code is a numeric index in the range (1,7) for Entry 2 and (0,7) for Entry 3.

6166 Vehicle performance type code P1 in Entry P2 on Record Type 72 is invalid. Vehicle performance type code is a numeric index in the range (1,7) for Entry 2 and (0,7) for Entry 3.

6167 Invalid negative value for Entry P2 on Record Type 72. The specified value is P1 .

6168 The speed value on Record Type 72 should be in the range (0,110) inclusive. The specified value is P1 .

6169 The entered code P1 in Entry P2 of Record Type 73 is invalid. Vehicle type code must be between P3 and P4.

6170 When Entry 2 on Record Type 73 is specified the remaining entries should be left blank. A non-zero value P1 as Entry P2 is incurred.

6171 Link (P1,P2) on Record Type P3 is not defined by geometry Record Type 19s.

6172 Node P3 is specified on Record Type P4 as the downstream node of the link receiving through traffic from link (P1 ,P2) Geometry cards indicate that node P3 is not the through receiving node. Compare Record Types P4 and 19 for link (P1 ,P2).

6174 The total percentage of through moving and exiting traffic does not add up to 100 for link (P 1 ,PZ) Check Record Type P3.

6175 The upstream node number P1 for link (P1,P2) on Record Type P3 is invalid. The upstream node number should be in the range (0,8999), inclusive.

6176 The downstream node number P2 for link (P 1 ,P2) on Record Type P3 is invalid. The downstream node number should be in the range (1,7000), inclusive.

- 6177 The specified turn fraction PI on Record Type P4 is invalid. Turn fraction should be in the range (0,100) inclusive. Check the turn fraction specifications for link (P2,P3).
- 6180 The upstream node number PI on Record Type P3 for entry link (PI,P2) is invalid. The upstream node number should be greater than or equal to 8000.
- 6181 The downstream node number P2 on Record Type P3 for entry link (PI ,P2) is invalid. The downstream node number should be in the range (1 ,P3) inclusive.
- 6182 A negative value for the flow rate entering from the entry link (P2,P3) is specified on Record Type 50. The specified value is PI.
- 6183 The specified percentage PI for trucks on entry link (P2,P3) on Record Type P4 is invalid. The specified value should be in the range (0,100) inclusive.
- 6184 A non-zero percentage for Carpool vehicles is specified on Record Type P3 for entry link (P 1 ,P2) Carpools are not simulated in the FRESIM model.
- 6185 The total number of freeway segments exceeds the maximum allowable number PI .
- 6187 The total number of geometric objects exceed the maximum number P 1.
- 6188 The geometric object which indicates the alignment at an off-ramp was not found. The index for the off-ramp in the object list is PI . Most probable cause is a programming bug.
- 6189 Freeway connector PI has improper geometry. The most probable cause is that one or more connector links are not defined as ramp links. Check geometric specification of all connectors and if they are correct a program bug should be suspected.
- 6190 A lane is dropped within the influence zone of an incident on link (PI ,P2) Check the incident length and the lane add/drop specifications for the link.
- 6191 The influence zone of an incident on link (PI ,P2) extends beyond the link. The geometry link cards indicated there is no other link downstream of link (PI,P2).
- 6192 The lane alignment for the on-ramp with upstream node PI was not found in the geometry list. The error is most probably due to a program bug.
- 6193 The capacity of destination arrays is exceeded. Maximum number of destinations in the FRESIM subnetwork is P 1.
- 6194 Origin link (PI,P2) has no accessible destination. Check the geometry of the FRESIM subnetwork.
- 6195 No entry link was specified by the link geometry data with a downstream node number PI . Check Entry P2 on Record Type 74s.
- 6196 Node PI on link (P2,P3) has already been defined. All entry and exit nodes must have a unique node number.

- 6197 No exit link was found with an upstream node number PI Check Entry P2 on Record Type 74s.
- 6198 No path was identified between the origin PI to destination P2 as specified on Record Type 74. The specified exchange is P3 percent.
- 6199 The total exchanges from an entry origin PI adds up to more than 100%. Check all Record Type 74s for this origin.
- 6201 The specified origin node number PI is invalid. The node number should be in the range (1 ,P2) inclusive. Check Entry P3 on Record Type 74.
- 6202 The downstream node number PI is invalid. The node number should be in the range (1 ,P2) inclusive. Check Entry P3 on Record Type 74.
- 6203 The specified O-D exchange PI on Record Type 74 is invalid. The specified value should be in the range (0,100) inclusive. Check Entry P2.
- 6204 Node PI is invalid. The node number should be defined on Record Type 19. Check Entry P2 on Record Type 74.
- 6211 An error is incurred in the geometry list. The error occurred while searching the warning sign for incident number PI on lane P2 which has an index P3 in the geometry list. The corresponding warning sign could not be located in the geometry list. The run is aborted. The error is caused by a program bug.
- 6212 The table number in Entry PI on Record Type P2 is invalid. Acceptable values are in the range (O-7).
- 6213 There are PI stations specified on Record Type P2. For MOE estimation and/or incident detection, at least 2 stations are required.
- 6215 There should be only one Record Type PI in the input stream. More than one card is present.
- 6216 Duplicate Record Type 10 for link (PI ,P2) exists. Check and remove the duplicate card.
- 6217 Incident object not found in search to add or remove a blockage or rubbernecking. Incident PI with beginning index P2 and ending index P3 was not found.
- 6218 Duplicate Record Type PI for link (P2,P3). Remove the duplicate card.
- 6219 No geometry Record Type 19 has been previously specified for link (P 1 ,P2) Check the input data Record Type 28 for link (PI,P2).
- 6220 Mean desired free-flow speed must be less than 70 mph. The specified value is P3. Check Record Type 20 for link (PI,P2).
- 6222 Invalid negative entry on Record Type 32. Check Entry P3 for link (PI ,P2).
- 6230 The specified detector serving the meter at node PI must be the Doppler radar.

- 6231 No detector is specified to serve the meter at node P1.
- 6232 When gap acceptance/merge control is specified, the number of ramp lanes is limited to one lane. Check the number of through lanes on the on-ramp that is being metered by the meter at node P1.
- 6233 The coupled pair of detector serving the meter at node P1 should be upstream of the ramp gore. The specified detector position indicates otherwise.
- 6234 The detector serving the ramp meter at node P1 must be a coupled loop for gap acceptance metering to work correctly.
- 6235 There is an alignment error at node P1. Check geometric specifications for all links entering and exiting from this node.
- 6240 The object corresponding to a lane drop in front of the vehicle cannot be located in the object list. This happened while processing vehicle P1 on lane P2 of the link (P3,P4). The most probable cause is a program bug.
- 6250 Entry link lane percentages for link (P1,P2) do not add to 100%. Check Entries 16-20 on Record Type 50.
- 6251 Entry link lane percentages are specified for link (P1,P2) on lane P3 when that link has only P4 lanes. Check Entries 16-20 on Record Type 50.
- 6252 The total number of through lanes on entry link (P1,P2) and its receiving link (P3,P4) are not the same. Check Record Type 19 for links (P1,P2) and (P3,P4).
- 6401 Lane 1 of the on-ramp (P1,P2) feeds lane P4 of the mainline link (P2,P3). An on-ramp must feed a full or acceleration auxiliary lane. Check Entry 16 on Record Type 19 for link (P1,P2).
- 6402 On-ramp (P1,P2) has too many through lanes P4 at the downstream end to be accommodated by the auxiliary lanes on link (P2,P3). There must be an acceleration or full auxiliary lane on the appropriate side of the freeway for each of the P4 lanes to enter.
- 6403 Lane 1 of on-ramp (P1,P2) feeds lane P3 of link (P2,P4). This lane does not exist. Check Record Type 19 for link (P2,P4).
- 6404 At node P1, there are P2 lanes entering and P3 lanes exiting. These numbers either must be equal or P3 may be 1 greater (for the case of a node with a multiple destination off-ramp). Check geometries for all links emanating or terminating at node P1. It may be necessary to add lanes or drop lanes explicitly using Record Type 32.

- 6405 There are P3 deceleration lanes on link (P1,P2) and only P4 off-ramp lanes to receive them.
- 6406 There are P3 acceleration lanes on link (P1,P2) and only P4 on-ramp lanes to feed them.
- 6407 Auxiliary lane P4 on link (P2,P3) is not fed by any lane on link (P1,P2).
- 6408 Auxiliary lane P1 on link (P2,P3) is designated as a multiple destination lane. Only through lanes (numbered 1-5) are allowed to be multiple destination. The geometry must be modified, most likely, a dummy node should be inserted.
- 6420 While attempting to calculate the environmental measures from a previous FREXM run, FRESIM was unable to correctly read the vehicle trajectory file. The simulation must be reperformed to properly compute the environmental measures.
- 6500 Link (P1,P2) defined on Record Type 19 does not belong to any disjoint freeway segment.
- 6501 No receiving link is specified for ramp link (P1,P2). Check Record Type 19.
- 6508 Node P1 is the downstream end of an entry link, but is being used as an ramp merge point. A dummy node must be inserted on link (P2,P1).
- 6710 Vehicle P1 is indicated to be on lane P2 of link (P3,P4). However, lane P2 physically does not exists. The most probable cause is user specification of the lane alignment data. Check the lane alignment table. If alignment specifications are correct a program bug should be suspected.