

Active Safety and Automated Driving



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AUTONOMOUS DEMOS



THE OPPORTUNITY

Crashes / Human Errors



Aging / Disabled



Congestion / Time



DRIVING AUTOMATED (IN NON-AUTOMATED VEHICLES!)



EARLY GM AUTOMATED VEHICLES



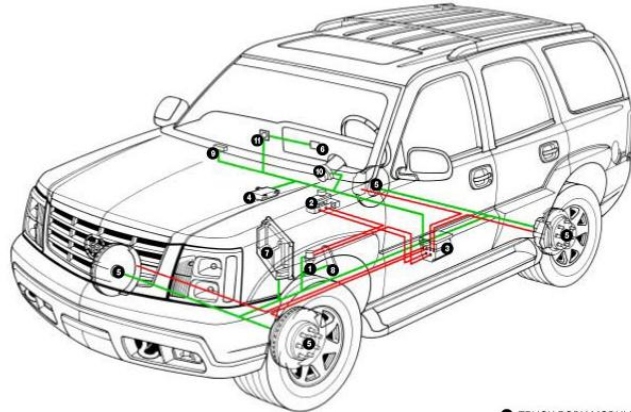
NOVEMBER 3, 2007: “BOSS” WINS DARPA URBAN CHALLENGE



TODAY'S TECHNOLOGIES



ELECTRONIC STABILITY CONTROL

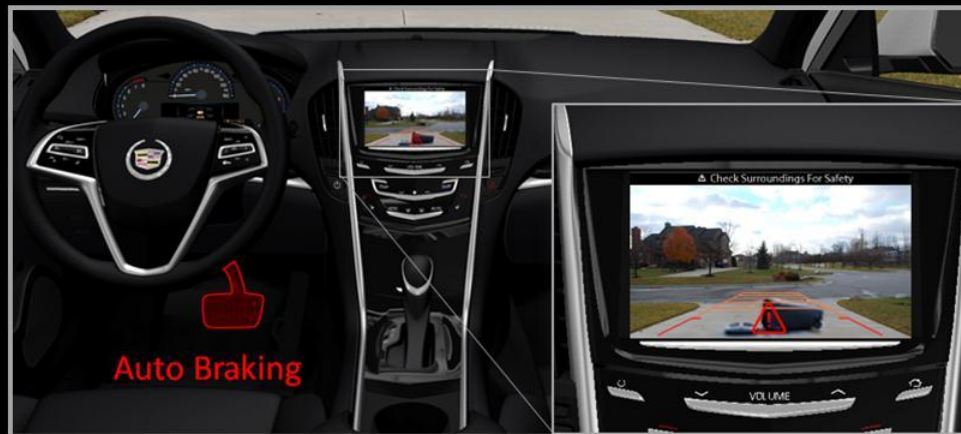
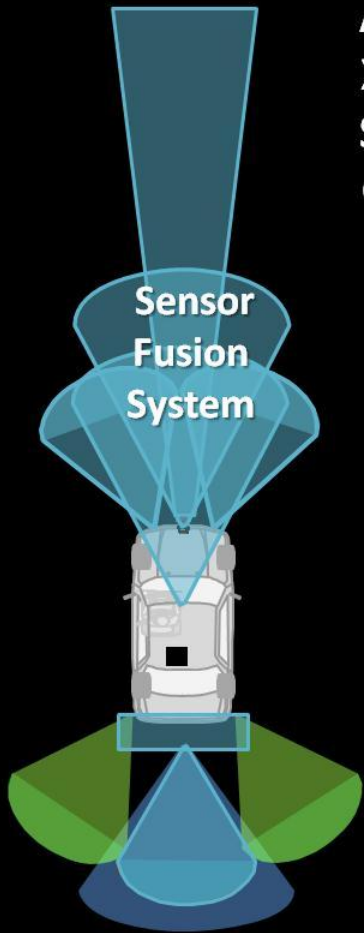


- | | | |
|-------------------------------------|----------------------------------|------------------------------|
| 1 PRE-CHARGE PUMP (ELECTRIC MOTOR) | 6 WHEEL SPEED SENSORS (4) | 9 TRUCK BODY MODULE (TBC) |
| 2 BRAKE APPLY SYSTEM | 7 INSTRUMENT CLUSTER | 10 STEERING WHEEL SENSOR |
| 3 CHASSIS CONTROL MODULE (EHCU) | 8 POWERTRAIN CONTROL MODULE | 11 STABILITRAX ON/OFF SWITCH |
| 4 INERTIAL SENSOR (YAW AND LATERAL) | 9 THROTTLE PEDAL POSITION SENSOR | — HYDRAULIC CIRCUITS |
| | | — ELECTRICAL CIRCUITS |



CADILLAC DRIVER ASSIST

ATS
XTS
SRX
CTS





NEXT STEP: SUPERCruise

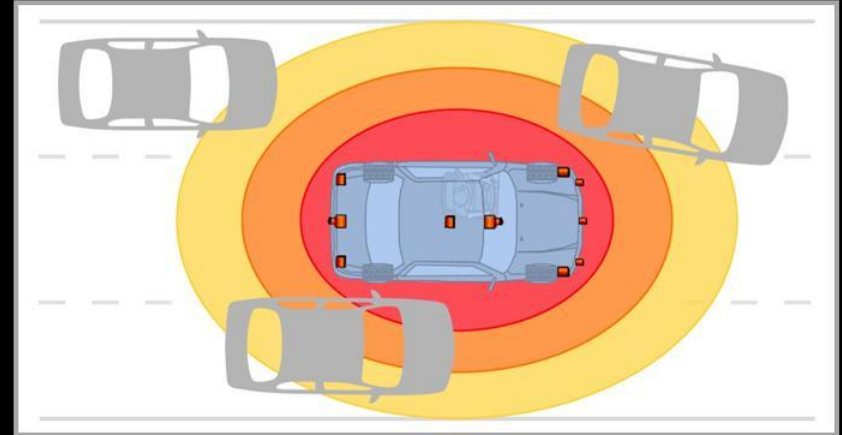


INTEGRATED SYSTEMS APPROACH

360° Sensing



Sensor Fusion



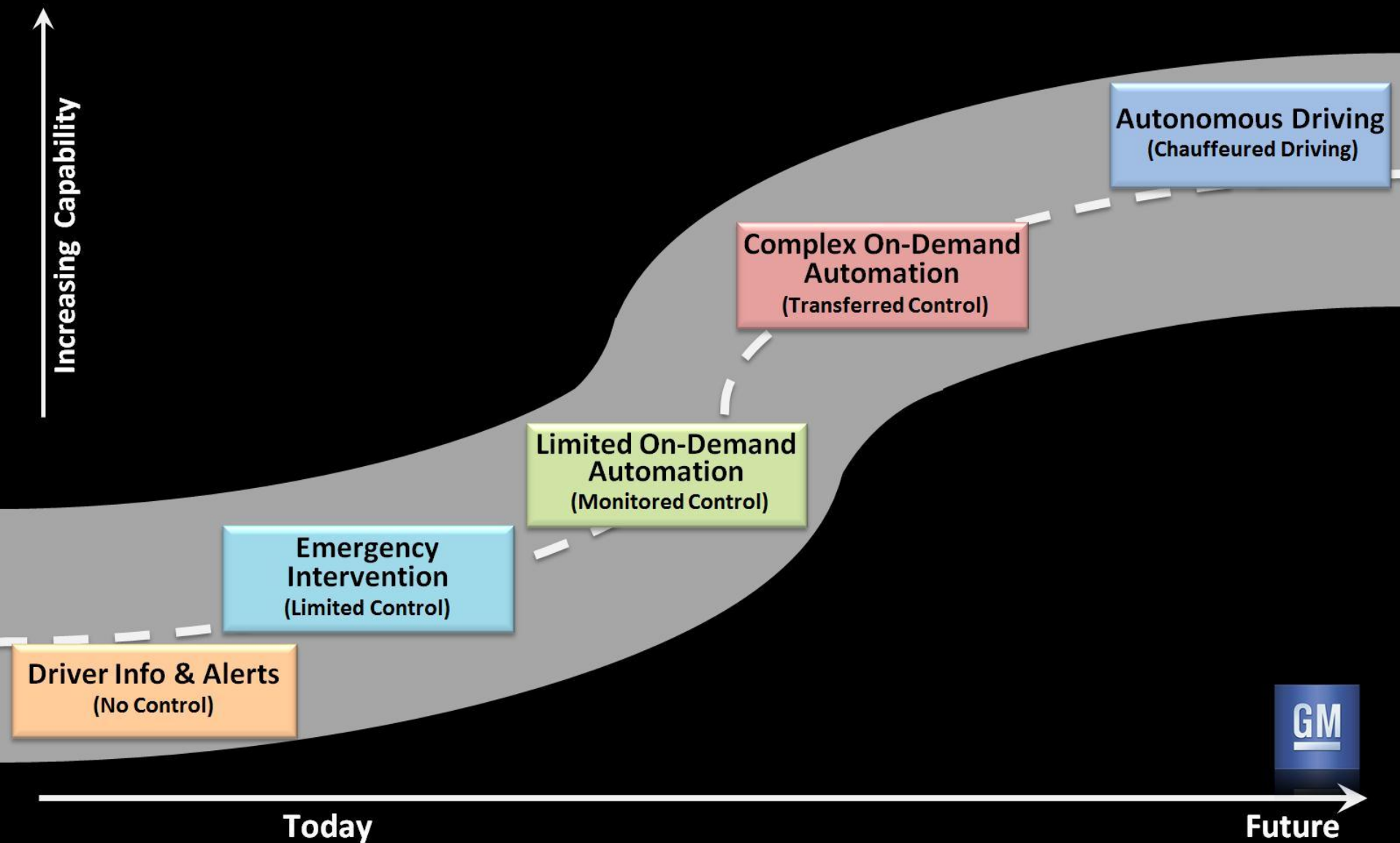
Maps / GPS



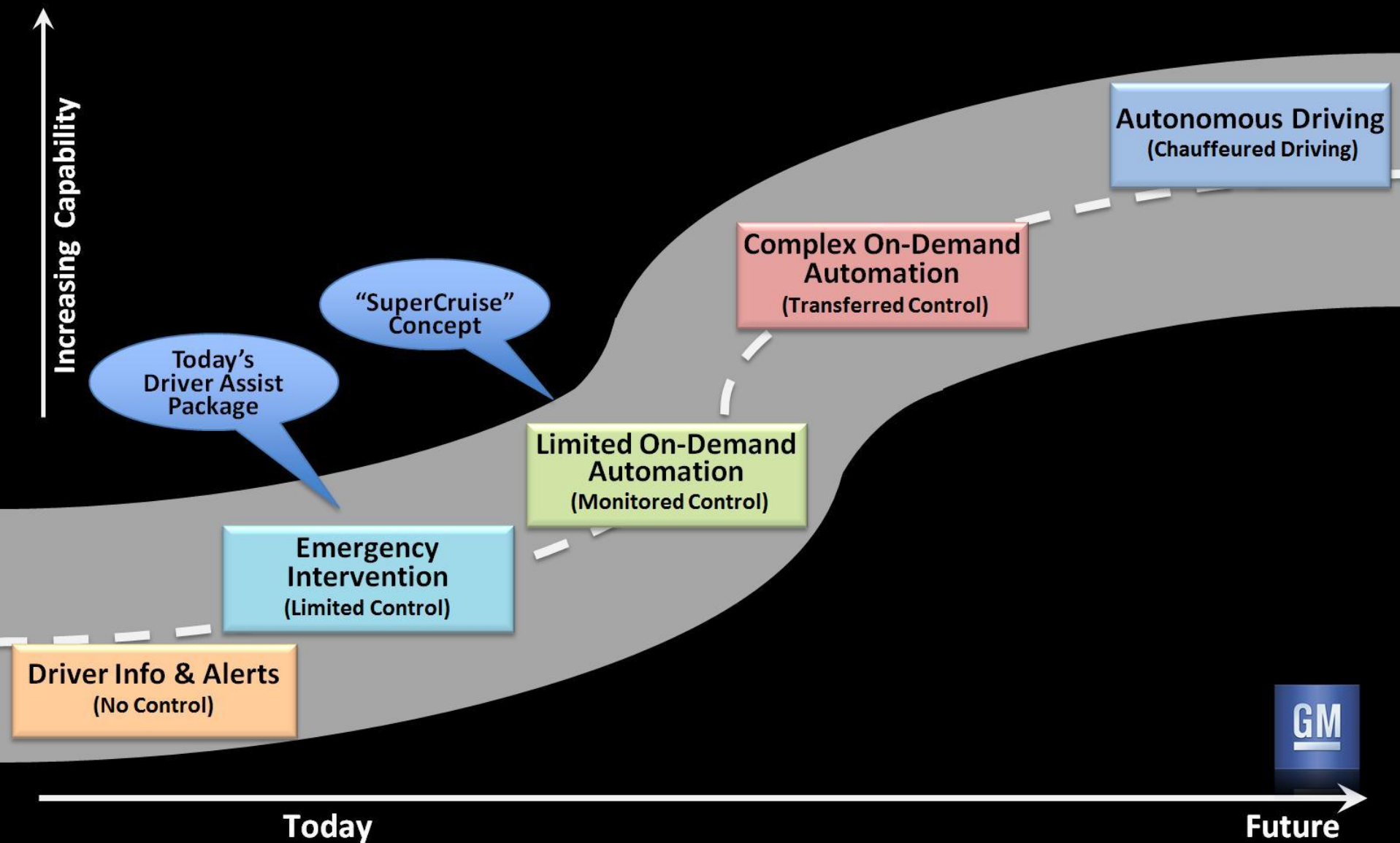
V2V / V2I Integration



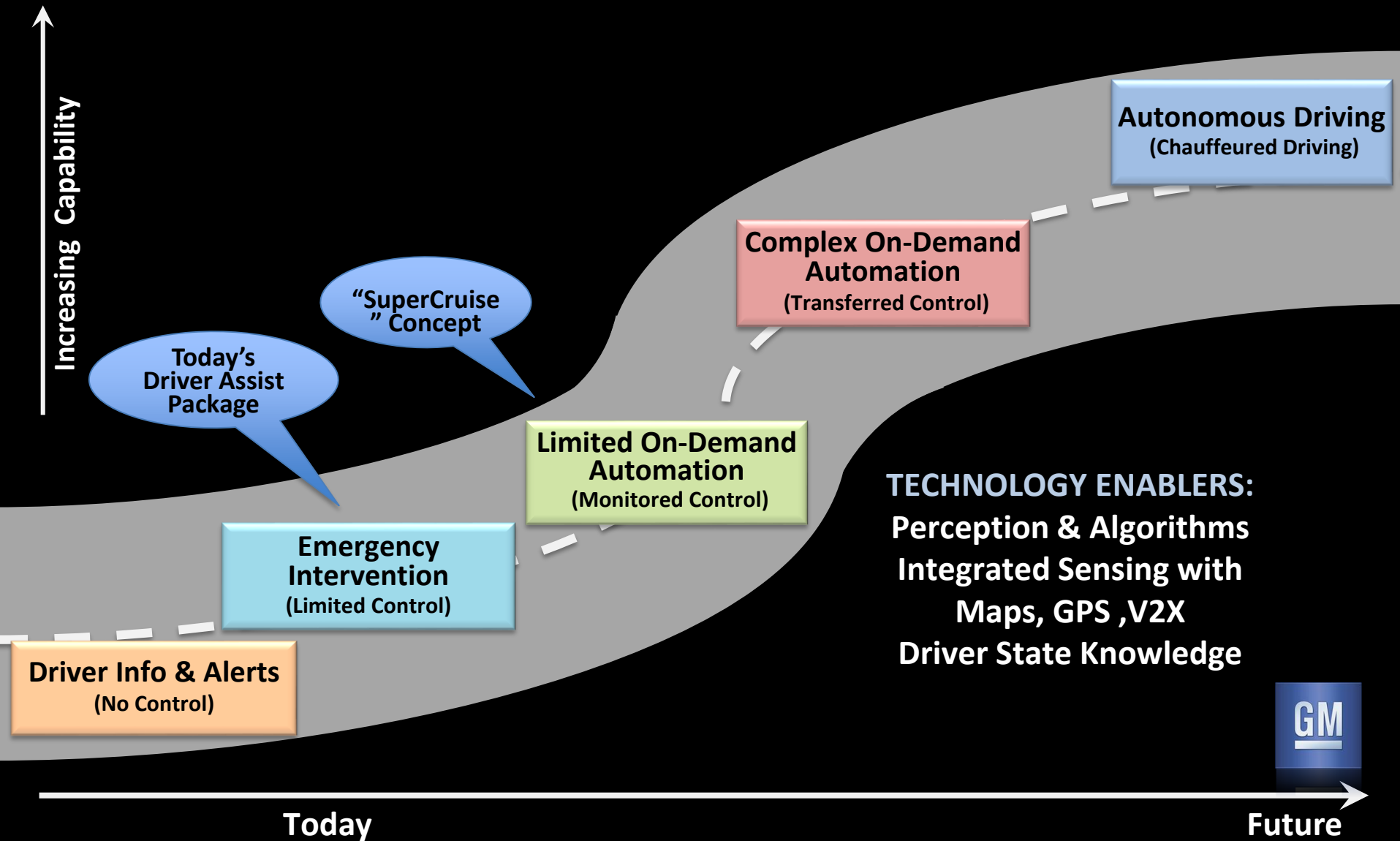
ROAD TO AUTOMATED DRIVING



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ROAD TO AUTOMATED DRIVING



THANK YOU

GM

