# Transportation Composite

## Sample Transportation Composite Definition with Extensions

<Category displayName="Michigan Transportation" name="transportation">

    <Routes>

        <Route relativeRouteTemplate="/localEducationAgencies/{LocalEducationAgency.Id}/{compositeName}" />

        <Route relativeRouteTemplate="/schools/{School.Id}/{compositeName}" />

        <Route relativeRouteTemplate="/students/{Student.Id}/{compositeName}" />

    </Routes>

    <Composites>

        <Composite name="TransportationStudent">

            <Specification>

                <Parameter name="LocalEducationAgency.Id" filterPath="StudentSchoolAssociations->School->LocalEducationAgency.Id" />

                <Parameter name="School.Id" filterPath="StudentSchoolAssociations->School.Id" />

                <Parameter name="Section.Id" filterPath="StudentSectionAssociations->Section.Id" />

                <Parameter name="Staff.Id" filterPath="StudentSectionAssociations->Section->StaffSectionAssociations->Staff.Id" />

                <Parameter name="LocalEducationAgencyId" filterPath="StudentSchoolAssociations->School.LocalEducationAgencyReference.LocalEducationAgencyId" />

                <Parameter name="SchoolId" filterPath="StudentSchoolAssociations.SchoolReference.SchoolId" />

                <Parameter name="StaffUniqueId" filterPath="StudentSectionAssociations->Section->StaffSectionAssociations->Staff.StaffUniqueId" />

                <Parameter name="StudentUniqueId" filterPath="StudentUniqueId" />

            </Specification>

            <BaseResource name="Student">

                <Property name="StudentUniqueId" />

                <Property name="FirstName" />

                <Property name="MiddleName" />

                <Property name="LastSurname" />

                <Property name="SexType" />

                <Property name="BirthDate" />

                <Property name="MedicalNotes" />

                <Collection name="StudentOtherNames" displayName="otherNames">

                    <Property name="FirstName" />

                    <Property name="MiddleName" />

                    <Property name="LastSurname" />

                    <Property name="OtherNameType" />

                </Collection>

                <Collection name="StudentAddresses" displayName="addresses">

                    <Property name="AddressType" />

                    <Property name="StreetNumberName" />

                    <Property name="ApartmentRoomSuiteNumber" />

                    <Property name="BuildingSiteNumber" />

                    <Property name="City" />

                    <Property name="StateAbbreviationType" />

                    <Property name="PostalCode" />

                </Collection>

                <Collection name="StudentIdentificationCodes" displayName="identificationCodes">

                    <Property name="AssigningOrganizationIdentificationCode" />

                    <Property name="StudentIdentificationSystemDescriptor" />

                    <Property name="IdentificationCode" />

                </Collection>

                <Collection name="StudentElectronicMails" displayName="electronicMails">

                    <Property name="PrimaryEmailAddressIndicator" />

                    <Property name="ElectronicMailType" />

                    <Property name="ElectronicMailAddress" />

                </Collection>

                <Collection name="StudentTelephones" displayName="telephones">

                    <Property name="TelephoneNumberType" />

                    <Property name="OrderOfPriority" />

                    <Property name="TelephoneNumber" />

                </Collection>

                <LinkedCollection name="StudentSchoolAssociations" displayName="schools">

                    <Property name="EntryGradeLevelDescriptor" />

                    <Property name="ExitWithdrawDate" />

                    <Property name="SchoolId" />

                </LinkedCollection>

                <LinkedCollection name="StudentTransportations" displayName="studentTransportations">

                    <Property name="BusRouteTime" />

                    <Property name="SchoolId" />

                    <ReferencedResource name="BusRouteReference" flatten="true">

                        <Property name="BusNumber" />

                        <Property name="DirectionDescriptor" />

                        <Property name="DayOfWeekDescriptor" />

                        <Property name="Name" />

                        <Property name="BusRouteNumberOrId" />

                        <Property name="StartTime" />

                        <Property name="EndTime" />

                        <Property name="BusDriverFirstName" />

                        <Property name="BusDriverMiddleName" />

                        <Property name="BusDriverLastSurname" />

                    </ReferencedResource>

                </LinkedCollection>

                <LinkedCollection name="StudentParentAssociations" displayName="parents">

                    <ReferencedResource name="ParentReference" flatten="true">

                        <Property name="FirstName" />

                        <Property name="MiddleName" />

                        <Property name="LastSurname" />

                        <Collection name="ParentTelephones" displayName="telephones">

                            <Property name="TelephoneNumberType" />

                            <Property name="OrderOfPriority" />

                            <Property name="TelephoneNumber" />

                        </Collection>

                        <Collection name="ParentElectronicMails" displayName="electronicMails">

                            <Property name="PrimaryEmailAddressIndicator" />

                            <Property name="ElectronicMailType" />

                            <Property name="ElectronicMailAddress" />

                        </Collection>

                    </ReferencedResource>

                    <Property name="PrimaryContactStatus" />

                    <Property name="EmergencyContactStatus" />

                    <Property name="ContactPriority" />

                    <Property name="ContactRestrictions" />

                    <Property name="HouseholdId" />

                </LinkedCollection>

            </BaseResource>

        </Composite>

    </Composites>

</Category>

## How the handle Updates

For Transportation, the primary Update resources are StudentTransportation and BusRoute. Update support exists for the following fields:

StudentTransportation

* BusRouteTime

BusRoute

* BusNumber
* DirectionDescriptor
* DayOfWeekDescriptor
* Name
* BusRouteNumberOrId
* StartTime
* EndTime
* BusDriverFirstName
* BusDriverMiddleName
* BusDriverLastSurnames

The generated API clients from the SDK can be used to work with these, including using PATCH as needed.